C 3 9015 00358 348 4
University of Michigan - Dunn

Digitized by Google



PRESENTED BY
THE PUBLISHER

Digitized by Google

TS
1
.M624

Digitized by Google

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Univ. of Mich.
Genl. Library
1-1-22



Detroit, January 1, 1921

HOW MICHIGAN IS SUPPLIED WITH POWER

(See Page Three for Table of Contents)

Vol. 27. No. 1 *Price Fifteen Cents*

ESTABLISHED NINETEEN HUNDRED SEVEN



No Engine Is More Efficient Than Its Cooling System.

WHEN you select the *Long Cooling System*—with its 19 years of *positively proved efficiency*–you are following the successful experience of many manufacturers. These manufacturers submitted their requirements and radiation problems to our specialized radiation engineers, who overcame all difficulties in advance.

Our purpose, our organization, our production facilities are concentrated upon *one thing only*—ridding the automotive industry of all radiation annoyances and needless expense.

Special designs, maximum efficiency and minimum cost comprise our slogan and maintain the Long Cooling System in its position of merited leadership.

LONG MANUFACTURING CO.
DETROIT, MICHIGAN
Pioneer Makers of Cooling Systems for Gasoline Engines

LONG

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Established 1907

CONTENTS

January 1, 1921

How Michigan Is Supplied With Power 7
First of a series of 52 articles, "The Romance of Michigan Industry," by Howard Campbell, technical editor of the paper.

The Double Cross in Seattle 10
Radicals, professing support of the American Plan of Employment, play the Judas, but the deception is discovered in time.

Protesting Adjustment Boards 11

Conditions Better—Metzger 12
Detroiter, pioneer of the automotive industry, summarizes favorable indications of the last few weeks.

An Art Exhibit at a Motor Show 13

News of Automotive Industry 14-15

Transportation Matters 16

The Week's Building 18

New Studebaker Policy 19

Editorial 20-21

Financial Section 22-29
Edited by Phil S. Hanna.

New Corporations 31

Vol. 27 Detroit, Mich. No. 1

Published Every Saturday by the Manufacturer Publishing Company
Suite 811 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELDON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Four dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.
Advertising rates on application.

Digitized by Google

Reduce Handling — Lower Costs

Every pair of hands, arms and legs you relieve from handling, lugging, wheeling or hauling material from place to place, is immediately available for real productive work.

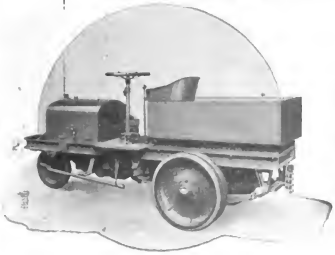


The Mathews Gravity Conveyor is readily adaptable in any manufacturing plant or yard—

will carry heavy or light loads over, under or around obstacles—straightaway—from floor to floor—

And the upkeep is negligible.

The Motive Power is GRAVITY



The Clark Tructractor is specially designed for industrial service—

for factory and plant haulage. Is "all steel" construction, amply powered, with a speed range from ¼ to 12 miles per hour under full load.

Can be used as a unit, or will tow from one to a dozen trailers.

A Tructractor will lower haulage costs—relieve aisle congestion—shorten distances—operate economically.

PALMER-BEE COMPANY

Detroit

"Engineers and Manufacturers of Conveyors for Every Purpose"

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

How Michigan Is Supplied With Power

Modern Methods of Production and Distribution As Developed in This "Machine Shop of America"

By HOWARD CAMPBELL

THE AVERAGE PERSON turns the electric light on and off, rides down town on the trolley car, shoots up fifteen or twenty stories in an elevator, practically without a thought of the miracle of power, the production and transmission of which have made these things possible.

Power is the first necessity in the operation of a manufacturing plant; power is the prime requisite in the operation of an electric railway; power alone makes possible electric light. Take away the ability to generate and transmit power, and the world would be turned backward to the time when all metal working was done by hand—when the stagecoach was the only method of transportation and when the best artificial light known was produced by oil lamps.

In the earlier days of our industrial history power was used almost entirely for manufacturing purposes. The location of industrial enterprises then was largely determined by power sites, and the settlements which have since become great cities were the first manufacturing communities. With the development of steam power and better transportation facilities, the controlling influence was transferred and the determining factor became either the accessibility of raw materials or labor or a market for manufactured products. The introduction of electric power transmission has again revolutionized this situation, opening up entirely new power fields and enormously increasing the importance of water power.

The three principal demands for power are for lighting, traction and manufacturing. And in place of each factory and mill having its own power and lighting plant, as was formerly the custom, the tendency of late years has been toward "central stations," or plants which produce electricity for sale. Such centralization makes possible the production of power on a gigantic scale, and with power as with everything else, increased production means reduction in cost per unit, which in this case is a kilowatt hour. Thus power can be sold to the consumer at a rate which is usually less than it would cost him to produce it himself, besides saving the initial cost of equipment and construction of a power house, the space which would be occupied by the buildings, coal storage, cranes and other equipment and relieving him of the responsibility of maintenance. In a number of instances power has been furnished the consumer at a cost which was not much greater than his coal alone would have cost him for an individual power plant. And as a rule the cost of the coal comprises from 50 to 60 per cent of the total cost of operation of the plant of average size. Another item of interest is this: Since the war started, the price of steam coal has advanced nearly 400 per cent, while the cost of central power has increased only about 25 per cent. In the city of Detroit alone the use of central power has increased much more rapidly than the growth of the city. The population of Detroit increased 1.6 times in the ten years from 1904 to 1914, while the amount of power required to serve the people of Detroit increased 21.4 times.

The Brush Electric Light Company, which was formed in 1881, began in September of that year to operate series arc-lighting circuits connected to lamps hung outside of stores on lower Woodward avenue, Detroit. In 1883 it contracted with the city for street lighting according to the Brush system. In 1891 the Peninsular Electric Light Company, succeeding the Brush Company, began the supply of incandescent lighting by alternating current.

In the meantime the Edison Illuminating Company, Detroit, was organized April 15, 1886, under Michigan laws, for the purpose of operating the Edison system of direct current lighting and power in the city of Detroit. It began in November of the same year to deliver current through an underground network of Edison tubes serving the central business area of the city. In 1898 the Edison Illuminating Company took over the management of the Peninsular Electric Light Company and began the extension of its lines, supplying alternating current for all purposes throughout the city and adjacent villages.

The Detroit Edison Company was organized in 1903, and immediately purchased all the securities of the Edison Illuminating Company and the Peninsular Electric Light Company. The great expansion of electric light and power service in southeastern Michigan dates from that year. The earnings of the company have grown from $534,000 in 1903 to approximately $15,000,000 in 1919.

The equipment of the Detroit Edison Company, which serves the southeastern part of the state, includes two steam-electric plants in the city of Detroit and six hydro-electric or waterpower stations on the Huron river. The waterpower plants operate regularly in synchronism with the Detroit plants and feed into the general system.

The Conner's Creek power station of the Edison company is an excellent example of a modern steam power plant. The equipment consists of six steam turbines, fed by 14 boilers.

Next Week:

Getting the Power to the Machine

In the article which begins on this page, and which is the first of a series of 52, Mr. Campbell discusses the production of power in Michigan. In next week's article he takes up the methods by which this power is applied to the wheels of industry. This article will be illustrated with photographs taken in Michigan plants.

Other Timely Features

386230

Digitized by Google



Ford 6,000 Horsepower Steam-Gas Unit. Showing 100-ton Flywheel and Generator.

These boilers are of the Stirling "W" type, rated at 2,365 horsepower each, and each boiler is calculated to generate 70,000 pounds of steam per hour at this rating. The engineers estimate that eight pounds of steam are available from each pound of coal used; therefore 70,000 pounds of steam means the consumption of four tons of coal per boiler per hour. As a matter of fact, these boilers are operating at 175 per cent of rating, using six and one-half tons of coal per hour.

From the time the coal enters the plant until the "juice" leaves it, the entire operation is mechanical. The coal enters the train shed in drop-bottom cars from which the coal is dumped into hoppers, one hopper serving each unit of two boilers. A motor-driven flight conveyor with a capacity of 120 tons per hour receives the coal from the hopper, carries it up an incline and discharges it into a motor-driven crusher of similar capacity, where it is broken into pieces small enough to go through a 1 3-4-inch mesh. The crusher discharges directly into a motor-driven lapping bucket conveyor which carries the coal up and discharges it into any one of the three coal bunkers which serve the two boilers of one unit. From the bunkers it descends by gravity to the stokers. The latter are Taylor under-feed, with 26 retorts per furnace arranged in two groups of 13 each, the furnace being fired from the two ends. Ashes and clinkers are discharged into the ash hopper below the furnace, being finally dropped directly into standard railroad cars, which run lengthwise of the building directly under the ash hoppers. The stokers are chain-driven by direct current motors, the speed of which can be varied from 200 to 2,000 R. P. M.

Blowing and Cleaning

Buffalo motor-driven blowers supply the air needed for combustion, each blower being designed to deliver at maximum 74,000 cubic feet of air per minute. The speed of the motors can be varied from 300 to 750 R. P. M. Steam pressure is kept at the desired point by regulating the speed of both stokers and blowers. The boilers each have 23,654 square feet of water heating surface and are built to operate at 225 pounds pressure per square inch.

The old-fashioned method of cleaning flues by inserting a hose through the hand-holes, one at a time, and blowing off the soot, has been supplanted with the "Diamond Soot Blower" method, a blower being installed on each boiler. A soot blower is in the nature of a set of tubes, open at the inner end and connected with the steam line, with the valve on the outside. When this valve is opened, steam is admitted, blowing out the flues quickly and efficiently. This is done while the boiler is in operation.

The power plant consists of one 10,000, two 20,000, one 30,000 and two 45,000 kilowatt General Electric turbo-generators. The 20,000 K. W. machines run at a speed of 1,200 R. P. M. and generate at 4,800 volts. The 45,000 K. W. machines also run at a speed of 1,200 R. P. M. but generate at 12,200 volts. The capacity of the plant under full load is approximately 170,000 kilowatts per hour and is distributed to the various substations by means of an underground conduit system of cables carrying 24,000 volts each. It has been found impractical to carry heavier voltage than this underground, and overhead high tension cables are impossible in the city.

There are, however, a great many industries in the state which are operating under their own power for various reasons. Some of these plants are too far from the central power lines to make the use of central power a practical proposition, some of them had their own power plants before power centralization became so well developed, and some (like the Ford Motor Company) prefer to remain as far as possible independent of all outside factors.

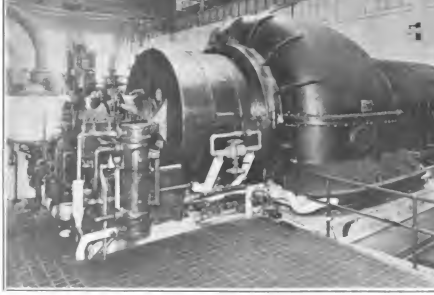
As an example of a private power plant, the Ford stands unique. The standard generating unit which furnishes the power with which the Ford factory is operated is a composite gas-steam engine rated at 6,000 horsepower, the gas side having tandem cylinders 42 by 72 inches, and the steam side tandem-compound cylinders 36 and 68 by 72 inches, Between the two engines are mounted a 100-ton flywheel and a 4,000 K. W. 250-volt direct current generator. The latter is of unusual size owing to a speed of 80 R. P. M. The gas engine is a four-cycle reciprocating engine operating on producer gas. One engine uses 150,000 cubic feet of gas per hour under normal load, the whole battery of machines, of which there are nine, using on the average 1,530,000 cubic feet per hour, or 28,000,000 feet per day of 24 hours. Although the engines frequently use 2,000,000 feet per hour, the load is considerably lessened during the night while only part of the factory is in operation, thus reducing the amount of gas required.

The Ford Power Plant

Gas is supplied from equipment consisting of 30 sections of type M-B Smith producer plants, a section consisting of two units each capable of gasifying two tons of coal per hour and supplying 5,000 cubic feet of gas per minute having a heat value of 165 B. T. U. per cubic foot. A Smith gas producer is shaped like a huge cylinder, being 16 feet in diameter and approximately as high. Coal is supplied through an opening near the top of the producer, and the bottom layer is ignited. Then more coal is fed in on top of this, but only the bottom layer is allowed to burn. Thus the upper layers are heated to the point required to generate gas, and this gas is drawn off and supplied to the engines. Approximately 500 tons of coal per day are used in the production of gas.

The steam engine is of the tandem compound type, using 40,000 pounds of steam per hour at 600 degrees temperature. The high pressure cylinder has a 12-inch steam connection and 8-inch connections to the jacket through which the exhaust from the gas engine is received.

Steam is supplied from seven Badenhausen boilers, seven Wickes boilers and one boiler similar in design to the Badenhausen boilers though erected by the Ford company, all of these boilers being served by Taylor underfeed stokers. The Badenhausen boilers each have 25,000 square feet of heating surface and



Forty-five Thousand Kilowatt General Electric Generator in the Detroit Edison Company's Conner's Creek Plant.

Digitized by Google

are rated at 2,000 horsepower. Steam is generated at 180 pounds pressure and superheated to 600 degrees. Each boiler is served by a 12-retort stoker of especially large size driven by a variable-speed motor with a range of from 300 to 1,200 R. P. M. The Wickes boilers each have 4,000 square feet of heating surface and are equipped each with a 4 retort stoker driven by an individual vertical engine mounted on a base at the side of the stoker. Steam is generated at 180 pounds pressure and superheated to 600 degrees, the superheater being of the same type as those employed in the larger boilers.

Coal is brought in by rail over a siding to the coal storage house, where it is dumped into a track hopper having a capacity of 800 tons. From the track hopper the coal passes to a conveyor, motor-driven at a speed of 37 feet per minute and having a capacity of 150 tons per hour. A cross-conveyor receives the coal and delivers it to the crusher, whence it is conveyed to the bunkers. Automatic weighing machines record the weight of the coal before it is discharged into the stoker magazine.

Consumers Company Service

The Consumers Power Company is utilizing the water powers of the state as far as possible, having at present 20 hydraulic, or water-power plants, located on several of the largest rivers of the state. These 20 plants, together with the 12 steam plants which are a part of the system, are capable of delivering approximately 202,000 horsepower, which is distributed through 77 substations throughout Michigan, furnishing electric power for the operation of hundreds of factories, shops, electric railways and various other kinds of machinery, down to the washing machine and electric flatiron in the home.

The Consumers Power Company was incorporated April 12, 1910, uniting a number of smaller independent companies. The Michigan Light Company was incorporated in December, 1913, and early in 1920 was consolidated with the Consumers Power Company through stock purchase.



Junction Dam Power House on the Manistee River. (Consumers Power Company.)

This corporation supplies electricity as power or light (or both) to 89 municipalities in 29 Michigan counties having a population of 800,000, comprising 64 per cent of the urban population of lower Michigan, including the ten largest cities in the state outside of Detroit.

Five of these waterpower plants are located on the Au Sable river, two on the Manistee, two on the Muskegon, one on the Shiawassee, four on the Grand and six on the Kalamazoo. Thus the natural resources of the state are harnessed and a vast amount of energy which for hundreds of years went to waste is now made to run factories, lift elevators, operate street cars and do the thousands of other tasks which are necessary in this day and age.

The utilization of the water powers of the state is going far toward solving what has come to be regarded as one of the severest problems of the day—that of obtaining fuel. When it is known that in the year 1919 the amount of power generated by the hydraulic plants of the Consumers Power Company was equal to the power in 306,000 tons of coal, one begins to realize the importance of such service to Michigan industry.

The Consumers Power Company has undeveloped resources consisting of water power facilities aggregating a fall of 880 feet and about 200,000 h. p. on 28 dam sites lying along the Au Sable, Muskegon, Manistee, Grand and Kalamazoo rivers. The land comprising these sites totals 60,000 acres. What this would mean to the people of Michigan may be gathered from the statement that this 200,000 h. p. yet undeveloped would be equal to about 750,000 tons of coal a year.

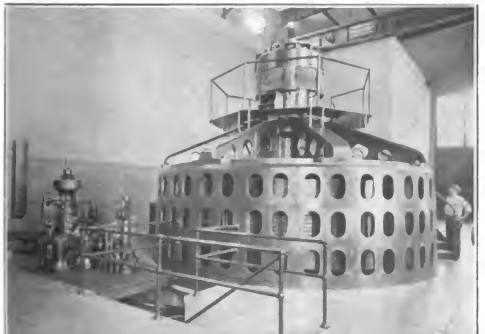
The extent of the growth of the use of central power in this state is evident when it is known that the gross earnings of the company have grown from $4,726,000 in 1914 to $11,440,000 in 1919. This, of course, includes the revenue from the gas plants, of which seven are owned by this company. On the first of July, 1920, this company was serving electricity to 110,775 customers, including 2,000 manufacturing plants which employed 170,000 workers.

The Transmission of Power

An important item in the manufacture of power is the transmission of this power to the markets. The hundreds of miles between the plants and the consumers have to be spanned, and done in such manner that the connection will be safe from the elements. And the system of transmission must be such that the energy generated at the power plants will not be dissipated in forcing its way through the conductors. One hundred and forty thousand volts has been adopted as a standard transmission voltage, and this requires copper cables just a trifle less than half an inch in diameter. These cables are supported by steel towers spaced about ten to the mile and extend from the power plants to the various points of distribution and consumption. The entire system of heavy voltage transmission spans a distance of more than 1,200 miles.

It is obvious that electric current at 140,000 volts is too near the texture of lightning to be used for any ordinary purpose; hence substations are erected at the points of distribution containing transformers which reduce the

(*Continued on Page* 31)



Water Turbo-Generator in the Junction Dam Power House of the Consumers Power Company on the Manistee River.

For a complete schedule of the "Romance of Michigan Industry" Series, see page 30

Digitized by Google

The Double Cross in Seattle

Radicals, Professing Support of American Plan, Play Judas, But Deception Is Discovered in Time

SEATTLE is the home of the American Plan of Employment.

Out of a turbulent period of strikes, riots, radicalism and bloodshed, the result of a deliberate attempt on the part of the then leaders of Seattle organized labor to establish the soviet form of government upon American soil, and which resulted in the city's gaining the reputation of being the worst hotbed of bolshevism in this country, Seattle emerged an open shop city.

The story of Mayor Ole Hanson's militant tactics in dealing with the rebellious element is well known. The formulation and adoption of the American Plan by the Associated Industries of Seattle is likewise familiar, for the plan has spread from coast to coast, and is in force in Detroit. But Seattle, the home of the American Plan, is not entirely "out of the woods," and it is not generally known how the radicals, temporarily defeated, came back with a terrific wallop by double-crossing the Seattle Chamber of Commerce and the Associated Industries.

In every community where the rank and file of organized labor still permits radical leadership to dominate and is either ignorant or indifferent to the "boring within," which is the policy of bolshevism's official and self-appointed agents, and where employers are still inclined to bargain with organized labor's agents rather than take a united stand under the American Plan or some equally effective plan, the story of the double-crossing of Seattle's industrial and commercial leaders carries a warning.

Why the Plan Was Adopted

The American Plan was adopted in Seattle as a means of protecting the building industry against vicious practices of vicious leaders in the building trades. It was not an attempt to throttle labor organization nor to prevent collective bargaining. All the promoters of the American Plan asked was that labor leaders desist from interfering with the right of all workers to sell their labor where and upon what terms they desired.

If a building employer preferred to hire union men, that was his business, but because he employed union men was not to be considered sufficient reason for union leaders to persecute employers of non-union men, or the non-union men themselves. The radical wing of labor was determined that Seattle should be a closed shop city, but the real object of the campaign was to take complete control of the building industry in the city from the owners and place it in the hands of the union leaders. The success of this program would have reacted as harshly against the union membership as it would have against the owners, but that the more conservative union men were prone to see.

After the smoke of battle had cleared away and the American Plan became recognized, the building situation improved and Seattle settled back confident that a worth-while victory had been achieved. Seattle's success in putting over the American Plan was spread broadcast over the country. Either Seattle employers were over-confident or they were not voicing their fears of a possible "comeback." At any rate, it was not long before they awoke to the realization that they were not "out of the woods"—that the radicals were not whipped. They merely were awaiting the psychological moment to execute a coup; and it came, and this is the way it developed:

During the long period of warfare between employers and organized labor, radicalism in the Northwest, in which the general public suffered equally with the belligerents, there developed a desire for a neutral organization which could investigate conditions and express the public will. In Seattle the Chamber of Commerce and Commercial Club was appealed to for aid in forming some such organization. As a result, a Committee on Labor Relations was formed to function independently of all bureaus and other organizations interested in the same subject. This committee was to view the whole situation from a middle ground, conduct such research work as was necessary and compile and submit its findings to the trustees of the Chamber of Commerce.

After several months of work the committee submitted a voluminous report from the standpoint of the general public. The committee carefully avoided holding briefs for either employers or employes. The members of the committee were not employers of labor but professional men and inclined to be liberal rather than conservative.

When the report was ready it was suggested that copies be sent to the officials of the Seattle Central Labor Council and the Washington State Federation of Labor. When this text was submitted, bars were embodied, and their constructive spirit is appreciated by this committee. This shows a willingness to pull together now and work out a practical solution for industrial harmony."

Having established confidence in the minds of the committee members, the radicals then proceeded to spread by the underground route the report that the building employers had decided to abandon the open shop program and tie up with the unions. They also announced that the Associated Industries, the organization formed to combat labor, was soon to be disbanded, and that the Chamber of Commerce would thereafter represent the employers and would work with the Labor Temple.

The conspiracy was well under way and the report of the special committee was published before the Chamber of Commerce awoke to the fact that it had been made the victim of an ingenious plot. The daily papers carried only extracts from the report which could be construed in almost any way a biased person desired.

The Central Labor Council's official newspaper, The Union Record, immediately began a front page campaign of misstatements, among them the following:

"Open shop capital's war on labor and the community as carried out by the Associated Industries has ceased in Seattle. . . . With the adoption of a report calling for conciliation between employers and workers the 26 trustees of the Chamber of Commerce by unanimous vote have uttered a call for a new order of things in this city's industrial life. . . . The Associated Industries retires from the stage. . . . Not only does the Chamber intend to speak in future for the employers of the community instead of the Associated Industries, but that body places itself on record in favor of many things that labor has been denounced for advocating. . . . An end to the bitter strife which has torn the city since the Seattle general strike looms now with the new attitude of Seattle capital. . . . After 20 months of expensive, exasperating and destructive adherence to the policy laid down by the Associated Industries, the same portion of the business and industrial community has announced a desire for a change in tactics. . . . Evidently realizing that a continuance of the ill-advised policy of the Associated Industries could only lead to financial, commercial and industrial ruin, the same portion of the business world has again taken the reins into their hands. Speaking through the Chamber of Commerce, a new program has been announced.

"The capitalists see their doom in the coming election. They realize that Hanson and the whole Farmer-Labor ticket will be elected. They are deserting the Associated Industries like rats leaving a sinking ship. The workers have triumphed. The unions are again the dominant force in Seattle industry. The Chamber of Commerce is panic stricken and has come running to the Labor Temple for aid. Within 20 days every open shop plant in Seattle will sign up with the unions. You fellows had better get in out of the wet. Just as your bosses are doing. Get in while getting is good. When your boss signs up with the unions you will be without a job. The only way to save yourself is to take out a union card and help labor lead to win the election, and we are going to run things in Seattle and all over the state, and this won't be a very healthy place for you unless you are one of us."

Labor leaders then began a spirited campaign to bring back into the organization fold those members who for one reason or another had left, and to advise those workers who had never enjoyed membership immediately to get "under cover" while the getting was good. Naturally there was a grand rush by such workers who feared rather than respected the union organizations as they were being conducted, and Seattle was in a fair way to see its American Plan structure fall in a heap.

The Chamber Comes Back

The Seattle Chamber of Commerce lost no time in endeavoring to make plain its position, the following statement being issued:

"In view of misstatements made by the Union Record October 11 that the Seattle Chamber of Commerce and Commercial Club has attempted to supplant the Associated Industries of Seattle and that the report of the Labor Relations Committee of the Chamber of Commerce discredits the work of the Associated Industries the trustees of the Chamber of Commerce take this occasion to state that the service rendered and now being rendered the community by the Associated Industries has made it feasible the consideration of its own program.

"But for the fearless stand of the Associated Industries during the Seattle general strike industrial life, this report could not have been presented to the public, and, furthermore, let it be understood there is no intention on the part of the Chamber in any way to disband them or be policies and aims heretofore followed and now pursued by the Associated Industries in this public activity, or to supplant the Associated Industries in its work.

"It is to be recalled that the Chamber has been at one time on record overwhelmingly in favor of the American or open shop plan of industrial relations and still unalterably committed, with the Associated Industries, to this just and fair principle.

"Further evidence of the declaration of principles put forth by the Associated Industries and the letter by the then president, Mr. Frank Waterhouse, accompanying it, met with instant approval, not only in this community but throughout the country. And the reason for this is plain. It stands for even-handed justice to employer and employe alike. That is why it has commended itself to all fair-minded people at home and abroad.

"But the Associated Industries did not stop there. With intelligence and courageous fidelity, beyond all praise, they put those principles in practice, and in 18 months the industries have

(*Continued on Page* 34)

Digitized by Google

Rail Board Protest Meeting on January 12

The demand of the Railway Brotherhoods that a National Board of Adjustment shall handle all labor problems instead of the individual company settling its own troubles, as formerly, will be protested at a convention of manufacturers, merchants, railway executives and shippers, at Chicago, January 12. About 500 delegates, representing all sections of the country, are expected to attend the meeting, which will be held at the Congress Hotel.

Acquiescence in the Brotherhoods' plan would mean the opening wedge for collective bargaining and the closed shop in all branches of American industry, according to the convention call issued this week by the National Conference of State Manufacturers' Associations, through its president, William Butterworth. In explaining the primal purpose of the convention the call says, in part:

"The Railway Brotherhoods are insisting upon the creation of a National Adjustment Board. The railway executives are opposing it because, if created, it means the nationalization of railways under the domination of the labor unions, and the destruction of discipline, efficiency and loyalty, which are necessary to the efficient and economical operation of the common carriers for the benefit of the people. If the railroads are thus shackled, the resulting conditions must necessarily be reflected in the organization of every manufacturer. It means the closed shop and union domination over all industries alike. This, today, is perhaps the most vital issue facing the manufacturing and producing interests of the United States, and should have immediate attention."

A discussion of the open shop, its effect on employe, company, production, cost of production and union labor is also scheduled. The immigration problem, particularly vital at this time, will be considered in all its phases. Many prominent men have been invited to address the convention, including Elbert H. Gary; Charles M. Schwab; Dwight W. Morrow, J. P. Morgan & Co.; A. Barton Hepburn, Chase National Bank; W. W. Atterbury, vice-president, Pennsylvania Railroad company; Charles Nagel, former secretary of Commerce and Labor, St. Louis; John D. Ryan, Anaconda Copper Company; P. A. Seiberling, Goodyear Tire & Rubber Company, and Charles Piez, president Link-Belt Company, Chicago.

Howell to Greet New Year With Industrial Revival

The city of Howell approaches the New Year with considerable enthusiasm as a result of promised industrial activity. The annual meeting of the Board of Commerce will be held January 12, at which a special program bearing on civic betterment will be provided. The speakers will be Mayor Sutton, Rev J. S. West, Superintendent of Schools Coulter, County Agent Douglass, H. L. Williams, Charles Norton and Wilson Howlett.

The work of constructing the Howell Foundry Company building is being pushed as rapidly as possible in an effort to begin operations before spring. Plans are being made for reopening the plant of the Howell Washing Machine Company. John Randall, engaged in the glass cutting business, has arranged to turn his business over to a stock company, which is to be formed with a view to enlarging the enterprise.

After a period of inactivity the plant of the Borden Company has been reopened and a large quantity of milk is being canned. The Howell Electric Motors Company is established in its new plant.

STRAIGHT LINE METHODS

Business Graphics

If you would make Figures talk, Chart them

Graphic Charts are moving picture stories of business activities. They are figures—illustrated. They picture the vital facts of your business, as those facts are revealed by figures—compare them, weigh them, measure them.

Graphic Charts illuminate the most complicated problems. Their logic is the logic of mathematics. They are simple. They interest. They convince instantly.

The value of your Graphic Charts depends on the just application of correct figures and the use of correct chart forms. Perfect accounting must be their base.

Only expert accountants, trained in engineering principles and with long experience in Graphics, may be entrusted to set these vital business pictures. Prepared by novices, Graphic Charts are misleading—untruthful—dangerous.

In this connection:—

ERNST & ERNST

offer a highly specialized Graphic service—in the preparation of Graphic Charts or the establishment of a competent Department of Graphics in your business.

Our detailed Pamphlet on the subject, to Executives

ERNST & ERNST

AUDITS—SYSTEMS
TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON, CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY, CLEVELAND, BUFFALO, PITTSBURGH, CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND, NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.
Miners and Shippers of Coal
LONE STAR
Mined at Blair, W. Va., C. & O. R. R.
BEST FOR { Gas and By-Product Glass Plants Excellent for Steam
BLACK HAWK SPLINT
Mined at Big Creek, W. V., C.&O.R.R.
FOR { Malleable Iron Plants General Steam Purposes
Low Ash *High Heat Units*
Detroit, Michigan Main 4064

Conditions Better—Metzger

Detroiter, Pioneer of the Automotive Industry, Summarizes Favorable Indications of Last Few Weeks

IN THE fastest thinking and snappiest acting nation in the world an industry like that which has made the motor car a necessity, a utility and a universally desired mechanical convenience cannot long remain dormant. The foundation of this industry has been too well laid and the need of every efficient facility for transportation is too great and too widespread to permit of its successful repression.

"The two requirements necessary to reestablish all business, including that of the motor car industry, are the adoption of every fair means to keep merchandise moving for the next two or three months, and lay plans for future business within the next year. Much of the responsibility of properly guiding business through this difficult period rests with the retailer, and the wisdom and energy he displays now in handling his business will influence industrial and mercantile activities."

The two foregoing paragraphs are from a message to the automotive industry from one of its pioneers, William E. Metzger, Detroit, director of the National Automobile Chamber of Commerce, and one of the men responsible for the remarkable success of the Columbia Motors Company. Mr. Metzger has been through more than one crisis in the industry and bespeaks an optimism based upon his experience.

"There is nothing mysterious or alarming about the present situation," he says. "We and all other countries are paying for the world war. It caused a tremendous waste of men and money, effort and resources, and all that waste must be paid for. Just as it takes a man who has been ill almost to the point of death a long time to recover, so it will take the world time to recover. Some countries will recuperate more quickly than others because they were not so hard hit by the war and because they have the tremendous natural resources for the creation of new agricultural and manufactured wealth that will make their convalescence not only easy but quick. Such a one is our country."

Mr. Metzger believes that, because the snap and go which is characteristic of American life, the desire to own a motor car is inbred in every American. The longer the present repression of this desire exists, the greater will be the reaction, for the desire has not been affected.

"The result of decreased demand for almost every kind of product has been and will continue to be liquidation. It is apparent everywhere," Mr. Metzger says, and points to the decline in demand for copper, cotton, food products, wool, silk and leather, and to the subsequent price reductions necessary to gain liquidation. And he believes that in some essential commodities the period of liquidation has about run its course. "It is from just such conditions," he asserts, "that recoveries develop into booms. When the world decides to begin buying, it will buy as it never has before."

Mr. Metzger sees the signs of a coming turn for the better, regarding which he says: "We have passed through a period of high money rates and have just witnessed the first material break in call and time money in New York. Call money has fallen from about 9 to 6 per cent and time from about 8½ to 7 and 7½. It will not be long before lower money in New York will be reflected in lower rates all over the country.

"Another very favorable sign is that which comes from our Federal Reserve System. For months after month it had to grapple with the problem of continued note expansion. Only recently came the first break, with a reduction in demand for new loans or the continuation of old ones. Now for the first time the system shows a progressive reduction in outstanding loans. The New York clearing house has shown the sixth successive decrease in loans since October 16, total contraction since that date aggregating $283,000,000. A slow upbuilding of the reserve system strength is noted throughout the country.

"Practically all the great banks in the country are agreed that the peak of the credit situation has passed. One of the foremost economists a few weeks ago forecast that 1921 would be a year of easy money. His prediction is making good. The greatest bank in the country has issued a statement saying that better business is on the way. A great Chicago banker looks for a business boom in the early spring. Men and concerns such as these do not make predictions just because they like to make predictions, but because they know what they are talking about.

"Now getting back to the automobile business for a moment. Production has been curtailed for several months. Every day of lessened production, or production that merely keeps pace with present sales, means a scarcity of automobiles when the demand revives, which I feel sure it will do in the spring, and perhaps sooner. I feel sure that the automobile shows will strike an emphatic note of better business, and it should be the duty of everyone in the trade, from office boy up, to get such an outpouring of people to the shows this winter as we have never seen before. Just as the reserve stock of automobiles is being wiped out by underproduction, the same is true in many other lines of manufacture.

"When conditions get just a little bit better and the climb toward normal begins, manufacturers in all lines will have to supply merchandise not only with immediate requirements, but build up surplus stocks for the future.

"Improved conditions are here. Better times are very near. As business picks up there will be more sales for merchants and more work for working men. And when business gets back to nearly normal there will be plenty of sales and plenty of work, but there will be no room for shirkers for a long time to come. Next year will be a truly happy one for all of us."

ACCOUNTANTS MEET THIS MONTH

Richard Fitz-Gerald, of Lybrand, Ross Bros. & Montgomery, and who was named chairman of the new Detroit section of the National Association of Cost Accountants, at a recent meeting at the Board of Commerce, has completed the personnel of the organization committee, which is composed of the following: E. E. Staub, Hudson Motor Car Company; Maj. William Butler, Fisher Body Corporation; A. C. Brown, General Motors Corporation; S. C. Guthrie, Hinkley Motors Corporation, and R. W. Busse, E. C. Little Tax Bureau. The second meeting of the Section probably will be held the second week in January.

BYLLESBY OFFICES FOR DETROIT

H. M. Byllesby & Company, engineers, Chicago, have opened Detroit offices at 1614 Dime Bank building. Thomas E Flanegin is the resident manager.

Digitized by Google

Clark Art Exhibit on View During N. Y. Motor Show

A group of twelve paintings portraying "The Spirit of Transportation" by a number of talented artists of America will be shown to visitors to the New York automobile show, this month. These paintings depict in a dramatic manner the place of the automotive industry in transportation and its relation to the economic and industrial life of the world. They were made at the instance of the Clark Equipment company, Buchanan, Mich., which has in this fashion shown its appreciation of the accomplishments of the American automotive industry.

The artists have endeavored in these paintings to awaken a realization that the part the automobile and motor truck play from now on will vitally affect the progress and development of the world. These paintings give everyone connected with the automotive industry a broader conception of the tremendous contributions to civilization which have come through the widespread use of automotive transportation.

Visitors to the Hotel Commodore during the automobile show will see on each of the twelve columns as they enter the main lobby one of these particular paintings, appropriately framed, which tells in each artist's characteristic technique his graphic conception of "The Spirit of Transportation." The artists represent portrait, landscape, figure, marine and mural artists, etchers, and also the popular illustrato

This is ...e first time in the history of industry that a company has endeavored to dramatize the accomplishments of a great industry, and is the first time that a large company has drawn so liberally upon art in such a manner. The artists whose work is represented in this prize competition have been selected from those representing the four branches of art as follows: Portrait, marine and landscape painters, George Elmer Browne, Jonas Lie and Max Bohm; illustrators, Frank X. Leyendecker, C. Coles Phillips and James Cady Ewell; mural painters, Maxfield Parrish, Alphonse Mucha and F. Luis Mora; etchers, Frankiin Booth, R. F. Heinrich and William Mark Young.

Added interest is given to the exhibit due to the fact that in addition to the remuneration which each artist has received for his painting, a competitive interest has been awakened among them by reason of a capital prize of $1,000 which will be awarded the artist whose painting is esteemed the best. A jury of award consisting of the leaders of the automotive, marine and railway industries will view the paintings while on exhibition and will award the prizes. The second prize is a silver medal of honor and to the third goes honorable mention.

At the close of the New York show the paintings will be sent to Chicago for exhibition during the Chicago automobile show and later to Boston, where they will be on exhibit at the Copley Plaza Hotel during the Boston automobile show.

YOUNG TO SUCCEED FLETCHER?

According to a report in political circles, State Labor Commissioner R. H. Fletcher will tender his resignation about January 1 to Governor Alex. J. Groesbeck. It is said that Carl E. Young, president of the Michigan Federation of Labor, is slated for Fletcher's post. Mr. Young has served two terms in the state legislature.

SAGINAW INDUSTRY MOVES

The Allington & Curtis Company, manufacturer of dust and shavings collectors and air conveyor systems, is moving into the plant of the Wilcox Engineering Company, which it bought some time ago and enlarged to meet its requirements.





Van Dorn



Electric Tools Excel

Because They

Increase your production.

Reduce maintenance cost.

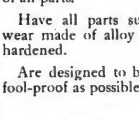
Save in power consumption.

Embody interchangeability of all parts.

Have all parts subject to wear made of alloy steel and hardened.

Are designed to be as near fool-proof as possible.





STRELINGERS'

Carry one of the largest, if not the largest, stocks of portable tools in the world and maintain a Van Dorn Service Department in Detroit, for the State of Michigan.

THE

CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

"EVERYTHING FOR THE SHOP"

43-51 East Larned Street DETROIT Cadillac 7080

Digitized by Google

NAPIER
Metal-Cutting Machine

As Modern as the 20th Century

The Napier Metal-Cutting Machine is the most modern, dependable, efficient and satisfactory of all devices on the market for cutting metal—soft machinery or hard tool steel, brass, bronze or aluminum.

We are Agents for the Napier Band Saw

J.R. Stone Tool & Supply Co.
Metal Working Tools & Accessories
997 Woodward Ave., Detroit

SPRUNK
Engraving Co.
700 Marquette Bldg.
MAIN 1491
EXCEPTIONAL SERVICE IN ENGRAVINGS AND ART WORK

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

ST. LOUIS' SHOW IN TENTS

St. Louis, Mo., is going to have its annual automobile show, according to reports from that city's motor row. Officials of the dealers' association notified the members that they had been unable thus far to find a suitable building, and that while some structures were under consideration, it wns not certain that arrangements could be made to rent them when wanted. When the dealers heard all the facts they voted unanimously to hold the show under any conditions, says the St. Louis Post-Dispatch. It is more than likely, says the newspaper, that circus tents will be pressed into service. It is said that ten such tents have been purchased and that plans for heating them and otherwise making them comfortable have been made.

GMC OFFICES REMAIN IN N. Y.

In regard to the report that the General Motors Corporation intends to remove its general offices from New York to Detroit and house them in the new Durant building, President du Pont has written this paper as follows: "There is no foundation for the rumor that General Motors offices will be moved from New York to Detroit. No consideration has been given to this proposition, and it seems unlikely, in view of the many important matters to be taken up and decided, that this one of lesser importance should receive consideration. I therefore deny the report as being untrue."

STOCKHOLDERS NAME COMMITTEE

Some of the stockholders of the Bethlehem Motors Corporation, Allentown, Pa., have formed a committee for the purpose of protecting the interests of shareholders and with the hope of being able ultimately to present a plan of reorganization which will preserve stockholders' equity in the property, says the Wall Street Journal.

MOTOR ADVERTISERS' MEET JAN. 7

The Advertising Managers' Council, Motor & Accessory Manufacturers' Association, will meet in Hotel Astor, New York city, January 7, to take up the matter of future advertising policy. Among the speakers will be E. W. Clark, Clark Equipment Company, Buchanan, Mich.; Alfred Reeves, general manager, National Automobile Chamber of Commerce; C. C. Parlin, manager of the commercial research department, Curtis Publishing Company, Philadelphia, and E. C. Tibbits, advertising manager, B. F. Goodrich Rubber Company, Akron

McGRAW TIRE AND RUBBER

The McGraw Tire & Rubber Company, Akron, O., having decided to omit its quarterly preferred dividend payable January 1, President John M. Morgan has issued the following statement to the stockholders:

"The directorate wishes to call attention to the fact that affairs of the company are financially sound—the ratio of quick assets to liabilities being approximately two to one. The obligations of the company have been substantially met since July 31, 1920.

"Inventories of raw and finished material, while larger than in normal times, are well balanced and will respond to quick liquidation in sales in the early part of next year, current market prices having been used in the readjustment of inventory values.

"Attendant with the writing down of the company's inventory, the officials of the company have been meeting the abnormal situation by a policy of rigid economy in all departments, including the reduction in salaries of officers and employes.

"Directors feel that prospects for spring business are encouraging, and in support of this view can state that our sales department has received contracts from our trade, which at a conservative estimate will provide 60 per cent of the total volume of 1920 business."

FIRESTONE PROFITS LARGER

For the year ended October 31, sales of the Firestone Tire & Rubber Company amounted to $114,080,369. Those for a similar period in 1919 totaled $91,078,514. Profits amounted to $9,396,912, an increase of $89,934.

JOHNSON JOINS AUBURN

A. R. Johnson, formerly with the Cadillac Motor Car Company, and prior to that with the Hyatt Roller Bearing Company, has been made assistant sales manager of the Auburn Automobile Company, Auburn, Ind.

KING APPOINTMENTS

The King Motor Car Company, Detroit, will start the New Year with A. Weber as general manager of the plant and S. J. Feldman in charge of eastern sales and export business.

ZIMMERSCHIED MANAGES CHEVROLET

K. W. Zimmerschied, who has been with the General Motors Corporation since 1911, and who during the last two years has been assistant to the president, has been appointed general manager of the Chevrolet Motor Company, Flint, succeeding W. C. Durant, resigned. The appointment is announced by Pierre S. du Pont, president of GMC. It is understood that F. W. Hohensee will remain general manager of Chevrolet production and W. C. Sills as general manager of sales.

REPUBLIC TRUCK DIRECTORATE CUT

Republic Motor Truck Company stockholders have approved a proposal to reduce the directorate from 15 to nine members.

NEW COMPANY WANTS QUOTATIONS

The Calumet Truck Body Corporation, Calumet, has been organized with a capital stock of $200,000 to build the Calumet All-Purpose Body for motor trucks. This type of body can be used as a platform express, stake, grain, cattle or hay carrier. The company is seeking catalogues and prices from manufacturers of malleable and drop forgings and fittings for truck and cab bodies; also prices on tools and shop equipment.

PREST-O-LITE CUTS PRICES

In anticipation of lower prices of materials, the Prest-O-Lite Company has made marked reductions in prices on much of its product. Some of the prices are back at the pre-war level.

REO CAPITAL STOCK INCREASE

Stockholders of the Reo Motor Car Company, Lansing, have authorized the directors to increase the capitalization from $10,000,000 to $15,000,000 at any time they deem advisable. This action will make a special meeting of the stockholders unnecessary. General business conditions are such that an immediate increase and a declaration of a stock dividend were considered unwise. Officers were re-elected as follows: President, R. E. Olds; vice-president and general manager, R. H. Scott; vice-president, H. G. Thomas; secretary-treasurer, D. E.

Digitized by Google

Bates; assistant treasurer, D. M. Parsons. The new board of directors consists of R. E. Olds, R. H. Scott, H. T. Thomas, R. C. Rueschaw, H. C. Teel, G. E. Smith and D. E. Bates. The plant was closed December 24 to permit reorganizing departments whereby trucking in the manufacturing process may be eliminated and automobile sections handled more efficiently from machine to machine. The plant will reopen January 3.

WILLIF HEADS DUPLEX SALES

Frank B. Willif, head of the sales division of the Kelly-Springfield Truck Company, has been appointed to a similar position by the Duplex Truck Company, Lansing, according to announcement by General Manager Harry M. Lee. Mr. Willif will succeed Andrew Langenbacher, who became secretary-treasurer on the resignation of George W. Hewitt.

Goodyear Shown Sound; Refinancing Approved

Probably the most interesting fact brought out at the meeting of the stockholders of the Goodyear Tire & Rubber Company, in Akron, O., a few days ago, was the result of the audit of the company's books, which showed total assets of $155,076,840, exclusive of issued and all outstanding capital stock, and including reserves for contingencies, of $42,696,243, thus leaving net assets after payment of all liabilities to be applied to the outstanding capital stock, of $110,380,596, sufficient to pay the entire outstanding preferred capital stock in full at $100 a share and leave $44,247,973 for the common. This would mean a book value of $73.87 a share.

President F. A. Seiberling in giving these figures added that the company's good will account was not taken into consideration at all and that all raw material, including rubber and fabric, had been invoiced at its market value regardless of what it cost the company.

There were present at the meeting in person about 1,200 stockholders, says the Cleveland Plain Dealer's special correspondent, while 498,129 shares of preferred stock and 546,362 shares of common were represented by proxy. When a vote on issuing not more than $50,000,000 of first mortgage bonds, notes and such other evidences of indebtedness maturing in not to exceed 25 years and bearing 8 per cent interest, was taken, there were 499,371 preferred shares which voted in favor and only 1,120 against the proposition. Another proposal to authorize and empower the directors to issue bonds, notes or other similar evidences of indebtedness and to execute and deliver a mortgage or trust deed on the company's property securing the payment thereof, was adopted by the unanimous vote of all the common stockholders and all of the preferred shares but 987.

WILL MAKE BEET HARVESTERS

A new corporation known as the Acme Beet Harvester Company, and which will be capitalized at $25,000, has been formed at Alma. The company has just been granted permission by the Michigan Securities Commission to sell $10,500 of its common stock.

The beet harvester, which the company is organized to place on the market, is still somewhat in the experimental stage, but is said to have shown great promise in tests in beet fields around the state. Arthur Lippert, formerly a machine and tool designer of the Republic Motor Truck Company, Inc., and the Fordson Tractor Company, invented the machine.

BUSINESS CLUB ELECTS OFFICERS

At the annual meeting of the East Lansing Business Men's Club officers were elected as follows: President, O. R. Adams; vice-president, C. W. Chapman; secretary-treasurer, W. I. Gilson.

DID YOU READ

The First Article in December "Machinery"?

"MAKING BRASS FORGINGS" is the title. And it describes the new methods developed by the Mueller Metals Co., Port Huron, Mich., for the production of parts made from brass, bronze, and other non-ferrous metals. The following is a brief quotation therefrom:

"During the war, brass forgings or so-called 'die-pressed castings' were made in large quantities to be subsequently machined into various fuse parts, but otherwise the forging of brass in dies had not found wide application in the United States.

"Several noteworthy advantages are secured by forging brass, bronze, or copper parts to the required shape, instead of turning the work from bar stock on an automatic screw machine or making it by some other familiar method of manufacture. Chief among these are the facts that it is possible to effect a substantial saving of high-priced metal; that parts can often be forged in a way that enables them to be utilized with little, if any, subsequent machine work, thus saving a heavy labor cost; and that the process of forging imparts greater density, freedom from porosity, and additional strength to the metal."

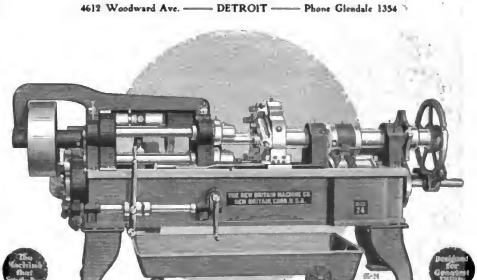
The Mueller Company have installed "New Britain" Multiple-Spindle Automatics as the most efficient means of finishing many of the parts illustrated.

If this article seems to point to possible economies on your work, we shall be pleased to give you the benefit of our experience along this line.

Our new catalog illustrates several pieces of this character, the operations performed and the productions obtained being indicated. Send for a copy

The New Britain Machine Co., New Britain, Conn., U.S.A.

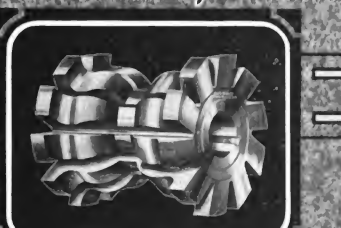
4612 Woodward Ave. —— DETROIT —— Phone Glendale 1354



-:- NEW BRITAIN AUTOMATICS -:-

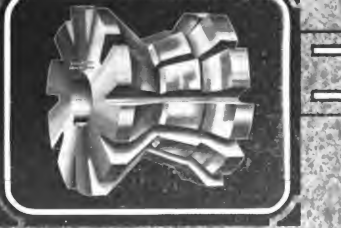
Digitized by Google

Brown & Sharpe Cutters



B. & S. Cutters are backed by fifty years' experience in the manufacture and use of milling cutters. For increased production and lowered operating costs *"Specify B. & S. Cutters."*

BROWN & SHARPE MFG. CO.
PROVIDENCE, R. I.



Brown & Sharpe Hobs

Transportation

WASHINGTON—Operating statistics for large steam roads, recently prepared by the Interstate Commerce Commission, shows for the period January 1 to October 1, 1920, a general increase in operating efficiency over the same period last year. A comparison follows:

Item	January 1920	October 1919	% increase 1920 over 1919
Miles of road operated	229,429	229,314	0.5
Freight train miles*	454,337,000	394,956,000	14.3
Pass. train miles*..	409,703,000	390,857,000	4.5
Loaded freight car miles*	11,413,566,000	10,138,467,000	12.6
Empty freight car miles*	4,991,612,000	4,777,981,000	4.5
Net ton miles*	330,964,000,000	295,967,000,000	11.8
Gross ton miles*	618,744,000,000	563,350,000,000	12.7
Gross tons per train	1,462	1,562 (d)	1.3
Net tons per train	723	726	1.0
Cars per train	27.4	28.8 (d)	3.6
SERVICEABLE CARS ON LINE DAILY:			
Home	510,173	(a)	
Foreign	1,818,197	(a)	
Total	2,328,370	2,267,788	1.8
Cars stored	15,044	180,932 (d)	91.7
Car miles per car day (b)	28.1	22.2	8.1
Net ton miles per day (b)	466	429	13.3
Tons per loaded car (b)	29.0	28.3	2.5

*—Excluding mixed and special trains.
(a)—Separation not available.
(b)—Including mixed and special trains.
(d)—Decrease.

Lansing—Road commissioners last week protested to the Michigan Public Utilities Commission against the 40 per cent freight increase, declaring that the excessive cost of hauling gravel would discourage road building. It was charged that former increases by the Interstate Commerce Commission have been unfair, an that unless new rates were made road construction would become prohibitive. It was decided to held another informal hearing January 6, when representatives of the railroads will be present. If no understanding can be reached a formal hearing will be arranged.

Washington—The Interstate Commerce Commission has given the Adams, American, Wells-Fargo and Southern Express companies permission to consolidate properties and business into the American Railway Express Company. The Commission was divided on the issue, two members, McChord and Meyer, dissenting on the ground that such a consolidation would stifle competition. The majority of the commissioners thought the merger would result in equal rates and better service.

Lansing—In affirming the award of $800 given Col. Ira G. Humphrey, Monroe, by the lower court in his suit against the Detroit, Monroe & Toledo Short Line Railway to recover damages for an over-charge in fares between Monroe and Detroit, the Michigan Supreme Court ruled that the company could not increase its fares without proper authorization. Col. Humphrey was charged 65 cents on each of four trips between the two points, although the fare fixed by franchise was 50 cents. The claim made by the company was that the new fare was fixed by order of the Interstate Commerce Commission. The higher court ruled that the question of whether the company was engaged in intra-state or interstate commerce did not enter into the case.

Washington—According to statistics of the Interstate Commerce Commission, coal consumption by locomotives in road service on the principal lines increased 10,000,000 tons in the first ten months of 1920, as compared with the consumption in the same period last year, the figures being: 1920, 81,752,821 tons; 1919, 71,619,009 tons. The average cost of coal per ton in 1920 was $5.95, as compared with an average of $3.21 in 1919. The cost of coal in different sections shows great variation. Roads in the New England region are paying $7.72 a ton, while those of the Central West are paying $3.38.

Digitized by Google









COLD DRAWN "COLUMBIA SPECIAL" STEEL

COLD ROLLED AND COLD DRAWN STEELS

FREE CUTTING SCREW STOCK

COLD DRAWN 40-50 CARBON AXLE STEEL

COLD ROLLED STRIP STEEL

TURNED STEEL SHAFTING

COLD DRAWN 3½% NICKEL STEEL
(S. A. E. 2320 and 2330 Specifications)

COLD DRAWN 1½% NICKEL CHROME STEEL
(S. A. E. 3120 Specifications)

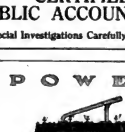
GENERAL OFFICES AND WAREHOUSE
336 to 350 West Fort St.

Digitized by Google

MORTON AUDIT COMPANY
1901 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS

INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

POWER



THE RED SBAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

Collections of Every Kind and Size
TACTFUL
Arrow Service
SCHENECTADY NEW YORK
EFFECTIVE
System of Collection Psychology
A Service for
Manufacturers and Dealers
Business and Professional Men
Write For Interview Phone
B. APPLEBY Dist. Mgr.
606 Breitmeyer Bldg., Detroit Cherry 4777
MAIN OFFICES, SCHENECTADY, N. Y.
"Results or No Pay"

Builders Iron Works
INCORPORATED
Structural Steel, Ornamental and Miscellaneous Iron Work
Fabricated and Erected at short notice.
Jefferson and Brooklyn Aves. Phone Cherry 3217
DETROIT MICHIGAN

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Niles—The prediction is made that there will be a building boom in this city in 1921, as compared with $104,356. Losses—Detroit, $2,996,029, as compared with $7,989,502 last year in November; Bay City, $333,550, as against $546,000; Battle Creek, $18,950, as against $205,000; Grand Rapids, $444,396, as against $676,090; Saginaw, $144,743, as against $318,467.

in 1920 at least 100 houses have been erected; also a $100,000 factory for the National Standard Company, an $80,000 plant for the Standard Oil Company, a $100,000 theater, extensive additions to the Niles Lumber Company, a brick factory for the Spinks Manufacturing Company, a two-story garage for A. E. Saum, a $75,000 addition to the garage of P. H. Friday, a building for the American Cleaners' Laundry Company, and the first unit of the proposed $500,000 addition to the Fourth Ward school. These are only the more important of the many construction jobs of the year.

Detroit—The November building record in some of the largest cities of Michigan as compiled by the American Contractor is as follows: Gain—Lansing, $323,000, as compared with $210,150 in 1919; Kalamazoo, $108,554, as compared with $104,356. Losses—Detroit, $2,996,029, as compared with $7,989,502 last year in November; Bay City, $333,550, as against $546,000; Battle Creek, $18,950, as against $205,000; Grand Rapids, $444,396, as against $676,090; Saginaw, $144,743, as against $318,467.

Kalamazoo—Construction work during the week ended December 18 represented an expenditure of only $13,450, as compared with $68,675 for the corresponding week in 1919. The building permits totaled 11, the most important one being for a residence to cost $4,500.

Muskegon—The city didn't grow any too rich from the building fees it collected during November. The total was only $69. The amount involved in construction was $21,840. Of this $10,000 was for new buildings, $4,060 for repair jobs, $3,025 for 16 garages and $4,000 for a business house front.

Grand Rapids—During the week ended December 23 the total involved in building permits issued was $67,350. The week before the amount recorded was only a few thousand dollars. The largest item on the list is a school, to cost $56,500.

Lansing—Work is being rushed on the construction of the salesroom and garage of the Robson Auto Company, to be ready for occupancy by about February 1. The building is being constructed by the H. G. Christman Company at a cost of about $60,000, and is of artistic pressed brick and plate glass.

Detroit—Thomas Barlum & Sons have provided for the construction of a two-story market building at Bates street and Cadillac Square. The exterior construction will be terra cotta and the interior finish white tile and marble. Market stalls will be provided on the first floor and accommodations for mercantile establishments on the second.

Kalamazoo—Architectural plans and specifications for a warehouse building, on the city yards, have been presented to the city commission by C. Miller, of the Miller Construction Company. The commissioners reviewed the plans, but delayed action. The plans as presented call for a $21,000 building. This price would provide for the installation of plumbing and heating fixtures. The building would be large enough to provide room for all of the city's machinery, as well as supplies used in improvement work. Funds for financing construction will be provided in the 1921 budget.

Detroit—A two-story factory building, 100 by 160 feet, is to be built on a site at Martin and Southern avenues for the Federal Screw Works. The materials will be concrete and steel with texture faced brick and Bedford cut stone trimmings. Two railroad sidings will be laid.

Lansing—Oscar F. Jackson plans to erect a multiple residence building on property just purchased in a central location.

Reduce Boiler Room Costs!
Use the Coupon
The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:
Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.
Name .....
Business Address .....
Home Address .....
Date .....
THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4830 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

INVENTORIES CALCULATED
You specify time.
$7.50 per thousand items
BOX C, MICH. MFR. & FIN. RECORD
611 Free Press Bldg.
DETROIT MICH.

Large Eastern Manufacturing Concern is in the market for a manufacturing plant, fully equipped. Replies confidential, state location, size, price and equipment. Address box M, Michigan Manufacturer and Financial Record, 611 Free Press Building, Detroit, Michigan.

Digitized by Google

Studebaker Discontinues Horse-Drawn Vehicles

The Studebaker Corporation, of Detroit and South Bend, Ind., has decided to discontinue the manufacture of farm wagons and other horse drawn agricultural equipment and will concentrate exclusively on motor cars and trucks.

When it is remembered that Studebaker has been making the Studebaker wagons some 75 years, that these products are considered standard and have been selling the world over, it may be said that there can be no pessimistic outlook for the automotive industry, for such an old established concern would not discontinue a line for which there is still a fair demand without being sure that the product to take its place would be in as great demand. And that is just what the Studebaker officials think, according to dealers.

In making the announcement the corporation said that the decision would become effective when present materials on hand had been used. Mr. Erskine, president of the concern, is quoted as having said to one of the oldest distributors that the house had made the decision with reluctance, as the horse drawn product had been manufactured for so many years and had met with so much success, but, he added, even standard products must make way for something better.

The Studebaker Corporation in 1919 discontinued the production of spring vehicles.

JACKSON LEAVES OVERLAND

Vice-President Edwin B. Jackson, of Willys-Overland, Inc., Toledo, O., has resigned and will withdraw from the concern at the end of December. He was in charge of sales. This work will be continued by the sales manager, A. C. Barber. The retirement of Mr. Jackson followed closely the resignation of Vice-President Clarence A. Earl. It is rumored that further changes in the higher personnel of the Overland organization will take place.

CALUMET & HECLA OPERATIONS

For the last three months the conglomerate department of Calumet & Hecla has produced an average of 2,750,000 pounds of refined copper a month. There will be practically no curtailment of forces in this branch of the property and it is expected production will continue on the basis established in the last several months. Although no attempt has been made to increase the output of the reclamation plant, its production, on the other hand, has not been decreased, continuing about 1,000,000 pounds a month.

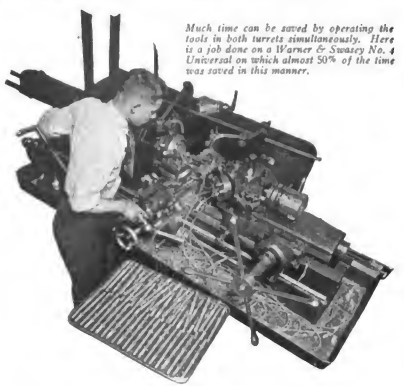
Six furnaces are now closed at the Calumet & Hecla smelter. One of these is of the larger type, with a capacity of 1,000,000 pounds of refined metal monthly. Two large furnaces are still in commission. The rest of the furnaces take between 40,000 and 50,000 pounds of mineral to a charge. The furnaces are not being forced

COX FORMS PARTNERSHIP

Keith Cox, public accountant, well known in Chicago, and who recently opened a Detroit branch office at 530 Penobscot building, has taken on two new partners and the former name of Keith Cox & Company has been changed to Cox, Komarek & Redding. E. J. Komarek is the originator of automotive and manufacturing accounting systems and J. J. Redding has had considerable experience as a construction accountant. The Detroit office is in charge of J. Ross.

FOREIGN TRADE MEETING PLANNED

Western Michigan bankers and business men are to be called together by Clay H. Hollister, Grand Rapids, in the near future to discuss participation in the Foreign Trade Financing Corporation, to be capitalized at $100,000,000 to finance trade overseas.



Much time can be saved by operating the tools in both turrets simultaneously. Here is a job done on a Warner & Swasey No. 4 Universal on which almost 50% of the time was saved in this manner.

A Production Engine Lathe

This is the right term for the Warner & Swasey No. 4 Universal Turret Lathe, as it does all that an Engine Lathe can do, and a great deal more. The carriage with feeds in both directions and equipped with the standard taper turning and chasing attachments, makes it capable of doing all kinds of work accurately and quickly.

Two No. 4 Universal Turret Lathes at the Kelsey Wheel Company, Detroit, have just replaced six Engine Lathes in their tool room. Other tool rooms in great number use these machines for blanking out taps, reamers and other tools that take so much time on Engine Lathes.

Are you doing work on an Engine Lathe that should go on a Warner & Swasey No. 4 Universal Turret Lathe?

Ask for descriptive folder and list of adjacent users.

World's Largest Manufacturer of Turret Lathes.
4½"x 44"—21" Swing to ⅝"x 4"—10" Swing.

The Warner & Swasey Company

CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, JANUARY 1, 1921

The New Year

THIS ISSUE of this paper bears the mark of a new year in its date line. We have turned the corner again and have a new twelve-month of activity, work and worry before us. The year 1921 is the beginning of a new era in American business. The people of the country have, by a decisive vote, determined upon a change in their national political administration. This change involves the application of the economic theories upon which the platforms of the successful party are based. The moment of change comes when the work of readjustment of governmental obligations and of the burdens upon the people to make their obligations good is just about to be entered upon. With the single exception of the formal act of terminating the war with Germany, we have put the war behind us. We have left as a heritage thereof our public debt incurred to maintain it, our obligations to the men who fought it and a sadly muddled industrial condition growing out of the conversion of our industrial facilities to the needs of war rather than those of peace.

The first two months of the year will belong to the old order, politically and otherwise. The remainder thereof, and probably the seven years to come, will belong to the new order. The primary thing to be undertaken is the reorganization of the public debt and the methods desired to support it. Luckily, our debt is largely internal. No serious amount of it is held abroad. As a matter of fact, the debts of the foreigners are held by us as an offset in the world account. So that our conversions and reconversions will have to be made in the light of the advice of our own people, rather than according to a plan which will suit foreign holders. To that extent we are in an advantageous position. But during this year we will have to settle several things regarding this debt. It was incurred and the plans to support it were made on the theory that it should be paid by the present generation. That accounts for the intolerable character of some of our present taxation plans. If we change this theory into one providing for the spreading of the debt and its payment into the long future, then we shall be able to take advantage of lower interest rates and lower annual contributions to the extinction of the debt, which will in themselves be palliatives of the present-day conditions against which our people's faces seem to be set.

Our next great obligation, which seems to be looming up rather conspicuously, is that to the men who fought the war. The taking of many hundreds of thousands of young men, the workers of this generation, from the pursuits of peace to apply their energies to the works of war entails a great public obligation to them as individuals. After the Civil War the obligation of the successful contestant of that conflict to its soldiers was composed successively into pensions for the injured and the maimed, support for the dependents of the dead soldiers, and eventually a general pension provision based practically on service. The dominant political majority during the World War was composed of the descendants of the losers in the Civil War, who had, quite naturally, no sympathy with the pension system which was elaborated for the benefit of the northern soldier participants in that war. Therefore, the entire fiscal system set up in advance to provide for the wreckage and ruin wrought to the men of the World War was based upon the theory that pensions should not exist as one of its consequences. The man whose dependents were to be made comfortable, in the event of his becoming a casualty of the war, was obliged to take out an insurance, half of the cost of which came out of his $30 monthly compensation. He had to add to the discomforts of his military condition in order to save money for his insurance. This insurance has been to some extent converted by the survivors into long-period insurance, but on the whole it is not going to take the place of pensions. At present the compensation theory, as most largely favored, takes the form of a bonus, some favoring money and some favoring land. But it is to be feared that the Government has not enough of either to go around, even if the plan were desirable. Youthful enthusiasm is always willing to discount its future into present-day capital. But even if that were done, there are bound to appear, as age supervenes, many sad physical results of participation in the World War, and the temper of the republic, always kindly to its saviors, will be in favor of alleviating that condition, regardless of earlier compensation. So that we are extremely likely to have pensions for the World War in the future. If such is to be the case, the sooner we get at the setting-up of the scheme, the better for all. The adjustment of our obligations to our soldiers is, therefore, one of the problems of the period to which this New Year is introducing us.

The readjustment of industry will bring its problems, has brought them and laid them at the feet of the New Year for solution. Our industries flattened out in the last half of 1920 by reason of the buyers' strike—not a formal strike, but a strike just the same. The reduction in the cost of living means that the items of compensation which enter into the costs of production must shrink. They are not likely to shrink to anything like the figures prevalent before the war, but the people are not drilled in the scheme of bookkeeping that compares this day's, this week's, this month's and this year's income with those of the corresponding periods one, two, three or four years ago. The public memory extends to yesterday. Yet the adjustments which have been made in wages so far do not indicate any recurrence to the pre-war scale. In the textile industry, for instance, a very general reduction of 22½ per cent is being made in wages. Even this reduction leaves the scale of industrial compensation in these lines 60 per cent higher than it was before the war. If no greater reduction in compensation has to be made than this, and if thrift is put at work, we ought, as a people, to round this corner very well.

These are the big problems of 1921. This New Year's day marks the calendar beginning of the new era. Let us hope that when the adjustments are over we may look to the initial day of the period, and recur to it as the Happy New Year's Day.

Free Trade in Motor Vehicles

NEW ECONOMIC CONDITIONS, as well as politics, make strange bed-fellows. Here we have Hiram Johnson and Josephus Daniels with their heads together; over in the corner that one-time ferocious old roaring lion, William Jennings Bryan, has lain down with the lamb, Warren Gamaliel Harding; but oddest of all is that group of men slapping each other on the back out there in the hall—the free traders and the makers of motor vehicles. If there ever was any such thing as "the old order," it is being so rapidly obliterated in these days of world business readjustment that you would hardly recognize it if you met it on the street.

If, back in 1909, when the Payne-Aldrich tariff law was being drafted, a delegation of automobile makers had descended upon Congress with a demand for absence of duties on motor products from abroad, their fellow manufacturers would have countered with a demand for a lunacy commission. The same

Digitized by Google

would have been true in hardly less degree had any such proposal been made in 1913, when the Underwood bill was under consideration. But now, we are told, the ways and means committee of the House of Representatives will receive on January 15 a group of men from the National Automobile Chamber of Commerce who will ask that in the forthcoming Fordney bill the products of European automotive factories be admitted to this country duty free. And, contradictory though it may seem, no volume of protest may be expected from the industry as a whole. Indeed the proposal appears to have the manufacturers' approval.

The industry, of course, has a reason for its change of front. That reason is that it seems to be convinced that its future success is tied up definitely with overseas trade, and it wants to be in position to take the greatest possible advantage of the opportunities offered in foreign markets. It believes that one of the prime requisites is the removal of European duties on the importation of American cars, trucks, parts and accessories, and to bring about that removal it wants the United States to take down the tariff wall erected against similar overseas products, in the hope that the European governments will reciprocate in kind. It dismisses as negligible what has always been the chief objection to free trade—inability to compete on even terms with cheap European labor. American methods of quantity production and sales will take care of that, is the answer. In other words, the industry is willing to take chances in a free-for-all, with no favors asked.

Except as a sop to European governments, it does not appear to this paper that the imposition or removal of a tariff on overseas automotive products would make much difference. Under the present tariff schedule of 45 per cent, shipments of American automotive products abroad have increased in a measure which is nothing less than phenomenal, the total, it is estimated, reaching $365,000,000 for the current year—a million dollars' worth of vehicles daily. This as against importation of European automobiles and trucks to the extent of only a few hundred thousand of dollars. We believe that during the year 1919 less than 150 overseas cars came into this country. Perhaps the removal of European tariffs would broaden the market for American cars abroad, although that is to be doubted. The removal of the American tariff against foreign machines might put the European governments in a frame of mind where they would not be so amenable to the arguments of their manufacturers to impose embargoes on American automobiles, as has been done by France and Italy. If it would, the action might be worth while. Considered solely as a tariff proposition, however, our opinion is that the American motor manufacturers can realize maximum possibilities abroad even with high duties to contend with.

It is not outside the range of possibility that the National Automobile Chamber of Commerce has reached an incorrect conclusion as regards the temporary slump in automotive sales abroad—that it has come to believe that tariff barriers, and not a scarcity of money, is responsible; and believing that, hopes to effect a resumption of sales by revising the tariff. If that is the case, it will find the remedy, if applied, ineffectual. The same conditions as obtain in the domestic automobile market—and markets of all other commodities, for that matter—are to be found overseas. Money is tight everywhere. And in addition to that, the disparity in the exchange rate militates against European purchases in this country. When money begins to flow freely once more, and the exchange approaches a balance, sales will pick up all along the line, and, unless we are mistaken, the manufacturers will be wondering why they laid so much stress on the tariff.

Unsound

THE House of Representatives probably will not concur in the passage of the Poindexter bill prohibiting strikes by railway employes, and it is to be hoped it will not. Such legislation is not only unconstitutional—involuntary servitude is no longer recognized in this country—but is in contravention of American principles, and in addition to all that it is unenforceable. Moreover, it would establish a precedent which would react upon business, in that if the courts were empowered to penalize workmen who declined to work, would there not also arise a demand backed by equal show of fairness that the courts could penalize factory executives who found it advisable to suspend operation of their plants? What is sauce for the goose is sauce for the gander.

Under its war time powers the Government undertook to prohibit strikes in the coal mining and railroad industries. We all know the result. The men went on a "vacation." If Congress made strikes illegal, workmen with grievances could take a "vacation," and surely there can be no law against vacations.

That there ought not be strikes on the railroads goes without saying. And there ought not be strikes in other industries. But workmen will continue to strike, law or no law, until they are convinced that strikes do not pay. A campaign of education, and not more legislation, is what is needed.

Short Measure Stuff

THE WAIL OF THE MANUFACTURER

In the realms of Manufacture
Things occur that sometimes pall
And good resolutions fracture;
Then we sip our cup of gall.

With that hope which seems immortal,
Eagerly we paw the mail;
'Ere the postman's left our portal
Hopes are dashed—and we turn pale!

"Please accept this cancellation;
Business here is slow just now."
That's the proffered explanation
Which we read with furrowed brow.

Now they're off—a stampede started;
Cancellations right and left;
Leaves us in a sea uncharted,
And of sanity bereft.

Here, we've planned, and worked, and worried,
Worn out Bradstreet's, also Dun's;
Bought machines and had them hurried,
Written letters by the tons.

"Kindly cancel all our orders."
Oh, ye Gods! What faithless men!
Now our thought on murder borders,
And we cuss and cuss again.

Is it any wonder, Brother,
Manufacturers go wild?
It's enough to make a Mother
Turn against her only child!

Well, boys, we must grin and bear it,
How much longer, none can tell,
It's our party; yes, we swear it,
Manufacturing is—Hell!!

—SAGINAW.

• • •

Kerensky reports that monarchists of Russia, Germany and Austria-Hungary are seeking to regain their thrones. They'll come back, just like Jess Willard and John L. Sullivan.

• • •

My Christmas gifts I'll have to heck,
I'm telling you the facts,
So I can raise sufficient dough
To pay my income tax.

• • •

Judge Goff, of the United States Shipping Board, has written a treatise on graft. Where in the world did he get his data?

• • •

Man wants but little here below,
But wants it while he's here;
Our bit, if you would like to know
Is a little nearer beer.

• • •

Wishing you all a happy and prosperous New Year, with lots of work and business and everything.

—A. F.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

WE of the United States of America are a strange lot. Things are either awfully good or awfully bad—no in-between conditions are ever permitted to exist in our consciousness, except in banks and other conservative institutions which have their profit margins set by law, and which, as an avocation, no longer appeal to so-called live wires. Business is either superlatively good or superlatively poor in our minds. Time is broken up into as small units as possible, and in each little unit most of us expect to find an increase of profit and an increase of volume over the previous unit; but history will not have it this way. What we need for 1921 is a broadening of these units of time and a relaxation from the high pressure expectation of larger volume and higher profits with each report from the book-keeper. We have spent a fortune preaching thrift, but always to the other fellow; and usually while business has been exhorting the individual to be thrifty and store up to meet personal losses and pitfalls, the same preacher has been putting profits into brick and mortar and steel in order to make the next unit of time show larger sums. And now that in 1921 an application of the thrift principle to business so that the next depression or readjustment, or whatever pet name you choose to describe the process of taking the stretch out of business, will not find the U. S. A. rushing to an extreme of retrenchment in a feverish hope of quickly curing an extreme of inflation.

The swing to the other extreme will be in vain, for such a concerted action necessarily will destroy the life blood of business—profits; and overhead has a ravenous appetite. If I have been doing business with you and suddenly cut you off entirely, your profits on my business cease and you in turn try to offset the loss by cutting off someone else; and so on down the line until before I know it a like amount of my profits have been eliminated. But if I merely curtail my business with you, there is still something for you to go ahead on and when the boomsrang gets back to me it does not wipe me out. If the country were visited with a pestilence, or a crop failure, or were not fundamentally sound, the mad scramble to get under cover might be justified on selfish grounds, but with so much of promise before the country it is difficult to explain the retrenchment fever, except insofar as the the American love of extremes sheds light on the situation.

We may expect a fair sized business revival before long, not only because the average consumer is nearly out of clothes and other necessaries, but, I believe, more for the reason that thinking men are beginning to realize the presence of a common enemy in the form of too much retrenchment. Bankruptcy is a fatality which is contagious. One concern saved may mean the saving of many others, and it was a sign of much encouragement this week to notice three deadly competitors in a certain industrial line joining hands to save a fourth from a receivership. If the common enemy in this case had not been apprehended, perhaps all four might have suffered eventually. Before the days of the Federal Reserve System it was common to find competing banks joining hands to bolster up a threatened member of the banking community for the common good of all and to the benefit to each.

Another hopeful sign for 1921 is the fact that more thought and study is being given to the business future. The preachments of business observers have regained a willing ear and the professional Moses can get an audience at any hour of day or night.

The condition of business as reflected by the mnemotional figures given out by Dun's and Bradstreet's, the Government and the Reserve Banks reaffirms what we are well and uniformly convinced of—that liquidation is pursuing its course. But the observation from the figures is the surprising evenness of it all. Failures as reported by Dun's are not more in numbers or volume than should be expected; bank clearings and total bank debits to commercial accounts exhibit a reduction in commercial transactions which is natural, and the federal banks' figures show decreasing deposits and increasing loans and circulation, which are also the logical accompaniment of business depressions. It is unfortunate that the Government has absorbed about $3,000,000,000 of credit which might have been used by business, but this is just one of the inconveniences which we are suffering because of the war, and we should not complain. The Annalist index number is down to 204, which may be compared with the high figure of 330 last June, and means that the wholesale price of 25 food products to the jobber or dealer is just about half way back to the pre-war level. Criticisms continue to pour in locally that the corner grocer does not seem to be aware of the existence of index numbers, but gradually we find an item now and then that he will take less for. Not so with the butcher, who seems to be making a regular Custer's last stand of it.

Our representatives at Washington—that is, part of them, and of a political faith not generally espoused in these parts—have gone on record disfavoring the artificial method of making business good for part of the people. And right here is a thought for 1921. How is the rest of the world going to pay us back the seven billion of loans and four billions of open accounts if we shut out imports? Read this from Buenos Aires. La Razon says: "There is no good in protesting against what the Americans are doing. We must imitate them. In playing the same game we will come out ahead." The paper then goes on to suggest increased tariff on American imports. From Toronto comes a similar complaint. Germany would buy our surplus if we were disposed to lend it the money, but France and England and the rest of Europe will buy in the cheapest market, which, as to wheat, is even now in Argentina. British wheat buyers, who are said to have been the chief purchasers of American wheat this fall, are right now being offered Argentinian wheat at 7 cents below our price, and there is lots of wheat down there, too. Shall we make it less profitable for our best customers to sell goods to us and thus turn them to other markets for their purchases, and more than likely in the bargain reinflate our currency and our cost of living? I think any experiments in this direction will soon tell us plainly No. A creditor nation which already has one-third of the world's gold and which has fifteen billion dollars coming to it must take goods and lots of them or the debts can never be paid. And the basis of taking the goods must allow of profit to the debtor. We are bound up now in the business of the world in such a way that we must consider the foreign proposition whenever we make a move at home.

The securities market has staged a partial comeback, but as this is being written the bears are still busy. American Light & Traction common stock got down to 57 during trading Tuesday and the sugar stocks are still sinking gradually to lower levels, but the amount of transfers at the low figures is small compared with the sales at higher figures. Individuals who own large blocks of corporation stocks which have been hammered down are complacent and have not lost confidence by these demonstrations, for the opinion is almost general that many of the low prices are purely a result of sales made for income tax purposes. If we witness a general rise early in January this theory will be substantiated.

The banks have not at this writing been called on for statements of condition, but the call for some years past has been made December 31 and is therefore expected at that date. A falling-off in deposits of the savings banks would be a natural consequence of business conditions and should not be viewed with particular concern, for the people must necessarily live on their reserves when employment is waning. Banks are reservoirs of surplus wealth and they are merely providing the natural, fundamental service to their depositors in releasing to them in these times part of the stored-up accumulations.

Fluctuations in the commercial banks vary widely from day to day, so that a statement on one day may vary substantially from that of the following or preceding day, and one bank may thus show a greater percentage of change than another. But a general downward level of commercial deposits would be a natural outcome. Bank profits are apt to be large for 1920, due to high money rates; but taking one year with another, the average profits are only commensurate with the hazards of the business, and these hazards are confined to the minimum by skilful management. It is fortunate in that the banks in the aggregate have not been obliged to overwork their credit with the Federal Reserve Bank. Those who have borrowed heavily have done so without profit to themselves and to the everlasting benefit of their customers. Detroit and Michigan banks will go into the new year with a large surplus of unused credit at the reserve institution, and there is in this alone much to give us confidence in the future.

Send In Your Bank Statement

THE financial editor of this publication will appreciate your sending in statements of condition following the December 31 bank call, and also subsequent calls. Lists of directors and officers for the new year, following the annual meetings of stockholders on January 11, are likewise desired.

Digitized by Google

SECURITIES BOARD ENJOINED

The Michigan Securities Commission, which recently assumed supervision of the various discount and finance corporations now operating in the state, has for the time being at least been restrained from carrying out its regulation program. The federal district court of eastern Michigan has granted an intervening restraining order which affects 13 finance corporations in the state association, and which prevents the securities commission from carrying out its October order. This order would prevent finance corporations from distributing dividends without the sanction of the Commission, and which also affects the corporation stock, completely tying the hands of the directors. An injunction in the case of the Security Mortgage Corporation et al versus Frank W. Merrick et al, had already been issued, and the intervening order is the outcome of the court's action in this petition.

Reference to the original action taken by the Commission was made in the issue of November 27, Page 33.

AMERICAN SHIPS TIED UP

The back-wash of the receding tide of foreign trade is being expressed in New York by the tying up of many American freight steamers and several passenger boats. International Mercantile Marine has tied up the St. Paul, New York and Philadelphia passenger liners, and the cargo carrier Minnesota. Three of the 18 Luchenbach freighters, which have been carrying coal to Rotterdam, have been tied up, owing, it is claimed, to rate slashes which foreign boats here awaiting cargoes have made. The Munson Line has tied up four boats taken from Cuban trade. The Southern Pacific-New Orleans line is doing a good business and the Clyde-Mallory line to Jacksonville is doing well. Many foreign ships are bidding for coal cargoes at any price in order to make the homeward trip show some return, but the rate war is on with a vengeance because of the sudden falling-off in tonnage offered.

Detroit Listed Bonds

Name	Bid	December 20 Ask	Last Sale
Cons. Pow. Co.—5s, 1936	81	82	81
Detroit & Flint—5s, 1921	..	..	93
Det. Ft. W. & H. L.—5s, 1927	80½	86	78
D., M. & T. Short Line—5s, 1932	80	84	..
Det. & Northw'n—4½s, 1921	96	98	93
Detroit & Pontiac Ry.—5s, 1922	95	99	95
Detroit & Pontiac—4½s, 1926	..	84	..
Det. & Pt. Huron S. L.—5s, 1960	..	..	..
Detroit Railway—5s, 1924	..	86	..
Det., Ypsl. & A. A.—6s, 1924	..	100	..
D., Y. & A. A., Jackson—5s, 1926	..	86½	..
Det. United Ry.—4½s, 1932	..	..	..
Detroit Edison Co.—5s, 1933	87	..	..
D. Edi. Co.—1st & ref. 5s, 1940	..	76½	80
East. Mich. Edison—5s, 1931	80	83	..
Detroit Edison deb.—7s, 1925	..	98	..
Detroit Edison deb.—7s, 1929	..	98	98½
Detroit Edison deb.—7s, 1930	..	98	99
D. C. Gas Co., G. M.—5s, 1913-23	91½	94½	..
D. C. Gas Co., P. L.—5s, 1923	95	96	94½
Detroit & Sub. Gas Co.—5s, 1925	80	90	..
Mich. State Tel. Co.—5s, 1924	88	90	..
Tol., Fremt & Norw'k—5s, 1920	..	..	..
Wyan. & Det. River—5s, 1918	..	..	..
By-Prod. Coke Corp.—6s, 1930	..	..	..
Detroit Rock Salt Co.—6s, 1932	..	..	..

Grand Rapids Stocks

The Corrigan Company, Grand Rapids, reports the following quotations on Grand Rapids stocks as of December 28:

Cities Service, com.	23⅜	23⅝
Cities Service, pfd.	62½	63
Cities Service, Deb. "B"	115	120
Cities Service, Deb. "C"	85½	87½
Cities Service, Deb. "D"	92	95
Cities Service Bankers	29	30⅝
American Public Utilities, com.	6	10
American Public Utilities, pfd.	16	20
Com. Pw. Ry. & Light, com.	9	11
Commonwealth Pw., Ry. & Light, pfd.	28	31

Net earnings of the Columbia Gas & Electric Company for the year ended November 30 were $9,916,869, an increase of 29.49 per cent over the total for 1919.

In any Export Emergency

Whether the grounds for refusal are justified or not, your export shipment needs special safeguards when your documentary draft on a foreign buyer is dishonored. It is in just such emergencies that the service departments of the Irving's Foreign Division demonstrate their capacity and initiative.

Not only is the refusal reported to you at once, but immediate provision for clearing, warehousing and insuring the merchandise is made through the Irving's local correspondent. Then the Foreign Division, consulting with you and acting under instructions, arranges for sale of the goods or for their disposal in some other approved way.

A collection anywhere over-seas is expedited by direct transmission of the draft and its accompanying documents to a carefully selected correspondent bank on the spot, familiar with local conditions and able to protect your interests at every stage of the transaction.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

His Valuable Time---
Is what the Busy Man begrudges, when acting as your Agent or Trustee. He does not mind the work; he is used to that. But there are not hours enough in the day for both his own business and yours.

Why ask it of him? Here is a well-established Trust Company, the oldest in Michigan. Its Departments render you a specialized service. Its large force of men and women is devoted to this business.

Our "Living Trusts" afford complete relief to property owners.

THE MICHIGAN TRUST COMPANY
Grand Rapids, Michigan

MATTHEW FINN
High Grade Municipal and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

OWING to short week, which included Christmas, the Federal Reserve Banks rendered statements of condition as of Thursday instead of Friday, as heretofore. We give below a condensed statement of all the Federal Reserve Banks and for comparison show figures for last week and the nearest date a year ago.

The reserve ratio of 45.1 per cent. while more than the figure for a year ago, 44.8 per cent. is 0.4 per cent less than the figure for December 17—45.5 per cent. Deposits of member banks, including deferred credits and uncollected items, fell off $234,000,000 during the six days from December 17 to December 23, and note circulation increased $60,699,000. A year ago deposits of member banks, including all items, were $3,684,654,000, about $663,000,000 more than December 23, and circulation was $747,409,000 less.

For the first time in several weeks holdings of member bank paper secured by war obligations showed an increase, reflecting the drawing by the Government of some of its deposits. The increase in note circulation is the reverse of a healthy tendency in view of the downward trend of deposits, but this is supposed to be largely due to needs of the holiday season.

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

	Dec. 23, 1920	Dec. 17, 1920	Dec. 26, 1919
RESOURCES			
Total gold reserves	$2,655,502,000	$2,042,368,000	$2,078,422,000
Legal tender notes, silver, etc.	180,962,000	180,160,000	57,104,000
Total reserves	$2,236,754,000	$2,222,468,000	$2,135,536,000
Bills discounted—Secd by Gov't war obligations	2,177,263,000	1,158,874,000	1,510,354,000
All other	1,554,428,000	1,437,775,000	484,524,000
Bills bought in open market	241,467,000	234,689,000	186,212,000
U. S. Government bonds	26,859,000	26,855,000	26,834,000
U. S. Victory notes	69,000	69,000	64,000
U. S. Certificates of indebtedness	281,253,000	365,555,000	278,567,000
Total earning assets	$3,281,039,000	$3,223,841,000	$3,080,485,000
Bank premises	18,168,000	17,852,000	13,002,000
Uncollected items, nine deductions gr. deposits	761,085,000	826,042,000	1,027,060,000
5% Redemption fund against F. R. Bank notes	12,652,000	12,530,000	13,237,000
All other resources	8,417,000	8,430,000	8,062,000
Total resources	$6,318,035,000	$6,387,263,000	$6,325,432,000
LIABILITIES			
Capital paid in	99,458,000	99,227,000	87,339,000
Surplus	164,745,000	164,745,000	81,667,000
Government deposits	26,049,000	53,152,000	72,357,000
Due to members—reserve account	1,721,291,000	1,738,826,000	1,786,874,000
Deferred availability items	539,241,000	614,166,000	822,680,000
Other deposits, including foreign gov't credits	23,652,000	38,471,000	97,655,000
Total gross deposits	$2,310,353,000	$2,444,636,000	$2,778,570,000
F. R. notes in actual circulation	2,464,931,000	2,332,232,000	3,057,546,000
F. R. Bank notes in circulation—net liability	218,832,000	217,131,000	263,039,000
All other liabilities	119,716,000	116,841,000	58,751,000
Total liabilities	$6,318,035,000	$6,387,263,000	$6,325,432,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	45.1%	45.5%	44.8%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	49.8%	50.5%	50.3%

DISCOUNT RATES

REDISCOUNTS	Within 15 Days	Maturities 16 to 90 Days	91 Days to 6 Months
Commercial and Industrial Paper	7%	7%	7%
Agricultural and Live Stock Paper	7%	7%	7%
Trade Acceptances	7%	7%	...
Bankers' Acceptances	6%	6%	...
Secured by 5½% U. S. Certificates of Indebtedness	5½%	5½%	...
Secured by 6% U. S. Certificates of Indebtedness	6%	6%	...
Secured by other U. S. Certificates of Indebtedness	5½%	5½%	...
Secured by Liberty Loan Bonds or Victory Notes	6%	6%	...
MEMBER BANK PROMISSORY NOTES			
Secured by Eligible Paper	7%	...	...
Secured by 5½% U. S. Certificates of Indebtedness	5½%	...	...
Secured by 6% U. S. Certificates of Indebtedness	6%	...	...
Secured by other U. S. Certificates of Indebtedness	5½%	...	...
Secured by U. S. Government Bonds or Victory Notes	6%	...	...

Aggregate debits to individual account as reported by 146 of the country's leading clearing house associations for the week ended December 22 were 9,696 millions, or 460 millions more than for the immediately preceding week. This increase in bank debits, in which all the larger centers, except Minneapolis, participate, reflects mainly the larger volume of holiday trade.

As compared with the corresponding week in 1919, debits for the week under review are 441 millions smaller, the total for New York city alone showing a reduction of 364 millions, while many of the larger centers, including Philadelphia, Cleveland, Pittsburgh, Baltimore, San Francisco and Los Angeles, report larger figures than the year before.

DEBITS TO INDIVIDUAL ACCOUNT AT CLEARING HOUSE BANKS SUMMARY BY FEDERAL RESERVE DISTRICTS

	Federal Reserve District	Number of centers included	Week ending Dec. 22, 1920	Week ending Dec. 15, 1920	Dec. 24, 1919
			(In thousands of dollars)		
No. 1	Boston	12	$ 484,421	$ 448,392	$ 526,042
2	New York	7	5,398,147	5,182,517	5,740,489
3	Philadelphia	11	481,723	466,829	432,809
4	Cleveland	13	417,921	389,401	382,574
5	Richmond	7	187,042	189,900	176,357
6	Atlanta	15	278,450	269,082	277,938
7	Chicago	21	1,097,955	1,039,809	1,128,036
8	St. Louis	6	238,154	218,482	253,635
9	Minneapolis	9	135,089	144,778	161,379
10	Kansas City	15	284,529	285,013	329,404
11	Dallas	12	164,146	156,647	168,831
12	San Francisco	19	529,052	518,197	543,274
	Total	146	$9,696,573	$9,236,057	$10,137,468

Digitized by Google

General Financial News

BANK OPENING DELAYED

The new Continental Bank, Detroit, has postponed its opening date to January 15 on account of delay in finishing the improvements of the building at Broadway and Gratiot avenue. Election of officers probably will be held January 11.

NEW SAVINGS SCHEME

The American Loan & Trust Company, Detroit, is out with a new plan for combining life insurance with savings accounts for a term of years, at the end of which the depositor receives first mortgage bonds in settlement of the principal. The scheme is ingenious and sound and should appeal to the thrifty.

SUPREME COURT USURY RULING

The supreme court of Michigan ruled last week that where a bank or other money lender charges a usurious rate of interest on a continuous string of note renewals the full amount of all such interest charged or collected may be offset against the face of the note in final settlement. Case references will be furnished on application.

FIRST DIVIDENDS ON NEW STOCK

The E. W. Bliss Company, Brooklyn, N. Y., has declared its initial dividends on stock under the new capitalization plans whereby common stockholders received 10 shares of new stock for one of the old issue and one additional share of second preferred B stock for each common stock share held. The dividends just declared are of 55 cents on the new no-par common stock and of 15 cents on the new second preferred B stock. The regular quarterly dividend of $1 a share on the preferred stock also was declared, all dividends being payable January 3.

LANSING BANK PAYS BONUSES

Directors of the American Savings Bank, Lansing, have authorized the usual semi-annual dividend of 4 per cent, and in addition appropriated $3,300 in bonus money to be distributed among the salaried members of the staff as a Christmas gift. This bank, organized a decade ago, will close the year with one of the best records in its history.

1920 A GOOD YEAR

The Lansing State Savings Bank has distributed a bonus of $4,268.65 to 31 officers and employes, and a 10 per cent semi-annual cash dividend to the stockholders. President J. Edward Roe, reports that the bank closes one of its most successful years. The annual meeting of stockholders will be held January 11.

MACLAR RECEIVER NAMED

The Detroit Trust Company has been appointed receiver for the MacLar Battery Company, Detroit, which has been making the "Master" storage batteries. It is stated that the trust company will make application to the courts for permission to sell the assets.

MISCELLANEOUS FINANCIAL

The Continental Motors Corporation will hold its annual meeting January 19 and the stock transfer books will be closed from January 4 to January 19.

The forty-seventh annual convention of the American Bankers' Association will be held the week beginning October 2 in Los Angeles according to announcement of the executive committee Wednesday.

It was reported Wednesday that the Ford Motor Company has deferred reopening of its Highland Park plant until February 1st.

Strategy in Investing

Putting a thousand dollars to work for a long term of years to earn 7% to 8% means, not merely that the income will purchase $70 to $80 worth of goods each year for the life of the investment, but $70 to $125 worth, as commodity prices get back to normal.

There is perhaps no stronger argument for investing in long term bonds now. Especially strategic, therefore, is the action of exchanging shortly maturing bonds for sound, long-term issues.

Our pamphlet, "Prices and Values," analyzes the strategy of bond exchanges from the standpoint of intrinsic values and the effects of conditions on prices. It points out many specific issues still low in price and gives comparisons helpful in passing judgment.

A copy will be sent free on request and without obligation. A representative will call to discuss the general market conditions with you, if you desire it, or you may accomplish satisfactory results by calling at our office.

A. B. Leach & Co., Inc.

Investment Securities

Chicago	New York	Cincinnati	Cleveland
Philadelphia	Minneapolis	St. Paul	Milwaukee
St. Louis	Boston	Baltimore	Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE

CLOSE DEC. 28

LISTED STOCKS	Bid	Asked	Par	High-Low 1920 to Date	High-Low Sales 1919	Cash	Stk.	Annual Indicated Dividend	When Payable	Last Dividend When Paid	Cash	Stock	Total This Yr. Cash	Stk.	Capitalization
Am. Chicle, pfd., XD	62	68	100	.....	.....	6%		6%	Quarterly	Oct. 1, 1920	1½%		6%		$6,000,000
American Light & Trac. Co., com.	65	67	100	204-55	277-9-175	4%		7%	Quarterly	Nov. 1, 1920	1%	1%	7%	6%	$26,671,800
Do., pfd.	.....	.....	100	.....	.....	6%		6%	Quarterly	Nov. 1, 1920	1½%		6%		$14,226,200
Auto Body Co.	2½	5	10	12½-5½	14½-7⅜	.....		.....	.....	Jan. 20, 1917	.....	25%	.....		$1,074,000
Do., pfd.	7½	8½	10	10½-10½	.....	6%		Semi-Ann	Aug.	.....	3%	.....	6%		$527,600
Bower Roller Bearing Co.	15	.....	10	29⅛-16	32½-26	Varies		As Decl'd	July 1, 1920		10%	.....	15%	.....	$600,000
Charcoal Iron Co. of America, com.	2	2½	10	5½-1½	7⅞-2¼	.....		.....	Apr. 1, 1919		2%	.....	.....	.....	$2,640,650
Do., pfd.	6¼	.....	10	8¾-3⅜	6¾-4½	.....		.....	July 1, 1919		6%	.....	.....	.....	$8,217,250
Cities Service Co., com., XD	232	234	100	355-65%	466½-464¼	*6%		Monthly	Dec. 1, 1920		½%	1¼%	6%	14½%	$40,039,245
Do., pfd., XD	62¼	63	100	70-62	84½-80¾	6%		Monthly	Dec. 1, 1920		½%		6%		$78,485,664
Conhuila Lead & Zinc Co.	6	10	1	25-10	67-48	Varies		As Decl'd	Nov. 15, 1917		20%	.....	.....	.....	$300,000
Columbia Sugar, XD	117⅛	10	10	26⅝-12⅜	21⅜-13⅛	12%		Quarterly	Oct. 1, 1920		6%		12%		$6,000,000
Commerce Motor Car Co.	6	7	10	18⅛-15⅛	18-10¼	12%		Quarterly	July 1, 1920		3%		9%		$500,000
Com. Pw. Ry. & Light Co., com.	9½	10⅝	100	41⅝-10⅝	29-17	4%		Quarterly	Nov. 1, 1917		1%	.....	.....	.....	$18,585,900
Do., pfd.	28	30	100	28-22	31⅝-20	16%		Quarterly	Nov. 1, 1920		1¼%		5%		$17,583,000
Continental Motor Co., com.	5⅝	5⅞	10	14⅜-5⅜	14⅝-7⅜	4%		Quarterly	Dec. 20, 1920		1%		7%		$14,539,250
Do., pfd.	93	95	100	100-92	101½-91½	7%		Quarterly	Dec. 15, 1920		2%		8%		$2,757,600
Detroit & Cleveland Nav. Co. XD	68	.....	50	100-67	90½-75	8%		Quarterly	Oct. 1, 1920		2%		6%	25%	$4,329,400
Detroit Creamery Co.	19½	20½	10	23½-16	26¾-23¾	6%		Quarterly	Dec. 24, 1920		2%		17%		$31,600,000
Detroit Edison Co., XDTS	94½	94¾	100	114-92%	122½-109¾	8%		Quarterly	Oct. 15, 1920		2%		8%		$37,655,200
Detroit Br. & Mal. Wks., XD	86	100	100	96-93	.....	6%		Monthly	Dec. 1, 1920		½%		6%		
Detroit United	.....	.....	100	.....	.....	6%		Quarterly	Dec. 1, 1920		1½%		6%		$16,900,000
Edmunds & Jones, com., XD	12	15	None	31-10	40⅝-19⅝	$4.00		Quarterly	Oct. 1, 1920		50c		$2.00		$40,000 shs.
Do., pfd., XD	75	85	100	77-78	.....	7%		Monthly	Dec. 1, 1920		½%		7%		$895,400
General Motors	13¾	13⅞	10	12⅞-4⅞	.....	.....		Quarterly	Nov. 1, 1920		25c 1-40 sh.		.....		20,883,358 shs.
Federal Truck, XD	18½	.....	10	32-16⅜	.....	12%		Monthly	Dec. 1, 1920		1%		25½%	100%	$2,000,000
Ford Motor Co. of Canada	226	228	100	460-210	600-230	Varies		As Decl'd	July 15, 1920		10%		15%		$7,000,000
Gen. Alum. & Br. Mfg. Co., com.	10½	11	10	11⅝-11	.....	Varies		As Decl'd	Oct. 1, 1920		5%	5%	5%		$1,067,750
Gladys Belle, com.	62	64	1.00	1.22-.66	.....	16%		Quarterly	Oct. 1, 1920		4%		12%		$6,000,000
Do., pfd.	70	72	1.00	1.48-.65	.....	16%		Quarterly	Oct. 1, 1920		4%		16%		$2,000,000
Godchaux Sugar, com.	20	22	None	30-20	.....	.....		.....	.....	.....	.....	.....	.....		$70,000,000
Do., pfd., XD	68	72	100	.....	.....	7%		Quarterly	Oct. 1, 1920		1¾%		7%		$6,500,000
Hall Lamp Co.	.....	16	10	62¼-16	61-26¾	Varies		As Decl'd	Dec. 24, 1920		5%		20%		$750,000
Hayes Mfg. Co., com.	6¼	8¾	10	8½-2¾	.....	Varies		As Decl'd	Feb. 1, 1921		1½%		3½%		$1,500,000
Holland-St. Louis Sugar Co.	7¾	8	10	19¾-7¾	21⅜-12⅜	12%		Quarterly	Oct. 15, 1920		6%		18%		$2,000,000
Iron River Mining Co.	25	40	10	42-42	50-42	Spec.		Semi-ann	Jan. 1921		Spec.		.....		$2,500,000
S. S. Kresge, Com., XD	125	129	100	151-109	160-159	6%		Semi-Ann	July 1, 1920		3%		6%		$10,000,000
Do., pfd., XD	95	98	100	.....	.....	6%		Quarterly	Oct. 1, 1920		1½%		5¼%		$2,000,000
Linderman Steel, com., XD	.....	15½	10	24⅝-15¾	27⅜-10⅝	6%		Quarterly	Oct. 1, 1920		2%		8%		$1,088,000
Lincoln Motor, Class A	17⅜	18	50	18-13½	$5.00	.....		Quarterly	July 30, 1920		$1.25		$2.80		$8,000,000
Mexican Crude Rubber Co.	.....	.....	10	16⅛-9⅜	12-10	.....		.....	Dec. 1, 1920		5%		.....		$1,000,000
Michigan Drop Forge, com., XD	35	.....	None	50-38⅝	43-14	$3.00		Monthly	Dec. 1, 1920		25c		$4.00		$12,500 shs.
Do., pfd.	.....	.....	100	100-90	.....	7%		Quarterly	Oct. 1, 1920		1¾%		7%		$250,000
Michigan Stamping Co., com., XD	16⅜	18¾	10	60-10¼	36-17	9%		Monthly	Dec. 1, 1920		¾%		6½%		$1,300,000
Michigan Sugar Co., com.	7¾	7¾	10	15⅝-7¾	14-8¾	12%		Quarterly	Oct. 1, 1920		3%		11%		$7,471,100
Do., pfd.	8	.....	10	9¾-9¾	9⅝-9¾	6%		Quarterly	Oct. 15, 1920		1½%		6%		$3,792,500
Miles-Detroit Theater Co.	15	.....	10	21-15¾	14⅝-9¼	*16%		Quarterly	Oct. 16, 1920		4%		13%		$250,000
Motor Products	33	45	None	60⅜-49	66-61	6%		.....	Oct. 1, 1917		$1.00		.....		$100,000 shs.
Motor Wheel	8⅝	9⅛	10	13⅝-8⅜	.....	*8%		Quarterly	Nov. 20, 1920		3%		6⅛%	50%	$4,500,640
Murray Mfg.	.....	20	25	24-23	.....	12%		Monthly	Dec. 15, 1920		1%		15%		$732,950
National Grocer Co., XD	95	101	100	156-156	.....	*8%		Quarterly	Sep. 30, 1920		2%		6%		$2,000,000
Packard Mfg. Co., pfd.	83	85	100	157-85	.....	6%		Semi-Ann	July 1, 1920		3%		6%		$1,500,000
C. F. Noble Oil & Gas Co., pfd., XD	110	110	1.00	2.00-1.05	2.15-1.17⅛	*18%		Quarterly	Oct. 1, 1920		1¾%		15%		$1,000,000
Packard Motor Co., com.	10⅜	10⅝	10	28⅜-9¾	1293-111⅛	16%		Quarterly	Oct. 31, 1920		2½%		10%		$13,885,100
Do., pfd.	76	76½	100	96-74	115-84	7%		Quarterly	Dec. 1, 1920		1¾%		7%		$3,000,000
Paige-Detroit Motor Car Co.	14⅜	14⅞	10	43⅛-15	46⅝-23⅜	*12%		Monthly	Dec. 10, 1920		1%		20%	25½%	$2,000,000
Parke, Davis & Co., XD	.....	98	100	117-97	129-116	16%		Quarterly	Oct. 1, 1920		4%		20%		$13,338,850
Penberthy Injector, pfd.	.....	.....	100	.....	.....	6%		Quarterly	Oct. 1, 1920		2%		8%		$500,000
Reo Motor Co., com., XD	17⅜	17⅝	10	29¼-15⅝	38-29	10%		Quarterly	Dec. 1, 1920		2½%		10%		$9,337,250
Scotten-Dillon Co., XD	30	42	10	35-29	42-28⅝	8%		Quarterly	Oct. 1, 1920		2%		8%		$1,500,000
Timken Axle, com.	25⅝	28	10	36⅞-26	.....	12%		Bi-Monthly	Nov. 15, 1920		2%		24%		$6,000,000
Do., pfd.	.....	100	100	100-95	.....	7%		.....	Dec. 1, 1920		1½%		7%		$1,000,000
Trus.-Con. Steel Co., com.	28	28½	10	29½-29¼	.....	16%		Quarterly	Dec. 15, 1920		4%		16%		$1,450,250
Do., pfd.	.....	9⅝	10	8⅝-9¾	9⅝-9¾	7%		Quarterly	Dec. 1, 1920		1¾%		7%		$1,625,250
U. S. Radiator, com.	16	.....	100	31⅛-20	.....	.....		.....	.....	.....	.....	.....	.....		$4,000,000
Do., pfd.	81	.....	100	95⅝-80	.....	7%		.....	Jan. 25, 1920		$7%		7%		$2,400,000
Warner Hat Co., com.	.....	28	None	.....	.....	.....		.....	.....	.....	.....	.....	.....		.....
Do., pfd., XD	92	100	100	.....	.....	8%		Quarterly	Oct. 1, 1920		2%		8%		
Western Knitting Mills	8⅝	8¾	None	38⅝-8¾	$2.00	.....		Quarterly	Dec. 15, 1920		$2.00		$2.00		$140,000 shs.
White Star Line	.....	42	50	60¼-50½	51⅝-49⅛	7%		Aug&Nov	Aug. 23, '20		3½%		6½%		$750,000
Wolverine Portland Cement Co.	2½	4	5	5⅝-2½	6⅝-4¼	.....		.....	Dec. 15, 1917		1%		.....		$1,000,000

*Old $90-$70; new 62¾-37. 67% in 1911, 7% in1920. only dividends since organized. *Extra dividend. †Scrip. ‡Increase to $600,000 authorized. §Book value, $1,016,997. ¶St. & J. ‖Book value, $3,213,327. Godchaux Book value, $2,622,795.00. Western Knitting Mills. ‖Book value, $5,084,450. Motor Products. ‖Old. xTaken from other exchanges.

Foreign Exchange

Country	Par	Nov. 10, 1920	Nov. 3, 1920	Dec. 28 1920
Canada	1.0000	.95938	.94938	.95375
London	4.8665	4.14	3.8425	3.8525
Switzerland	.1930	.1799	.1574	.1526
Paris	.1930	.1165	.06272	.0583
Belgium	.1930	.11736	.06655	.0610
Holland	.4019	.3775	.30375	.3125
Italy	.1920	.08787	.03636	.0325
Greece	.1930	.18	.0365	.0310
Spain	.1930	.1340	.1385	.1310
Vienna	.20262	.0105	.002	.00255
Berlin	.23821	.0230	.0126	.01365
Denmark	.26799	.2090	.1350	.1345
Norway	.2682	.2180	.1343	.1345
Sweden	.2680	.1930	.1930	.1930

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Dec. 27, 1920	Nov. 30, 1920	Nov. 17, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	90.00	91.76	93.06	91.06	99.20	99.75	99.56	99.62
U. S. Liberty 1st 4s	85.32	87.20	87.80	85.60	93.00	94.30	96.00	96.12
U. S. Liberty 2nd 4s	84.10	85.90	85.80	85.00	91.56	93.64	93.94	94.10
U. S. Liberty 1st 4¼s	85.50	86.72	87.50	85.18	93.46	95.14	96.50	....
U. S. Liberty 2nd 4¼s	84.64	85.86	85.80	85.00	93.20	94.66	95.70	....
U. S. Liberty 3rd 4¼s	87.28	88.66	88.30	85.32	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	84.96	86.20	86.80	85.56	93.76	100.10	....	....
Victory Bonds, 4¾s	91.90	95.86	88.10	88.50	94.00	95.08	95.62	96.32

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement Book Val.	Capital	Deposits	Dividends Annual Rate	How Paid	Detroit Stock Exchange Range 1919		Range 1920		Dec. 27, 1920 Last Sale	Bid	Ask
						High	Low	High	Low			
American State	150	$1,000,000	$17,315,928	10%	J-A-J-O 1st	280	260	276	260	271	...	281
Detroit Savings	240	1,500,000	25,910,829	12%	5 Jan-Jul 1st 2 Ex. Jan	...	...	259	259	259	258	...
Dime Savings	258	1,500,000	37,910,528	14%	1 Monthly 1 Jan-Jul	...	...	259	258	259	258	259
First and Old Detroit National	191	5,000,000	69,634,333	*12%	J-A-J-O 1st	330	247	275	268	268	...	...
Central Savings Bank	142	1,000,000	18,468,170								187	195
First State	156	1,000,000	14,079,618	10%	J-A-J-O 1st							
Highland Park State	191	1,000,000	15,970,485	20%	J-A-J-O 1st	307	241	298	295	295	300	360
Merchants National	165	2,000,000	12,573,432	8%	J-A-J-O 1st	185	185	163	148½	142	145	205
National Bank of Commerce	223	1,500,000	34,417,843	10%	J-A-J-O 1st	250	246	210	190	210	205	215
Peninsular State	241	2,500,000	43,845,320	12%	J-A-J-O 1st	...	...	220	215	218	220	...
Peoples State	275	5,000,000	104,207,084	12%	J-A-J-O 1st	...	...	335	306	335	350	...
United Savings	146	500,000	6,729,942	12%	Monthly	...	...	215	209	209	...	212
Wayne County Home	257	4,000,000	74,564,051	16%	Monthly	...	...	347	306	347	345	351
American Loan and Trust	134	300,000		6%	J-A-J-O 1st	...	...	155	155	155	...	...
Bankers Trust	118	500,000		8%	J-A-J-O 1st	...	...	...	...	...	...	...
Guaranty Trust	175	200,000		8%	J-A-J-O 1st	150	146	148	148	...	...	160
Detroit Trust	409	2,000,000		14%	J-A-J-O 1st	...	...	...	...	...	400	...
Security Trust	338	500,000		12%	J-A-J-O 1st	...	...	...	...	...	...	285
Union Trust	1,000	1,000,000		8%	J-A-J-O 1st	190	183	197	195	195	175	190
Commonwealth-Federal	124	750,000	11,422,274		None	...	...	130	...	...	105	112
Bank of Detroit	164	1,000,000	19,635,801	10%	J-A-J-O 1st	...	...	...	...	200	193	200
Michigan State	116	250,000	2,284,870			...	...	...	...	...	...	...
American State, Dearborn					None	...	...	...	...	...	...	...
American State, Highland Park	132	200,000		6%	J-A-J-O 1st	...	...	122	122	122	118	122
Peninsular State, Highland Park	220	100,000		10%	J & J	...	...	...	...	...	...	...

* Under one ownership—stock combined.

Cleveland Stock Exchange

	Bid	Ask
American Multigraph	20	...
American Ship	...	75
Dow Chemical	...	200
Firestone Tire & Rubber	74½	75½
Fisher Otho Body	18	18¾
Do preferred	59	60
Goodyear Tire & Rubber	21	22
Do preferred	46	47
Grant Motors	1¾	2
Growth Chemical	125	129
Inter'ake Steamship	210	220
Jordan Motors	90	...
Miller Rubber	72	74
Murray Ohio	...	9
National Acme	26	28
Paragon Refining	24	25½
Portage Rubber	15	17
Do preferred	90	...
Pre. & Refining Corp	4	4¼
Do preferred	6	8
Standard Parts	...	29
Do preferred	...	93½
Stearns Motors	17½	19
Torbensen Axle	12	18
Victor Rubber	20	33
White Motors	102	104
Youngstown Sheet & Tube, pfd		

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale
Amer. Pub. Utils., 7	16	...	...	...	...
Do., pfd.	26	28	23	23	23
Columbia Motors	4½	1¾	14	4	4
Hoover Steel Ball	18	...	21¼	18	18½
Great Lakes Engr., 110	117	*118	*132	117	117
Liberty Motor, 100	55	130	65	55	55
Noble Oil, com.	61	62	1.30	58	61
Invader Oil	1.70	1.80	1.88	1.78	1.75
Mich. Gas & Brass	15	18½	26	19½	20
Un. Mtg. 100% com.	110½	...	...	...	...
Un. Mtg. 50% com.	110¾	...	...	...	...
Federal Discount	8	3½	...	...	...
Del. Mort., com.	13¾	17	4	...	...
Del. Mort., pfd.	15¾	5%	6¼	5½	6½
Ind. Cap. & Brass	13	21	...	...	...
Wilson Truck	15	6	...	...	...
Me'ord Mfg. com.	16½	...	...	...	...
Me'ord Mfg., pfd.	70	80	...	...	...
Duplex Truck	16	8	...	...	...

*Old basis. †Nominal. ‡Invader Oil sold ex. dividend Dec. 15, 3% cash, 100% stock.

Detroit Bank Clearings

Week of Dec. 28, 1920	$ 77,826,441.37
Week of Dec. 21, 1920	$136,535,808.09
Week of Dec. 14, 1920	$167,314,389.32
Week of Dec. 15, 1920	$109,933,305.00
Week of Dec. 8, 1920	$ 93,230,447.55
Week of Dec. 1, 1920	$ 91,142,146.65
Month of Nov. 24, 1920	$116,512,394.31
Week of Nov. 17, 1920	124,877,817.76
Week of Dec. 28, 1919	$ 83,230,447.55
Week of Dec. 21, 1919	$141,674,621.95
Week of Dec. 15, 1919	155,549,025.45
Week of Nov. 10, 1919	118,048,072.03

HOPKINS GOES TO FLINT

E. P. Hopkins, better known as Ned Hopkins, as Charlotte, Michigan, many who has been manager of the Woodward avenue branch of the Bank of Detroit for the past two years, leaves January 15 to become auditor of the Genesee County Savings Bank of Flint. Hopkins was a state bank examiner under Commissioner Doyle and also under Commissioner Merrick and is particularly well fitted for the new work. We join with his many friends in wishing him well in the new undertaking.

NEW DIRECTORS AT ALMA

At a meeting of the directors of the First State Bank, Alma, a few days ago, E. C. Crandell was elected to succeed the late Henry H. Soule, and J. M. Montigel was elected to succeed P. M. Smith, who recently moved to California. These men will serve until the annual meeting of the stockholders in January.

Active Bonds and Notes.

Security—Maturity	Bid	Ask
Am. T. & T. 6s, Oct. 1, 1922	92¾	94
Anaconda 6s, Jan. 1, 1929	80¾	81¼
Ang.-Am. Oil 7½s, Apr. 1, 1925	93	93½
Balt. & Ohio 6s, July, 1920	89¼	89½
Bel. Govt. S. F. 7½s, June 1, 1945	94¾	95½
Beth. Steel 7s, July 15, 1922	96¾	97¾
British 5½s, Nov. 1, 1921	97¾	98
British 5½s, Oct. 1, 1922	94½	94¾
Canadian 5s, Apr. 1, 1926	...	85¾
C. C. C. & St. L. 6s, July 1, 1929	86½	91
Rock. Valley 6s, Mar. 1, 1924	90	92½
Ill. Cent. 4s, Jan. 1, 1951	87	88
Jap. Govt. 4s, Jan. 1, 1921	55	55¾
Jap. Govt. 1st 4½s, Feb. 15, 1925	75½	75¾
N. Y. Central 7s, Sept. 1, 1930	100½	100¾
Norway 8s, 1946	94¾	95½
Penna. Ry. Co. Apr. 1, 1936	102½	103
St. Paul 4s, Jan. 1, 2011	58	58¾
Solvay 6s, 1927	95	96¼
Swedish Govt. 6s, June 15, 1939	77	78
Swiss Govt. 8s, July 1, 1940	102	102¾
U. S. Rubber 7½s, Aug. 1, 1930	94½	95¼
Virginian Ry. 5s, May 1, 1962	80	81
Western Electric 7s, Apr. 1, 1925	96½	97½

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Briscoe Motor	8	8½
Chalmers Motor	3	4
Curtis Aeroplane	...	10
Dorchelt com.	31½	32
Harroun	...	1¾
Lee Tire	14½	15¾
Nash	300	325
Pierce Truck	17	17½
Republic Truck	2¼	2¾
Saxon	...	3¾
Stromberg Carb.	24	25½
White Motors	32½	33

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910
Municipal Bonds.
CHICAGO.

Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

SAFE INVESTMENT BONDS
FOR SAVINGS

JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.

CHERRY 2600

Digitized by Google

Your Will

You like to have it in life.

You cannot hope to have it in death, even in the disposition of your property, unless you have made your Last Will and Testament.

For if you die leaving no Will the law will determine the distribution of your property, and degrees of blood relationship, rather than your desires, will then control.

If you would make altogether sure that your wishes will be respected, you should have your Attorney draw your Will, NOW, and designate this strong, experienced Company as your Executor or Trustee.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

A Happy New Year—

is best assured by careful planning of your financial affairs.

These are days when every dollar must be made to do its duty. Idle money recklessly "plunged" in unproved investments are not doing their share to restore normal conditions. An investment in Detroit Mortgage Corporation First Mortgage Bonds will work for you and the betterment of Detroit.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

LOUIS G. PALMER & CO.

Announce their removal from the Congress Bldg. to Suite 556-562 Penobscot Bldg., Detroit, Mich.

Financial Record Open Market

(This department has been established in order to bring together buyers and sellers of securities which are not listed or in which there is comparatively little trading. Brokers are invited to submit lists each Tuesday.)

Corrigan Company, Grand Rapids, will buy or sell American Public utilities preferred and common, Commonwealth Power, Ry. & Light, preferred and common, Cities Service, preferred and common, and Detroit Edison. H. C. D.

Webb Lee & Company will sell 125 Recreation, preferred, 100 Utility Compressor, 125 Crescent Land Company, 15 Great Lakes Lock Co., 11 Wilcox-Armstrong Company, 100 Kelvinator Corp., 100 Commercial Finance, 500 Cameron Spring Wheel, 50 Little Wonder stove Company.

Dividends Payable

Company	Rate	Payable	Blk. of Record
Am. Brake Shoe & Fdy. pfd...	$1.00	Dec. 21	Dec. 21
Am. Brake Shoe & Fdy. com...	$1	Dec. 21	Dec. 21
Amer. Gas & Electric com...	2½% Q	Jan. 2	Dec. 17
Amer. Gas & Electric com...	2% extra	Jan. 2	Dec. 17
Amer. Gas & Electric pfd...	2% Q	Feb. 1	Jan. 15
Amer. Radiator	$1.00 Q	Dec. 21	Dec. 15
Amer. T. & T.	$2.00 Q	Jan. 15	Dec. 20
Amer. Agricul. Chemical...	$2.00 Q C.S.	.....	.....
Cities Service pfd. (new)	1% of 1% M Co.	Feb. 1	Jan. 15
Cities Service com.	1¼% M Co. Stock	Feb. 1	Jan. 15
Clayton & Lambert Mfg.	12½% Q cash	Jan. 16	Dec. 16
Cleveland Automobile pfd...	$2.00 Q	Jan. 2	Dec. 20
Columbia Sugar	2%	Jan. 1	Dec. 20
Columbia Sugar	1% extra	Jan. 1	Dec. 20
Continental Can	1¾% Q	Jan. 1	Dec. 20
Continental Can pfd.	1¾% Q	Jan. 1	Dec. 20
Dearborn Truck	1½% Q	Jan. 2	Dec. 15
D. & C. Navigation	7½ Q	Jan. 15	Dec. 15
D. & C. Navigation	¾ Extra	Jan. 1	Dec. 15
Detroit Creamery com.	5%	Jan. 15	Dec. 13
Detroit Edison	2½ Q	Jan. 15	Dec. 31
Detroit Finance Corp.	2½ s. a.	Dec. 31	.....
Detroit River Tunnel	1½ s. a.	Jan. 15	Jan. 9
Empire Steel & Iron pfd...	3½ Q A.	.....	.....
Fairbanks-Morse Co.	$1.25 Q	Jan. 3	Dec. 15
Firestone Tire 6% pfd.	1½ Q	Jan. 15	Jan. 1
Fisher Body pfd.	1¾ Q	Jan. 1	Dec. 17
General Cigar deb. pfd.	$1.75 Q	Jan. 3	Dec. 24
Gilroy Oils Co.	.....	Jan. 15	Dec. 31
Gladys Belle Oil pfd.	3%	Jan. 15	Dec. 31
Hall Lamp Co. com.	5%	Dec. 24	Dec. 17
Hydraulic Steel	75c Q	Dec. 21	Dec. 10
Hydraulic Steel pfd.	1¾% Q	Dec. 21	Dec. 10
Hupp Motor Car	1½ Q	Jan. 1	Dec. 20
Hupp Motor Car 7% pfd.	1¾% Q	Jan. 1	Dec. 20
International Harvester	1¾% Q	Jan. 15	Dec. 24
International Harvester	2% Stock	Jan. 25	Dec. 24
International Truck 1st pfd.	1¾ Q	Jan. 2	Dec. 15
International Truck 2d pfd.	1¾% Q	Jan. 2	Dec. 15
Jewett, Bigelow & Brandt Coal pfd.	1¾% Q	Jan. 1	.....
Kelly-Springfield pfd.	$1.75 Q	Jan. 1	Dec. 17
Kerr Lake Mines, Ltd.	12½ ctn.	Jan. 15	Dec. 31
Linderman Steel	3%	Jan. 1	Dec. 15
Loose-Wiles 1st pfd.	$1.75	Jan. 2	Dec. 15
Mason Tire	1¾ Q	Jan. 2	Dec. 12
Michigan Central	2½ s. a.	Jan. 29	Jan. 7
National Biscuit com.	1¾ Q	Jan. 15	Dec. 31
National Tool	1¾ Q	Jan. 2	Dec. 20
National Tool pfd.	1¾ Q	Jan. 2	Dec. 20
New York Central	1¼ Q	Feb. 1	Jan. 4
Nipissing Mines	50c Q	Jan. 30	Dec. 31
Nipissing Mines	$1 extra	Jan. 30	Dec. 31
Ohio F. Noble Oil & Gas	3¢ Q	Jan. 2	Dec. 15
C. F. Noble Oil & Gas pfd.	1¾% Q	Jan. 2	Dec. 15
Otis Elevator com.	2% Q	Jan. 15	Dec. 21
Otis Elevator com.	$2.00 extra	Jan. 15	Dec. 21
Otis Elevator pfd.	1¾% Q	Jan. 15	Dec. 21
Otis Steel pfd.	1¾ % Q	Jan. 1	Dec. 15
Reo Motor Car	3½% Q	Jan. 1	Dec. 15
Reading	1½ Q	Feb. 10	Jan. 18
Reading 2nd pfd.	1½ Q	Jan. 13	Dec. 21
Republic Motor Truck pfd.	1¾ % Q	Jan. 1	Dec. 20
Security Mort. Corp. pfd.	1¾ % Q	Jan. 1	Dec. 22
Superior Steel Corp. com.	1¾ % Q	Jan. 1	Dec. 22
Sterling-Withington pfd.	1¾ % Q	Feb. 1	Jan. 15
Standard Screw com.	5% Q	Jan. 1	Dec. 18
Standard Screw pfd.	1¾ % Q	Jan. 1	Dec. 18
F. H. Stearns	$1.00 Q	Jan. 10	Dec. 31
Stromberg Carburetor	50c Q	Jan. 15	Dec. 20
Superior Steel Corp. 1st pfd.	2% Q	Feb. 1	Jan. 15
Superior Steel Corp. 2d pfd.	2% Q	Feb. 15	Feb. 1
Trumbull Steel	2½ Q	Jan. 1	Dec. 20
Trumbull Steel pfd.	1¾ % Q	Jan. 1	Dec. 20
Trumbull Steel	¾ % extra	Jan. 1	Dec. 20
United Drug	2% Q	Jan. 1	Dec. 16
United Light & Rail. pfd.	1¾ Q	Jan. 1	.....
United Cigar Stores com.	1½% M	Jan. 15	Dec. 31
United Verde Extension	50c s. a.	Feb. 1	Jan. 5
Vanadium Corp. of America	$1.00 Q	.....	.....
Western Union Telegraph	1¾ Q	Jan. 15	Dec. 20
Westinghouse Air Brake	$1.75	Jan. 31	Dec. 31
Westinghouse Elec. & Mfg. com	2%	Jan. 31	Dec. 31
Westinghouse Elec. & Mfg pfd	2%	Jan. 15	Dec. 31
C. H. Wilcox Body pfd.	1¾% Q	Jan. 1	Dec. 20
Winton Motor pfd.	1¾% Q	Jan. 1	Dec. 20

Digitized by Google

Banks and Bankers

MUSKEGON TRUST ELECTION

The Muskegon Trust Company, Muskegon, held its annual meeting December 11 and re-elected its present officers for another year. The officers are: Fred W. Riblet, president; J. Arthur Dratz and Fred M. Breuninger, vice-presidents; Harold M. Thruston, vice-president and secretary; Robert D. Harvey, assistant secretary; Henry E. Langeland, treasurer; board of directors, W. A. Angell, J. A. Hilling-hurst, Fred M. Breuninger, J. Arthur Dratz, John S. Emerson, Frank W. Garber, Rev. A. Hadden, Henry E. Langeland, Frank C. Morse, Fred W. Riblet, Frank Hubbard Smith, E. H. Sheldon, Harold M. Thruston, John Vander-werp, Frank C. Whitney and Ira A. Wyant, and Otto L. Goffrey, title department manager.

The company announces that its new building will be ready by February 1. Work on this structure is proceeding rapidly and the first story has already been completed.

BRANCH FOR HIGH SCHOOL STUDENTS

The Dimondale State Bank, Dimondale, will open a branch at the Dimondale high school next week, the service to be for the student body. An official of the bank said: "To establish and encourage thrift is the duty of every bank, whether it brings an immediate return or not. The Dimondale State Bank takes up this school service work, partly as a matter of business and partly as a matter of obligation to the community in which it lives and in which it hopes to prosper."

STATE FUND INTEREST INCREASED

An increase of ½ of 1 per cent interest on all state funds deposited in banks will be demanded by the State of Michigan after January 1. This increase will add about $40,000 to the commonwealth's revenue. The new rate will be 2¾ per cent, to which is added ½ of 1 per cent for insurance, making a total of 3¼ per cent. The same increase affects checking accounts.

BANKS DISTRIBUTE GIFTS

Detroit banks and trust companies have distributed to employes cash Christmas gifts this year amounting to more than $300,000. The Wayne County & Home Savings Bank gave employes 10 per cent of their salaries, the total amounting to $60,000. The cash gifts of the First & Old Detroit National and the Peoples State banks to employes amounted to $50,000 for each bank. The Dime Savings Bank paid the fourth quarterly installment of 24 per cent of salaries to employes. The First State Bank distributed $15,000 in gifts, and other banks gave from $5,000 to $20,000 in cash.

A SUGGESTION FOR BANKS

The boarder apparently is adding to his ranks not a few new recruits. From information furnished by the American Bankers Association there is a tendency toward increased hoarding on the part of many people who are afraid of banks. Why not bring the object lesson home to possible depositors in your city by using in your local advertising examples like the one given below?

WANTED TO BE HIS OWN BANK; BANDITS GET $600

Battle Creek, Mich., Dec. 20.—James Callahan, Grand Trunk employe had a hobby for keeping his money in $20 bills. Nor did he make any secret of the fact, or that he carried his roll with him, sometimes as much as $1,500. He didn't believe in banks. Last night two strangers met him, almost in front of his home. They relieved him of the roll, amounting this time to $600. Today, Mr. Callahan stated he had started a bank account.

Other examples will be given as they come to our notice.

DIME SAVINGS BANK
FORT AND GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Grand Boulevard & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison

Operating in This Field

for over 36 years, this bank's service to banks and business houses is based upon knowledge of conditions—assuring ACCURACY, SAFETY, DISPATCH in every transaction.

Correspondence and consultations invited.

Capital and Surplus $3,600,000.00

Michigan Finance Corporation
120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation.
President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy., GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce Pres. Dry Goods Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier Avery Co. Savings Bank, Tenino, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

A Ten-Year Call on Stock

is possible at a price considerably below the average annual quotation for the past six years, through purchase of

Cerro de Pasca Copper Corporation
Ten-Year Convertible Sinking Fund 8% Gold Bonds
which sell at a
Price to Yield 8%

Write for circular which gives full particulars.

Bonbright & Company
UNION TRUST BUILDING, DETROIT

Telephone Cherry 4320
New York Philadelphia Boston Chicago

COAL C. C. COKE REY.
1803-4 MAJESTIC BLDG. DETROIT, MICH.

STEEL STAMPINGS OUR SPECIALTY
STEEL STAMPING AND SHEET METAL PARTS FOR AUTOMOBILE AND OTHER USES
QUALITY AND SERVICE
STEEL FURNITURE CO., Grand Rapids, Mich.
Detroit Representative E. H. WELKER CO., INC. 66 W. Larned St. DETROIT

The Romance of Michigan Industry

THIS series of articles, the first the recital a stirring romance.
of which, "How Michigan Is Supplied With Power," appears as the leading article of this issue, will run throughout this year. The purpose of the series is to present in panorama the operations and output of the 27 or more basic industries of this fifth industrial state in the Union, drawing to the reader's attention the unique and the spectacular in the processes by which are turned out annually more than $15,000,000 of products which play such a vital part in the industrial life of the nation. The series marks the first attempt so far made to present graphically the scope of the accomplishments of Michigan industry as a whole—accomplishments which make of

The author of the series, Mr. Howard Campbell, technical editor of the Michigan Manufacturer and Financial Record, has spent more than 15 years first as a workman and later as an efficiency engineer and executive in various Michigan manufacturing plants, and therefore knows whereof he writes. His style is entertaining, his presentation clear and understandable. He has written the articles so that they will be of equal appeal to the executives in the factories and the men in the shops, who specify and use equipment and materials described.

The following subjects will be taken up in the order and on the dates specified:

Jan. 1—Power
Jan. 8—Power Transmission
Jan. 15—Sugar Industry
Jan. 22—Foundry Work
Jan. 29—Paper Industry
Feb. 5—Metal Forging
Feb. 12—Rubber Industry
Feb. 19—Lathe Operation
Feb. 26—Leather and Belting Manufacture
Mar. 5—Screw Machine Operation
Mar. 12—Auto Body Building
Mar. 19—Milling Machine Operation
Mar. 26—Copper and Brass Milling
Apr. 2—Planing and Shaping
Apr. 9—Agricultural Implement Manufacture
Apr. 16—Boring Mill Operation
Apr. 23—Electrical Equipment Industry
Apr. 30—Drilling
May 7—Steel Ball Manufacture
May 14—Grinder Operation
May 21—Salt Industry
May 28—Punch and Power Press Operation
June 4—Saw and Lumber Mills
June 11—Gear Cutting
June 18—Lumber Finishing Mills
June 25—Heat Treatment of Metals
July 2—Woodenware Manufacture
July 9—Welding
July 16—Marine Engine and Boat Building
July 23—Polishing and Plating
July 30—Shipbuilding Industry
Aug. 6—Inspection
Aug. 13—Chemical Industry
Aug. 20—Conveying Systems
Aug. 27—Tobacco Manufacture
Sept. 3—Small Tool and Air-Tool Manufacture
Sept. 10—Pottery Manufacture
Sept. 17—Office Equipment Manufacture
Sept. 24—Abrasive Industry
Oct. 1—Auto Wheel Manufacture
Oct. 8—Cement Manufacture
Oct. 15—Mining Industries
Oct. 22—Motor Axle Manufacture
Oct. 29—Paint and Varnish Manufacture
Nov. 5—Auto Spring Manufacture
Nov. 12—Stove Manufacture
Nov. 19—Auto Steering Gear Building
Nov. 26—Flour Milling, Food and Canning Industries
Dec. 3—Furniture Manufacture
Dec. 10—Silk and Knit Goods Manufacture
Dec. 17—R. R. Car Building
Dec. 24—Pharmaceutical Industry
Dec. 31—Shoe Industry

New Corporations

FOR WEEK ENDED DECEMBER 24, 1920

Charles Wolohan, Inc., Birch Run, Saginaw county; to deal, wholesale and retail, in farm products, etc.; Charles Wolohan, Birch Run; Thomas and Mark T. Walsh, Hemlock ..... $ 200,000
Wolverine College of Chiropractic Physicians, Detroit, to teach the science of chiropractic; John H. Albert, 1218 Gratiot Ave., John J. McKay, Katherine Lake, Detroit 2,000
Northern Paper Mills (F.), Green Bay, Wis.; E. C. Murphy, Ontonagon, Michigan agent 2,000,000
Bolger, Mosser & Willaman (F.), Chicago, Ill.; John W. Bailman, 2020 Dime Bank bldg., Detroit 500,000
Dime Savings Bank of Hamtramck; commercial and savings bank; William Lavigueur, 76 Eliot ave., George H. Barbour, Bethune Duffield, Detroit 100,000
Witowski-Widzkowski Co., Detroit; to buy, sell and deal in clothing, haberdashery, hats, caps, wearing apparel, dry goods, etc.; Joseph, Vernon and Max Witowski, 6305 Chene st., Joseph A. Widzkowski, Detroit .. 100,000
Stratton Bros. Co., Ltd., Lansing; insurance agency, real estate, stocks and bonds; Burt S. and John W. Stratton, Harry M. Gerry 10,000
Brevard Electric Corp. (F.), New York; Albert J. Fisk, 1835 Woodward ave., Detroit 200,000
Walther's Department Store, Bay City; general mercantile business; John H. Walther, Mary E. Walther, Lewis J. Weadock, Bay City 150,000

(*Continued on Page* 33)

Digitized by Google

How Michigan Is Supplied With Power

(*Continued from Page 9*)

voltage to a point where it can be used with safety. From the substations to the customers' meters, the method of distribution is varied to suit the conditions. The street and interurban railway companies take their supplies at the substation switchboards. In the central area of Detroit the general service distribution is direct current by underground "feeders," mains and service cables. In the remainder of Detroit and in the other cities and villages and throughout the rural districts, distribution is by overhead wires, the current being carried to transformers on or near the premises of customers, where the voltage is stepped down to suitable pressure for lights and motors.

An interesting and important feature in the operation of such an extensive power system is the office of the "load dispatcher," from which all orders for the addition or curtailment of power are issued. The "load" varies greatly throughout the day as the business of the day progresses, and every variation in the amount of current used registers immediately on the indicator on the load dispatcher's desk. In the morning as the first lights are turned on in the homes and the early cars begin running, the hand on the indicator drops back a point. The dispatcher immediately calls (by direct connection) a waterpower plant operator away up on the Au Sable river, and directs him to put one of his generators on the line. This machine, although so many miles away, takes care of the extra load and the hand on the dial creeps back to normal. Then as the day advances, the load dispatcher anticipates the coming heavy load and orders other plants to come in on the line, so that the current will be sufficient to take care of all requirements. As lights are turned off or as the factories close for noon or night, the dispatcher orders equipment or stations off the line, so that the power is properly conserved. He also orders out the "trouble-shooters" wherever there is trouble on the line, and gives the necessary instructions for the opening and closing of switches on the trunk lines. The dispatcher has before him a map of the system, equipped with miniature switches which are opened or closed as the real switches are opened or closed, so that he can tell at a glance just what plants are operating.

Thus these two companies, by means of the co-ordinated effort which is possible only by highly perfected organization, are able to supply 344,000 homes and 9,400 industries throughout the state with the necessary light and power for carrying on the daily tasks.

METRIC SYSTEM BILL DRAFTED

Senator Frelinghuysen, New Jersey, is the author of a bill in Congress making the metric system the standard for measurements in the United States. The bill does not make it compulsory for manufacturers to adopt the system, but provides that industry may use the English system in manufacturing, but may use the metric system in commerce. A period of 10 years is allowed in which to accomplish the transition from the English to the metric system. The bill is supported by petitions containing 100,000 names of persons favoring the metric system.

WOULD ORGANIZE CONTRACTORS

Building contractors of Grand Rapids have instructed Secretary Harry J. Hoskins to visit towns in Western Michigan and feel out sentiment concerning a contractors' association covering that part of the state. The contractors at one time had a very successful state association, but it was allowed to lapse during the war.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins
Valve Roller Pins
Roller Clutch Pins

Dowell Pins (Hardened Straight)
Oil Pump Plungers
Rollers (Grinding Rolls Straight)
Differential Gear Pins

Headless Shackle Bolts
Universal Joint Pins
Small Gear Shafts

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 375

Digitized by Google

ESTABLISHED 1906

Bookkeeping
Appraisals
and
Cost Systems

Audits

Income
Tax
Reports

THE
WALTER S. GURD CO.
Public Accountants
708-9 Hammond Bldg. Detroit, Mich.
Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F. C. A.

PRODUCTION FOUNDRIES COMPANY

We have successfully specialized to
SAVE YOUR DOLLARS
by our modern intensive
production methods
applied by an expert
organization in our
40 TON
GRAY IRON FOUNDRY
OF ANN ARBOR, MICHIGAN

On Michigan Central Main Line for Carload Lots
BRANCH SALES OFFICE
315 Park Building, Detroit Telephone Main 8336

TWIST DRILLS, CUTTERS, REAMERS
AND SPECIAL TOOLS
NATIONAL
TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

State Obtains Injunction To Prevent Rate Increase

An injunction was issued December 24 by Judge Charles H. Collingwood, Ingham circuit court, restraining the steam railroads in Michigan from increasing their passenger rates. An order to show cause was issued returnable January 11, 1921.

The injunction was asked by Attorney General Groesbeck and is the result of the recent conference between the Interstate Commerce Commission and the representatives of several states, including Michigan, when it was virtually decided that a rate of 3.6 cents a mile would be necessary to maintain satisfactory service. Officials of the 18 railroads affected have been served with the injunction notice by the state police.

During the Washington conference an effort was made to restrain the Commission from issuing arbitrarily a series of rate increases, declaring the jurisdiction over intra-state rates was held by the state legislatures. It is held that damage to people in Michigan would result if the rates were increased, while the state would also lose because of the traveling costs of its officials and employes.

An effort will be made to have the injunction made permanent. It is possible that the Interstate Commerce Commission may ask a federal court order restraining Michigan from interfering with the establishment of the new rates.

BRIDGE CHARTER ASKED

The Canadian Transit Company, the corporation which will operate the proposed suspension bridge across the Detroit river from Detroit to Windsor, has made application to the Canadian government for permission to build the span. A. F. Healy, Windsor, one of the provisional directors of the company, says that if the charter is granted, work will start within a year. The cost will be in the neighborhood of $30,000,000. The provisional directors include E. B. Winter, Windsor; W. J. Pulling, C. E. Fowler, engineer; W. R. Campbell, C. S. King, mayor of Walkerville; G. M. McGregor, W. L. McGregor, F. Joyce and A. F. Healy.

CHICAGO PNEUMATIC TOOL CHANGES

H. L. Dean, manager of the compressor and engine sales division of the Chicago Pneumatic Tool Company, Chicago, New York and Detroit, has resigned. The company has appointed J. F. Huvane eastern manager of compressor and engine sales, with headquarters at No. 6 East 44th street, New York City, and G. C. Vander Boom, western manager of compressor and engine sales, with headquarters at No. 300 North Michigan Boulevard, Chicago.

BUZZELL OPENS AD AGENCY

J. J. Buzzell, formerly a member of the advertising staff of the General Motors Corporation, author of two books on sales letter writing, and an advertising man of considerable note, has resigned from the GMC to open an advertising service office in the Henry building, Woodward avenue and Grand Boulevard, Detroit.

DETROITERS ON A. B. A. BOARD

John S. Drum, president of the American Bankers Association, has announced appointments of the various committees and commissions for 1921. Three Detroit bankers are to serve. John W. Staley, president of the Peoples State Bank, is on the Economic Policy Commission and the Public Relations Commission. Frank W. Blair, president of the Union Trust Company, is on the Finance Committee, and Robert B. Locke, manager of the Federal Reserve Bank, Detroit Branch, is on the Committee on Public Education.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

Why Take a Risk on Forgings?

When at no greater expense you can secure your requirements and eliminate all forging responsibility by having them made

"The Champion Way"

FORGINGS THAT PASS OUR INSPECTION ARE CERTAIN TO MEET WITH YOUR APPROVAL

Try Us

The Champion Machine & Forging Co.
CLEVELAND, OHIO

Detroit Office:
H. B. KENDAL CO.
REAL ESTATE EXCHANGE BLDG.

MOTCH AND THE MERRYWEATHER MACHINERY CO

METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

Digitized by Google

Production Managers—



Quantity Production of Shafts in Continuous Heat Treatment Furnace.

Write nearest branch for Bulletin 217 B and learn whether this method is adaptable to your product and manufacturing conditions.

The following advantages are secured by the Continuous Method of Heat-Treatment:

Increased production per unit of floor space.
Reduction in manual labor per unit of production.
Uniformity of product, resulting in decreased scrap, following less dependence upon the human element.
The fuel economy that naturally follows the direct transfer of heat in spent gases to incoming material.
Improvement in working conditions by cooler shop.

In short, the saving in cost of the finished product due to economy in labor, time, fuel, floor space, decreased rejections, etc.

Do these advantages appeal to you?

W. S. ROCKWELL COMPANY
Furnace Engineers and Contractors
50 Church St. (Hudson Terminal B'dg.), New York.
We Make Industrial Heating Furnaces for Every Requirement.
"FURNACE AND FUEL TO SUIT CONDITIONS"
Branches: Chicago——Cleveland——Detroit
Elsworth Bldg. Hickox Bldg. Majestic Bldg.

Houston Oil
An explanation of its market action

American Ship & Commerce
And the outlook for the shipping shares

New Haven
Possibility of a receivership appears averted

American Smelters
Contest for control

Nipissing
A new analytical report

We have prepared a special bulletin covering important developments in the above stocks which will be sent free on request.

Ask for No. 316-M. R.

Schmidt & Deery
Members Consolidated Stock Exchange, New York
230 Penobscot Bldg., Detroit, Mich.
Telephone Main 8620-21-22
NEW YORK CLEVELAND CHICAGO PHILADELPHIA PITTSBURG
Direct private wires to principal markets.

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Seline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
138-140 Fort St. E. DETROIT

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

Factory, Warehouse and Railroad property *exclusively.* Personal service and personal knowledge of all available Railroad property in the city.
J. H. Cowley
509 Moffat Block. Main 2816.

The Double Cross In Seattle

(*Continued from Page 10*)

been rescued from a condition of demoralization and uncertainty as to the future to one of buoyant confidence and steadily growing success under the rule of law, fair dealing and justice.

"The Seattle Chamber of Commerce and Commercial Club, in common with the rest of our citizens recognizing the inestimable service rendered by the Associated Industries not only to this community but to the whole state, called upon one of its committees to prepare a report along the line of the great work of the Associated Industries. That committee, composed of energetic and public-spirited men, after months of careful study and consideration submitted a report to the Chamber September 20. It was not intended to enter the field now so successfully occupied by the Associated Industries. But approaching the subject not exclusively from the standpoint of the employer or the employes but from that of the public at large, its aim was and is: To familiarize that public with the essential principles of law and order and fair dealing that must be upheld if the city is to grow and prosper and be a fit place for men, women and children to live in.

"The trustees have compared the plan of the Associated Industries' committee on industrial relations, introduced in many Seattle institutions in 1920, with that of the plan of the Chamber's committee on labor relations recently submitted, and find them similar in all their essential intents and purposes.

"This report was unanimously adopted by the board of trustees.

"It is not too much to say that the committee's report is remarkable for the conscientious care and industry with which it was prepared, for its breadth of view and for its persuasive appeal to all our people to unite in building up this city on a basis of law and order and even-handed justice.

"It is not to be wondered at that the few individuals in this city who find their personal advantage in agitation, threats and turbulence have sought to misinterpret and pervert this report from its true and obvious aim."

American Campaign Reopened

As a result of this coup, Seattle Industrial and business leaders were obliged to reopen the American Plan campaign on a more intensive basis and augment it with a strenuous fight against the Farmer-Labor party. The fate of the Farmer-Labor party is well known, but Seattle is still fighting for the American Plan, although the situation is less desperate than it appeared prior to the election.

In calling upon the property owners, business and professional men and organized and unorganized workers opposed to radical leadership to stand together in an effort to break the grip of radicalism on the city, Edwin Selvin, editor of the Business Chronicle of the Pacific Northwest, closed his article with this statement:

"Let the labor movement come clean and it will have the sympathetic co-operation of the business interests. Workingmen have the right to organize. They have the right to collective bargaining. But with collective bargaining there should go collective responsibility. There should be laws compelling labor unions to incorporate so that they can be held responsible legally and financially for their acts. The honest American worker is a fine type of citizen; the present type of labor leader is not always a good citizen or an honest man. It is high time for an awakened and enlightened public sentiment definitely and decisively to drive the dishonest labor leader into the wilderness."

CANADIAN CAR & FOUNDRY

The Canadian Car & Foundry Company and its associated companies report assets of $43,828,951 on September 30, 1920, as compared with $35,017,435 a year ago. Surplus is now $7,061,556 as compared with $6,243,603 in 1919. The directors have decided to distribute 6 per cent negotiable script in payment of dividends in arrears on the cumulative preferred stock, amounting to 22½ per cent.

Digitized by Google

RED CROWN Gasoline is made especially for automobiles. It will deliver all the power your engine is capable of developing. It starts quickly, it accelerates smoothly, it will run your car at the least cost per mile, and it is easily procurable everywhere you go.

Standard Oil Company (Indiana) Chicago, Ill.

Royal Palm
To
FLORIDA

Daily Through Sleeping Cars

To Jacksonville

Lv. Grand Rapids (M. C.) ..... 5:15 p. m.
Lv. Detroit (M. C.) ..... 10:00 p. m.
Lv. Toledo (Big Four) ..... 11:45 p. m.
Lv. Cincinnati (So. Ry.) ..... 5:45 a. m.
Ar. Chattanooga ..... 4:05 p. m.
Ar. Atlanta ..... 9:15 p. m. (C.T.)
Ar. Jacksonville ..... 8:25 a. m. (E.T.)

Making direct connections with morning trains for all Florida points.
Dining car service for all meals.
Winter tourist tickets on sale daily, with liberal stopover privileges.

Via

MICHIGAN CENTRAL

In Connection With
BIG FOUR ROUTE—SOUTHERN RAILWAY SYSTEM

For booklet and detailed information or reservations consult

J. W. SWITZER, A. G. P. A.
Michigan Central R. R.
M. C. R. R. Pass. Term.
Detroit

J. P. CORCORAN, D. P. A.
Big Four Route
Nicholas Bldg.
Toledo

J. A. EDWARDS, D. P. A.
Southern Railway System
410 Free Press Bldg.
Detroit

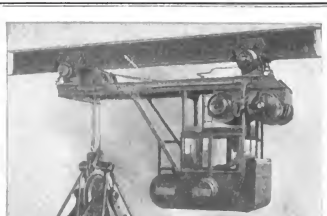
SOLVAY
COKE

Best for Your Needs:
the Name Guarantees
the Highest Quality

SEMET-SOLVAY CO.
DETROIT, MICH.

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
18 W. COLUMBIA ST.
DETROIT
CAD. 6163 CAD. 6164

STEERE ENGINEERING CO.
Machine Shops Structural Steel and Plate Shops
Detroit, - Mich.

FOR RENT

13,000 Square Feet; Manufacturing Space; 2nd and 3rd Floors; suitable for machine tool work; also offices. Modern, fireproof, central location (½-mile circle); passenger and large freight elevators.

LOUIS G. PALMER & CO.
558 Penobscot Bldg. Detroit, Mich.

(*Continued from Page 30*)

CHANGES OF NAME

Detroit Sanitary Closet Co. (name changed to Advance Sanitation Co.), Detroit	$ 160,000
Marietta Stanley Co. (name changed to Semi-pay Accessory Co.), Grand Rapids	10,000
Cutting-Emery-Nicholson Co. (name changed to Emery-Nicholson Co., Incorporated), Detroit	25,000
Breyer & Landblad Found'y Co. (name changed to Landblad Foundry Co.), Saint Haven	25,000

INCREASES

Alloo Co-operative Co-partnership Creamery Association, Limited, of Alloo, Michigan, from $4,000 to	$ 6,000
Tecumseh State Savings Bank, Tecumseh, from $26,000 to	50,000
Michigan Trust Co., Grand Rapids, from $200,000 to	1,000,000
Buchanan & Huff, Detroit, from $50,000 to	100,000
Washtenaw Lumber Co., Ann Arbor, from $15,000 to	30,000
Motor City Building Co., Detroit, from $10,000 to	25,000
Diamond Coal & Coke Co., Detroit, from $50,000 to	100,000
Body Publishing Co., Detroit, from $2,700,000 to	3,000,000
After Laird Co., Detroit, from $6,000 to	100,000
Bradford Lumber & Planing Mill Co., Alpena, from $10,000 to	20,000
Detroit Vacuum Cleaner Co., Detroit, from $1,500 to	35,000
Edwin Fultus Canning Co., Lowell, from $80,000 to	100,000
Lailey Realty Company, Detroit, from $25,000 to	100,000
Jackson Iron and Metal Co., Jackson, from $5,000 to	75,000
Morris-Travis Drug Co., Detroit, from $10,000 to	150,000
Cheboygan Apple Growers' Ass'n, Cheboygan, from $25,000 to	75,000
Texas Co. (The) (Texas), Houston, Tex., Detroit, from $85,000,000 to	120,000,000
Keeler Brass Co., Grand Rapids, from $250,000 to	1,000,000
Oliver Machinery Co., Grand Rapids, from $210,000 to	850,000
Consumers' Ice Co., Grand Rapids, from $250,000 to	500,000
Detroit Merchants Improvement Co., Detroit, from $51,000 to	500,000
Williams & Hastings, Inc., Detroit, from $50,000 to	100,000

DECREASES

South Bloomfield Highlands Co., Detroit, from $60,000 to	46,200
J. Feldman Sons Co., Detroit, from $100,000 to	60,000

NOTICES OF CHANGES OF ATTITUDE

Cavanagh Poultry Farms, Lansing	$ 7,500
Hemlock Elevator Co., Hemlock	36,000
Nash Sales Co., Jackson	10,000
Corporation Service Bureau, Inc., Detroit	10,000
Liberty Auto Service of Michigan, Inc., Detroit	25,000
Penn-Bayer Co., Detroit	12,000
Murphy Company, Detroit	25,000
Charlevoix Theatre Co., Charlevoix	6,000
Shobe, Flint	10,000
Battlements Drug Co., Benton Harbor	5,000

WORLD'S STAR CO. ELECTION

On account of the recent death of President Henry B. Smith, the stockholders of the World's Star Knitting Company, Bay City, met last week and elected the following officers: President, D. L. Galbraith; vice-president, M. H. Smith; secretary and treasurer, Howard F. Smith. The above officers, together with C. A. Galbraith and A. Galbraith, were elected as the board of directors. Louis M. Nims was re-elected general manager.

GRAND RAPIDS OFFICE OPENED

A. W. Ehrman & Company, Detroit advisory accountants, have opened a branch office in Grand Rapids, in the Fourth National Bank building. Martin Dowd, for several years in the income tax department of the United States government, at Washington and Grand Rapids, will be in charge. The company will specialize in audits, income tax reports and tax systems. Detroit offices are located at 1314 Ford building.

ATLAS IRON REORGANIZED

John W. Bass is president of the Atlas Iron & Steel Company, Detroit, recently organized to take over the business of the Atlas Iron Works. The capital stock is $200,000.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Univ. of Mich. (Hist.) Library



Detroit, January 8, 1921

HOW THE BANKS HAVE STOOD BY BUSINESS

(See Page Three for Table of Contents)

Vol. 27. No. 2 *Price Fifteen Cents*

Aladdin



Most Modern Housing Project in the South

The Delgado Mills, Wilmington, North Carolina, erected fifty Aladdin houses for their employees. These fine, comfortable homes are provided with toilet facilities, electric lights and running water.

The Delgado Mills experience has been complete satisfaction. The management of the biggest and most progressive corporations in the country are providing improved housing facilities for their employees. Big firms all over the country are placing orders for Aladdin-made industrial houses. This is not a philanthropic movement, nor is it welfare work; it is a sound, sane business proposition.

The workman who has a comfortable home to go to is a satisfied workman. The housewife and the children in such a home are happy and contented to stay in it.

In addition to making many types of industrial homes, we also manufacture hotels, stores and churches.

When you are ready to consider your housing problem bear these facts in mind:

Aladdin—

—expedites your building project—
—houses your men well and quickly—
—saves 18% of the cost of lumber—
—save 30% of the labor cost—
—reduces the skilled labor required—
—guarantees complete shipment of material—
—guarantees the quality—
—carries material for 1,000 houses in stock—
—ships from the nearest timber region—

—quotes definite prices on any order from one house up to a city of 3,000, including churches, schools, offices, water and sewage systems, electric plants, street and house lights, heating plants, street parks, trees, lawns, etc., complete.

Write, wire or phone for Aladdin Catalog No. 2077

The Aladdin Co.

Offices and Mills at { **Bay City, Michigan**
Wilmington, N. C.
Hattiesburg, Miss.
Portland, Oregon
Toronto, Ontario



Industrial Housing

Digitized by Google

MICHIGAN
MANUFACTURER
AND
FINANCIAL RECORD

Established 1907

CONTENTS

January 8, 1921

Page

How the Banks Have Stood by Business 5
Examination of the character of credits extended answers the question, "When will they loosen up?" By Phil S. Hanna.

Getting Power to the Machine. 7
Transmission methods used in Michigan plants; an examination of their respective advantages. By Howard Campbell.

The Full Crew Bill Again..... 9

Highways—How and Where.. 10
What the new federal committee hopes to accomplish; conference looking to U. of M. meeting held in Detroit. By F. W. Hersey.

Page

The S. A. E. New York Program 11

More Ford Changes Forecast.. 12
Brownell and Klingensmith out, others reported scheduled to follow; some reasons back of the disagreement. By Marc Braun.

News of the Motor Industry..14-15

Transportation Matters 16

The Week's Building..... 18

The New Dort Line..... 18

Editorial 20-21
Mr. Fordney's Reassuring Statements — Labor Unions and the Anti-Trust Laws.

Financial Section 22-31
Edited by Phil S. Hanna.

Vol. 27 Detroit, Mich. **No. 2**

Published Every Saturday by the Manufacturer Publishing Company
Suite 611 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Four dollars a year in the United States, Canada and Mexico. On sale at all new stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.
Advertising rates on application.

Digitized by Google



MUELLER Forgings in Brass and Bronze

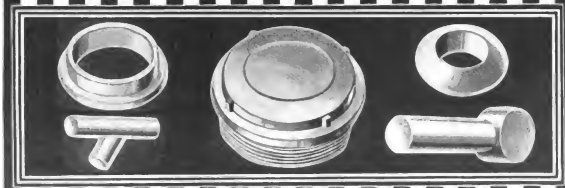
For all parts where density, yield, elongation and tensile strength are factors, *MUELLER* Forgings are more economical and efficient than sand castings, because the brass is first heated to cherry red and then subjected to pressure of 200 tons per square inch.

MUELLER Forgings are non-porous—are free from flaws and sandholes—are held to close dimensions, thus saving metal, labor and machining. Mixtures can be varied to secure special working conditions. Submit samples, state quantities desired, and we will quote interesting prices.

MUELLER METALS CO., PORT HURON, MICH.

Makers of "Red-Tip" Brass Rod; Brass and Copper Tubing; Forgings and Castings in Brass, Bronze and Aluminum; Die Castings in White Metal and Aluminum; also Screw Machined Products.

H. Mueller Manufacturing Co., Decatur, Ill., and Sarnia, Ont.
Makers of Water, Plumbing and Gas Brass Goods and Tools.



Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

How the Banks Stood By Business in 1920

Examination of Character of Credits Extended Answers Question, "When Will They Loosen Up?

By PHIL S. HANNA

WE HEAR quite often these days in business circles the familiar remark, "When are the banks going to loosen up?" and other similar cracks to the effect that it is the banks which have caused all this depression. Those who haven't taken a fling at the commercial banks have given the Federal Reserve System a round chastisement, alleging that these have purposely raised the discount rates, to the detriment of business, and that credits in general have been unduly restricted. I have never yet had the slightest suspicion of ulterior motives on the part of the Reserve Banks, and after going back for a year to study the figures of loans by them to member banks and by the member banks to their customers I am more convinced than ever that a study of the figures will go a long way to set this matter right in the minds of any doubters. The better to illustrate the extent to which the banks and the Federal Reserve System expanded themselves to care for business during 1920 I have drawn up a set of graphs which are shown herewith.

I take it that our readers are generally aware of the general plan of operation between the banks of the country and the Federal Reserve System, but for the benefit of those who are not familiar with this system I shall deviate long enough to describe the situation briefly.

In ordinary times, when the demands of business for credit are normal, the commercial banks generally find that the deposits of their customers are sufficient to allow them to loan out all the funds required by any given community and thus the function of the Federal Reserve System is mainly that of holding the reserves of its member banks. If the amount of gold on hand happens to be unduly or unnecessarily large in proportion to the reserves of members, the federal banks may employ their surplus funds by purchasing bills in the open market in order to make earnings enough to cover expenses, but until the members begin to call on the central system for currency or for credit, the Federal Reserve Banks function mainly as their name would imply—as reserve banks. They have, however, another function which plays an important part, and that is the power of issue. At present the currency in use is made up of about $700,000,000 national bank notes and about $3,600,000,000 Federal Reserve notes of both kinds, and, as may be noted from the graphs, the amount of Federal Reserve Bank notes in circulation follows quite closely the increase or decrease in loans by the Reserve Banks to the member banks.

Let us look first at graph No. 1. How have the banks taken care of their customers in the matter of increasing loans? The first curve, showing a steady downward trend, shows how the loans made on Liberty bands and all other classes of war issues have decreased from $1,320,000,000 in January, 1920, to $900,000,000 at the end of December. While the small owner of Liberty bonds has no doubt made up part of this total as a borrower, it takes a great many small borrowers to make up in the aggregate as much of a loan as one large borrower will obtain, and the deduction therefore is that the major portion of loans on war paper have been to the wealthy, and of course to corporations which have reduced their obligations of this nature during the year more than $400,000,000, as the graph shows.

The second curve on graph No. 1 represents the trend of loans on stocks and bonds. It shows a steady reduction until August 6, when there was an increase, followed by a decrease

Warns Against Cutting Advertising

S. E. CUNNISON writing in the Bulletin of the Brooklyn Chamber of Commeree, of which he is a director, warns industry and business against eliminating or reducing advertising space at this time. He says:

"Advertising should be maintained and not cut at this time when manufacturers are so seriously overstocked with goods. We have come to a period critical in the growth and even existence of many business houses. Decisions made today will be determining factors in the success or failure of the years to come.

"The greatest and most successful concerns have always been the most consistent advertisers. Mindful of lessons of the past, they safeguard the present and anticipate the future."

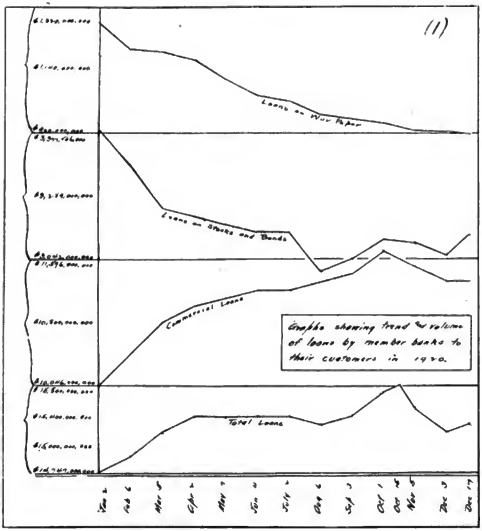
Next Week:

Beet Sugar Manufacture in Michigan

In this article, the third series of 52 constituting "The Romance of Michigan Industry," Howard Campbell, technical editor of the paper, discusses one of the state's basic enterprises, taking up plant facilities and processes, personnel, value and distribution of the product, and the various other phases of the subject, the whole being a graphic picture of the industry in the state.

Other Timely Features

Digitized by Google



December 3, but the year closed with a net reduction in these items of about $159,000,000.

The third curve shows the trend of commercial loans and discounts and brings out the real story of how the banks have taken care of their customers. Starting with a total of $10,046,000,000 in January, these loans increased to a high figure of $11,774,000,000 on October 8, or a net increase in accommodations to business houses, contractors, farmers, retailers, manufacturing corporations and the like, of more than $1,728,000,000 for the first eight months and eight days of 1920. From October 8 until the close of the year these loans decreased gradually, due to the liquidation which set in with full force about October 1, until on December 17 the total had dropped to $11,535,000,000, a reduction of $439,000,000. The net result is that the year 1920 closed with the business concerns of the country owing the banks $1,289,000,000 more than they owed the banks January 1, 1920. And still many will ask, "when are the banks going to loosen up?"

On comparing the three curves, it is plain that the credit accommodations of the banks during 1920 have been taken away largely from the borrower on stocks and bonds and Liberty bonds and turned over to the commercial interests of the nation.

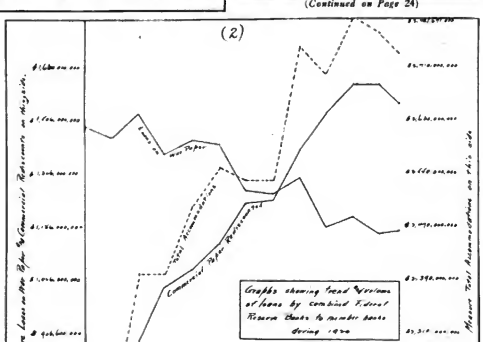
The last curve on sheet No. 1 shows the trend of total bank loans during 1920. Except for a slight downward movement in August, the trend was upward from January 2 to October 15. For the year the net increase in all kinds of loans by the banks was $593,314,000, but on October 15 the increase stood at $1,107,000,000.

As stated in the beginning of this article, when a commercial bank finds that its reserve is running low, it may increase it by rediscounting its short term notes given by customers and by borrowing in its own name upon United States collateral. Theoretically, when a bank's reserve runs low, it is supposed to discontinue making new loans and to call in enough of its outstanding loans to replenish its reserve, but history has taught us that the condition of all business may prevent the application of this theory, and thus the Federal Reserve Banks were organized to step into the breaches of this kind and furnish currency or credit to banks needing either until such time as the condition of business might permit of a liquidation of outstanding loans. The facts have been, however, during the early part of 1920, that reserves dropped down and a still further demand of new loans had to be taken care of; so the commercial banks went further and not only called on the Reserve Banks to replenish reserves, but were obliged to borrow for the purpose of rediscounting, and it is just here that the average man has failed again to appreciate the efforts of the banks to keep the business wheels turning with some similarity of normalcy.

Now let us turn to graph No. 2, which shows the extent to which the Reserve Banks have taken care of the commercial banks. Take the dotted line curve which on January 3 showed total loans to member banks of $2,231,187,000 (right hand margin) and follow this across the chart. After June 4 there was a slight falling back, but between January 3 and November 5 the Reserve Banks increased their loans to member banks $623,000,000 (see dotted line, graph No. 2). The other curves on this graph follow in the main the tendencies shown by the curves on graph 1, namely that loans on war paper decreased throughout the year while rediscounts of commercial paper increased. In other words, the business of the nation was given a right-of way by the banks over speculators and all other classes of borrowers.

The third graph shows the increase during 1920 of Federal Reserve notes in circulation and is ascending every period except for the

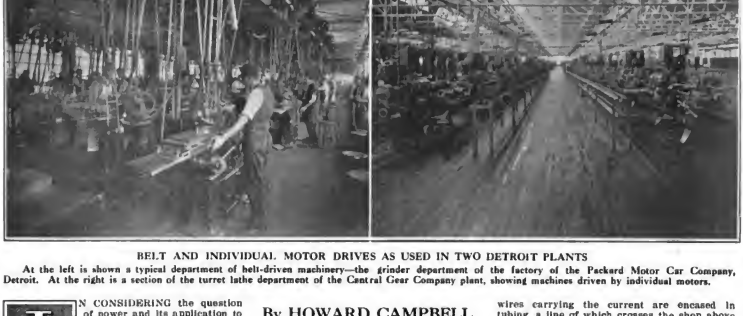
(Continued on Page 24)



Digitized by Google

Getting the Power to the Machine

Transmission Methods Used in Michigan Plants; An Examination of Their Respective Advantages



BELT AND INDIVIDUAL MOTOR DRIVES AS USED IN TWO DETROIT PLANTS

At the left is shown a typical department of belt-driven machinery—the grinder department of the factory of the Packard Motor Car Company, Detroit. At the right is a section of the turret lathe department of the Central Gear Company plant, showing machines driven by individual motors.

By HOWARD CAMPBELL

IN CONSIDERING the question of power and its application to the machinery which it is to drive, we are confronted with a rather complex subject. Undoubtedly the first method of transmitting power ever used was that of coiling a rope about the cylinder or wheel to be turned, and to this day there are a great many places where the rope as a means of power transmission is holding its own.

The last few decades, however, have seen the development of the belt drive, and by far the greater amount of machinery, especially that used in the production of small metal parts, is belt-driven. The use of chain is coming more into favor, also, as a result of recent developments in chain-belt engineering. It is often exceedingly useful for the transmission of power within the limits of a single machine, and beyond a doubt will be applied to many new uses in the future.

There are three phases of power transmission to be taken into consideration, viz.: the transfer of power direct from the engine to the machines, as is done in small shops having their own power plants; using the engine to drive dynamos from which the current is transmitted to motors for the purpose of driving lineshafts, which, in turn, drive the machinery; or driving each machine with an individual motor of the capacity required to drive the one machine.

Merits of Each Method

The respective advantages and disadvantages of these various methods are in direct ratio to the conditions, size of the machines to be operated, and the duty that is to be performed. Where the amount of equipment to be driven is not too great, the economy of driving direct from the lineshaft is apparent. But where the volume of equipment is so great as to necessitate the division of the plant into several departments, the problem is solved by the use of electricity. In this case, all the machines which would be most likely to be in operation at one time are grouped together and a motor supplied for the group. And very recently a number of plants have been built in which the individual motor-drive system was adopted, thus eliminating the problem of belts, shafts and countershafts, with all the attendent accessories.

Among the latter the plant of the Central Gear Company, Detroit, a division of the General Motors Corporation, is an excellent example. This factory is quite new and has never produced to the limit of its capacity, but it is estimated that 1,450 complete differentials can be produced daily when production is normal.

THIS is the second of Mr. Campbell's series of 52 articles comprising "The Romance of Michigan Industry." The third, to be published next week, will discuss beet sugar manufacture in the state.

Equipment includes nearly 900 machines, such as lathes, screw machines, grinders and such other metal-working machines as are necessary in the production of gears, with floor space for 500 additional machines. Each machine in the shop is driven from its own individual motor, the motor being attached to the top, rear or other place where it will not interfere with the operation of the machine. Power is supplied by the Detroit Edison Company, in the shape of a 4,600-volt current. At the plant it is transformed down to 440 volts, alternating current, for power purposes, and 220 volts for lighting. Inside the shop the wires carrying the current are encased in tubing, a line of which crosses the shop above each line of machines. From these main lines tubes branch down, one to each machine, carrying the wires which are attached to the motor. The ceiling of the shop and all the tubing is painted white, as are all posts and walls, and the result is astonishing to those who have been accustomed to the more common variety of shop with its various kinds and sizes of belts, shafts, hangers, shifters, pulleys and other paraphernalia.

Taking Care of the Wires

There are no wires in sight excepting at the junction of the tube with the machine motor. Such machines as require five horsepower or more to operate are equipped with rheostats, but the lighter machines are equipped with automatic starting devices. To start one of these the operator has only to push a button and "the machine does the rest." The gear-cutting machines are equipped with automatic switches or "cut-outs" which shut off the power when the operation of cutting all the teeth in a gear is completed, thus saving the gear from being spoiled. Gear-cutters are automatic, one operator taking care of several machines. Obviously, the operator could not shut off each machine at the critical moment.

Thus a length of small white stationary tubing takes the place of shafting, countershafts, pulleys, hangers and belts, with all the attendant dirt and danger. If it becomes necessary to take the machine apart for repairs, or if the machine is needed in another part of the factory, it can be easily disconnected, mounted on casters and wheeled away to its destination, where it is quickly connected again and is ready for production. There are no countershafts to take down and put up again and no belts to cut and lace. While the machine is running it is using power; when it stops, the power consumption stops also. And many machines are not actually running more than 50 per cent of the time.

Digitized by Google

However, nothing is perfect, and occasionally a motor burns out or gives trouble. At the end of each row of machines is an emergency push button, connected to a bell and a number on a register in the repair shop. An electric shop truck, loaded with the necessary tools and apparatus, with an electrician, is always on duty. If a machine motor gives trouble it is only a matter of seconds until the repair man has located the machine and is making the necessary changes. If a motor should burn out it is quickly and easily replaced.

However, such power transmission equipment as that described above is very much the exception. There is no doubt that the first cost is an important factor, and the case of cost of motor equipment versus the more usual kind has never been settled as yet.

Obviously, the factories which have been using belts and pulleys for years are not likely to discard their present equipment and install a new system. The larger and heavier machines in practically all modern shops are motor-driven, however, due to the great amount of power required.

Belting in the Majority

A recent survey of the methods of power transmission employed by American manufacturers has disclosed the fact that 78 per cent use belting (or rope) in their plants. Of this number 48 per cent use leather belting, 21 per cent rubber belting, 16 per cent fabric or balata, 9 per cent chain drive, 2 per cent Manila rope drive, and 1 per cent wire drive.

Practically all machine shops and factories engaged in the production of small articles or parts use leather belting. Rope drives are used largely in paper mills, mines and for the purpose of driving rock crushers, textile mills, rolling mills and similar machinery. This is due largely to the fact that the heavier machinery, once started, runs continuously throughout the working period at a given speed, while the smaller machines not only are started and stopped frequently, but the belts are shifted from one pulley to another to vary the speed of the machines according to the operations being performed. In a shop operating under normal conditions, the leather belt unquestionably is the best, although fabric or rubber are sometimes used. Leather being pliable, though strong, was early used for the transmission of power. The treadmill, which operated with a form of belt transmission, dates back to antiquity. And the same qualities which make leather preferable to woven fabrics for transmission purposes today, probably made it preferable then. A leather belt, properly taken care of, will last practically a lifetime. There are numerous records of leather belts running 25 and 30 years. The famous "Centennial Belt," made by the Edw. H. Ladew Company, Philadelphia, has been running continuously 24 hours a day, 300 days a year since 1877—43 years, and is still doing strong.

However leather belting is expensive and there are some places where fabric can be used with good results. Among the substitutes for leather is Burmaline, which is canvas impregnated with a composition intended to impart wearing qualities. It is not waterproof. Canvas-stitched belts are used in many places where the duty is light. Balata belting is made of canvas, thoroughly impregnated with a gum solution resembling rubber, which makes it especially adapted for use in places where it may have to run through steam or water. Balata is not affected by steam, water, animal oils, grit, alkalis or exposure. However, it will not stand heat.

For a great many years the cable and grooved pulley, or "rope drive," was the favorite method of transmitting power. This has very largely been supplanted by the belt in this country, although in England the rope transmission is still used largely. The English use cotton rope, while in America hemp is most often employed, as it is claimed that the hemp is stronger, cheaper and will last nearly as long as cotton. Cotton rope, being softer and more pliable than Manila rope, can be used with smaller pulleys without undue injury to the fibres. This condition is aided by the natural wax in the long fibre.

There are a number of places in this country where the rope drive is still in use. It is most frequently used for driving from the engine to the line shaft, and sometimes for driving around corners where the problem of transmission is a particularly difficult one. Because of the fact that rope will not slip when wound several times about the pulley, it is very efficient where a heavy pull is required at close range. The claim is also made that the rope drive will stand much more punishment than the belt.

The first use of rope for the purpose of driving machinery was as a single endless loop, working over sheaves having single grooves with inclined sides. Double power was obtained by running two such single loops on sheaves having two grooves each. By amplification of this plan the multiple or English system of driving was developed, using several independent ropes, each running in its own pair of grooves in the two sheaves. In 1883 Wallace H. Dodge, founder of the Dodge Manufacturing Company, devised and patented the continuous or "American" system of rope driving, in which one continuous endless rope is used, winding around the sheaves successively in the several grooves, making as many wraps as may be required by the power to be transmitted.

The Monroe Installation

Practically all paper mills use the rope drive for driving from the engine to the main lineshaft, the system in use at the Monroe plant of the Monroe Binder Board Company, Monroe, Mich., being a fair sample. in this case a hemp rope is used, the diameter of which is 1¼ inches and the length a little more than 2,300 feet. The driving sheave is 16 feet in diameter, while the driven or lineshaft sheave is 8 feet. The distance between the shafts is about 50 feet. There are 20 grooves in the sheave and the width of the face is about 52 inches. The load varies from 600 to 1,000 horsepower, although it is usually between 800 and 900. The grooves in the small sheave are V-shaped, so that as the rope passes on to the sheave it is wedged into the groove and the resistance to slipping is thereby greatly increased. This wedge action also acts in opposition to centrifugal force, which latter is so potent a factor in belt driving.

The grooves in the large sheave are U-shaped, the friction obtained from a sheave of this size being great enough to pull the load without slippage. A single-groove "tightener" pulley is suspended between the upper and lower strata of rope as they engage and leave the smaller sheave. As the rope engages the sheave it passes once around, then around the single groove pulley and on to the sheave

(*Continued on Page* 34)



ILLUSTRATING THE CHAIN AND ROPE METHODS OF POWER TRANSMISSION

At the left a Link-Belt Silent Chain is shown driving a lineshaft in the plant of the Reo Motor Car Company, Lansing, and at the extreme right a Morse Silent Chain driving a running-in stand in a motor manufacturing plant. In the center is shown a quarter turn in rope drive—transmitting power around a corner.

Digitized by Google

Full Crew Bill Again Before State Legislature

According to legislative records, as regularly as the Michigan legislature convenes, just as regularly there is introduced the well-known and justly famous "Full Crew Bill," which has no connection whatever with the use and employment of intoxicating liquors, but is concerned with the number of men the railroads of Michigan shall assign to work on all passenger and freight trains.

This year, it is understood, Samuel H. Rhoades, formerly city attorney of Lansing, will introduce the full crew bill, and R. M. Branton, chairman of the Michigan state legislative board of the Brotherhood of Railroad Trainmen, will lead the campaign in favor of the passage of the measure.

The bill stipulates that a freight train crew shall consist of not less than six men, to-wit, one conductor, one engineer, one fireman, two brakemen and a flagman; that a passenger train crew shall consist of not less than five men, to-wit, conductor, engineer, fireman, brakeman and flagman, the latter to have at least one year's experience as a trainman.

The measure prohibits the employment of brakemen or flagmen in the service of baggageman, porter or express messenger in addition to his own duties. It also prohibits the operation of more than four freight trains in every 24 hours by any one railroad. The penalty for violation of the provisions of the statute would be fines of not less than $100 or more than $500, or imprisonment of not more than 90 or less than 30 days in jail.

A bill of similar character died in committee at the last session of the legislature.

ROME WIRE BRANCH OPENED

H. C. Joos, district manager for Detroit of the Rome Wire Company, Rome and Buffalo, N. Y., has opened a branch office of the company at 25 parsons street. The company operates two plants, one known as the Diamond branch, Buffalo, at which is manufactured primary, secondary, lighting, starting and high tension automotive cables, cable assemblies, harnesses, horn cables, flexible R. C. wires, heater cords, mining machine cables, special wires and cables for all electrical requirements. The Rome plant produces bare and tinned copper wires, full seale of rubber-covered wires and cables, lead-covered cables, W. P. wires, magnet wires including cotton, silk and enamel insulations. The company is incorporated under the laws of New York state at $10,000,000.

PIERCE-ARROW

Due to the lack of a quorum, the meeting of the directors of the Pierce-Arrow Motor Car Company, Buffalo, was postponed to January 11, at which time, it is reported, there is good reason to believe that the regular quarterly dividend due April 1, will be voted. The business of the company is said to be picking up, especially since the bringing out of the new series of passenger cars, for which there are about 700 orders on the books, says the Wall Street Journal, which orders are consumers' orders and not dealers' display or show cars

CLEVELAND TRACTOR INCREASES RATE

The Cleveland Tractor Company, Cleveland, in declaring a quarterly dividend at the rate of 7 per cent per year, has increased the rate 1 per cent. President Rollin H. White stated that the plant was being operated at normal capacity and probably would be indefinitely.

MACHINE COMPANY CHANGES NAME

The West Michigan Tool Company, Ltd., Grand Rapids, has changed its name to the Pulte-Korreck Machine Company. F. E. Pulte is president.

When The Ad Appears In The Magazine—

How frequently is the advertiser disappointed.

The art work graphically reproduced the product.

But the actual reproduction in the publication fell short of expectation.

Because the paper quality and press work were not fully taken into consideration when making the engravings.

That is why we watch and study the paper and press work of the publications in which your ads appear.

The result is faithful reproduction—in the publication—where the pictures sell.

A Wayne sales-service man will respond to your call to Main 4138—will help you in other ways in your engraving problem.

WAYNE COLORPLATE CO.
Photo-Engravers
1040 WAYNE ST MAIN 4138-9

Digitized by Google

Highways—Where and How

What New Federal Committee Hopes to Accomplish; Conference Looking to U. of M. Meeting Held in Detroit

By F. W. HERSEY

ONE of the contributing causes of the present curtailment of Industrial operations and the attendant economic depression is limited distribution. The present business situation may be likened to a log jam, one of the key logs of which is inadequate transportation facilities. To continue the simile, the products from mill, factory, field and forest have floated freely through the existing channels of distribution to a point where the narrows have forbidden further progress. The narrows are the undeveloped inland waterways and the unimproved highways.

In normal times the ceaseless flow of commodities is absorbed along the way, so that the volume never becomes great enough at the narrows to create a jam. That great territory beyond what we are calling the narrows never sees the mass of flowing commodities. Seldom, if ever, does it reach as far as the narrows. That territory in which waterways, railroads and good highways simplify and accelerate distribution naturally becomes the center of intensive salesmanship. The railroads have opened up this territory, but in laying out these lines railroad builders had always in mind economy in construction and reasonable guarantees of future income. The inland waterways of the country have been developed more with an eye to sectional advantage than commercial value.

Existing railroads and waterways, as great as they are, fall short of serving a fair percentage of this great continent. Consequently there remain vast fields for commercial enterprise yet to be developed. Some of these territories are awaiting future railroad development, some are trusting to waterway improvement, but others hope for nothing, and even glory in their isolation.

Babson's Idea of It

Recently Roger Babson, statistical expert having under his control a large organization for investigation of Industrial and commercial problems, told me that 90 per cent of the salesmanship effort was being directed at 10 per cent of the people. He said:

"The waste in production is even exceeded by the waste in distribution. Salesmen go, not where the goods are needed, but where the railway and hotel accommodations are the best. Sales campaigns are often based upon custom rather than upon facts.

"Salesmen are sent, not where they are needed, but rather to communities where they have a surplus of goods. We should develop new fields instead of constantly striving to capture trade in fields already well developed. Let us stop struggling over the division of what is already produced. Let us stop fighting for trade which already exists. Ten per cent of the public is oversold, while 90 per cent is neglected. Three essentials are needed for continuous prosperity—intelligence, labor and capital."

To these three things I want to add a fourth —highways. Perhaps the item of intelligence mentioned by Mr. Babson includes highways as an essential evidence of intelligence. But rather than leave the fourth element to conjecture, I shall add it and repeat it—highways. All the efforts of capital, labor and intelligence will be of small avail if the broadening of production and distribution is hampered by neglect of the rail-less arteries of trade—the highways.

Some years ago, before prohibition, the usual collection of knights of the grip were swapping yarns and plying their vitals with red liquor at the bar of the old Piedmont Hotel in Atlanta, Ga. I say "old" Piedmont because while it still exists, it neither looks nor acts the same.

The Piedmont was famous as a clearing house for commercial traveling men, and the custom was to congregate there, and through the good offices of the telephone, corral such orders as were easily available. In the course of this particular evening a young salesman arrived. He was a foreigner considerably involved in the mysteries of the English language, but eager for advice and fellowship. Having offered to treat and thereby gathered to himself a host of counsellors, he sought help in selecting a territory.

Alive to his youth, both in years and experience, the counsellors mapped out a pretty route for him through unsurveyed, railroadless and almost roadless regions in the "cracker" country. The young knight expressed proper appreciation, and while the gang was hawhawing in mutual glee over the joke, he called for a horse and buggy and began his journey. For several months he drove about, sometimes behind the dignified trot a good horse, but more often in the wake of the ambulings of various species of the Georgia mule.

For months he never saw a railroad. He met persons who never had seen one. He met hundreds to whom an automobile would have been the first wonder of the universe. He took orders everywhere. He frescoed the country with cigars, samples and stories.

One of his lines was a cheap hat which sold to the trade at $12 a dozen, to be retailed at $2 each. He sold the entire output of the house he represented, and he returned to "civilization" a happy man. The roads he traveled, the people he met and the sales he made supplied the Piedmont Hotel with materials for har-fly debate for weeks thereafter. But the lesson taught by that drummer's experience, and probably little appreciated by the average traveling man in that territory, was this:

Where the railroad does not serve and only the adventurous will venture with horse or mule, there lies the future commercial field. There will be found much relief from the evils of over-production and the clogging of well developed markets. But not until such regions are linked with the sources of supply by the modern highways over which roll the motor truck and the passenger vehicle, will that relief come.

In a recent address Robert C. Hargreaves, district manager of the B. F. Goodrich Rubber Company in Detroit, said:

"Trade centers depend upon trade lines; trade lines depends upon transportation; transportation depends upon discovery, and discovery depends upon invention. These facts and forces act and react upon each other in the play of history. The most powerful factor of all is commerce, which lends men into new lands, new knowledge and new life. Commerce is the motive force back of all human progress."

Another Hargreaves utterance was this: "I like to think of highway transportation as a logical development of our great national transportation system—a system that, when finished, provides for the free and complete circulation of commerce. Arteries of commerce in the form of economical highway transport for people and commodities compel our attention."

The attention of the thinking people and the Government is now directed toward highway transport. The recent railroad experience, the emphasis on the strategetic importance of roads in military operations resulting from the war, and the realization of commerce that it has grown-up from a buyers' into a sellers' market where future prosperity will depend upon research and initiative, all compel attention to highways and highway transport.

After we had had the fiend-like, motor-propelled vehicle rushing legions of armed men to the rescue of the beleaguered city, moving foods to strike-embargoed cities and transporting coal to and commodities from factories where strike-besieged railroads have failed, are we going to hesitate longer over the problem of national highway construction?

National Road System Needed

It has been apparent to engineers, manufacturers and automotive men that the vital need of the nation is a complete system of national trunk highways so laid out as to afford easy access through county and state links, and built to withstand the wear and tear of heavy duty vehicles as well as all types of passenger cars. Aside from these physical needs there is also the need for a definite national highway administration policy that will eliminate as far as possible the vote-swapping method of establishing improved highways without regard to their actual need and value in commerce.

This much, and more, was achieved from a talk with Prof. Charles J. Tilden, professor of engineering mechanics at Yale University, New Haven, Conn., and who recently has been

(*Continued on Page* 32)

Oakland Makes War On Overloaded Trucks

OAKLAND county's campaign against the destruction of its highways by overloaded motor trucks has been started in earnest and will be conducted all winter. County officials have enlisted the co-operation of the sheriff's office, the prosecutor and the justices of the peace.

A limitation of the tonnage has been set by law and weighing jacks have been provided so that trucks can be stopped on the road and weighed. If the load exceeds the allowance based on tire measurements drivers will be cited to appear before the nearest justice of the peace. The penalty is fines of from $5 to $50, with or without jail terms up to 30 days, but the officials threaten to impose the maximum penalty for violations.

Farmers, industrial plants and business houses operating trucks, as well as trucking companies, are subject to the law.

Digitized by Google



"NIAGARA"
Tinners' Tools
and
Metal Forming
Machinery





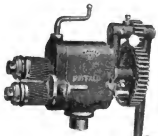


Are known the world over for their quality and serviceability.

We have a very complete stock. Come in and look it over.



THE
CHAS. A. STRELINGER CO.
Machinery—Tools—Shop Supplies
"EVERYTHING FOR THE SHOP"
149-165 E. Larned St. DETROIT Cadillac 7080



What the S. A. E. Will Discuss in N. Y. Next Week

THE PROGRAM for the Sixteenth Annual Meeting of the Society of Automotive Engineers, in New York city, January 11 to 13, has been announced. The program for the technical features has been arranged to cover those subjects of greatest interest at this time, and sessions will be run simultaneously to enable a member to select the meeting relating to the subject nearest to his work, this innovation allowing more time for discussion of each particular subject and enabling a more comprehensive presentation of the problem under consideration. All of the technical meetings will be held in the Engineering Societies building, 29 West Thirty-ninth street, where the general offices of the Society are located.

The semi-annual meeting of the S. A. E. standards committee will take place Tuesday morning and afternoon, January 11. Several proposals for new standards and recommended practices will be discussed and voted on.

The first technical session is scheduled for Tuesday evening, January 11, and will be devoted to aeronautic engineering. C. D. Hanscom will outline the development of wing sections during the last year and Grover C. Loening will present a paper on structural design trend. Maj. Thurman H. Bane will tell of the recent work of the air service at McCook Field, illustrating his talk with motion pictures.

The annual business meeting of the Society will be held Wednesday morning, January 12. A feature of the post-business session will be the presentation, by three members, of the topic, "The Engineer's Place in Industry."

There will be three simultaneous technical sessions Wednesday afternoon, January 12, covering chassis design for fuel economy, body engineering and commercial aviation. In the chassis session A. L. Putnam will outline the many power losses, fudependent of the engine, which reduce fuel efficiency and deserve closer study. J. G. Vincent will also discuss this subject and D. McCall White will present his impression of modern chassis construction. A. L. Nelson has prepared a paper on the fuel problem in relation to the engineering viewpoint. C. W. Spicer has a short revelation to make regarding the torsional strength of splined shafts and a new principle of engine suspension will be submitted by S. E. Slocum. H. M. Crane, who will preside at the chassis session, will propose a method of rating racing cars that will encourage passenger car development.

In the body engineering session Charles A. Heergeist, venerable carriage and body engineer, will present a statement on the reduction of body weight, and Andrew F. Johnson, educator of many of our foremost body engineers, has tendered some general remarks. George J. Mercer will handle the subject of body lines and predict the styles for 1921. George E. Goddard is planning to illustrate the steps in quantity production of all-metal bodies with some very interesting motion pictures, and Kingston Forbes will discuss the relation of the body engineer to the industry.

The aeronautic session of Wednesday afternoon will be devoted to commercial aviation. Glenn L. Martin will address the members on this subject and Ralph H. Upson has prepared a comprehensive paper on the application of aircraft to the transportation of the immediate future. The development of commercial air transport lines in Europe since the war will be described by Prof. Edward P. Warner, of the National Advisory Committee for Aeronautics, who has recently returned from abroad.

Thursday morning, January 13, C. F. Kettering will disclose the results of extensive fuel research work carried on under his direction. The fuel session will be continued in the afternoon simultaneously with the highway session. Dr. H. C. Dickinson has some Bureau of Standards experimental study to present and R. E. Fielder will describe a system of thermostatic inlet temperature control as installed on the Fifth Avenue 'buses in New York city. F. A. Howard, of the technical staff of the Standard Oil Company, will discuss the volatility of motor gasoline. P. S. Tice will present briefly some conclusions reached as a result of inlet manifold flow study, and A. W. Scarratt will describe recent tests on alcohol as an engine fuel.

H. W. Alden, in opening the highway session Thursday afternoon, will emphasize the responsibility of the automotive engineer in the making and maintaining of good roads. The Bureau of Public Roads has conducted an extensive practical study of highway design during the last year, and A. T. Goldbeck will present the data and conclusions. H. E. Breed, formerly deputy state highway commissioner of New York, will present a paper entitled "Variable Factors that Influence Highway Design," and W. E. Williams will give some suggestions on unconventional highway construction.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
138-140 Fort St. E.
DETROIT

SAFE INVESTMENT BONDS
FOR SAVINGS
JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.
CHERRY 2600

More Ford Changes Forecast

Brownell and Klingensmith Out, Others to Follow; Some Reasons Back of the Present Disagreement

By MARC BRAUN

ANNOUNCEMENT of the resignation of Charles A. Brownell as advertising manager of the Ford Company, last Friday, and the statement made on Monday by Frank L. Klingensmith that he had relinquished his post as vice-president and treasurer, are said to be only the beginning of a series of changes among the higher officials of the Ford company. As a matter of fact, it was reported on good authority Tuesday that L. H. Turrell, chief auditor, had also retired and that Chief Engineer W. B. Mayo and Production Manager William E. Knudsen were expected to leave the company.

As is usually the case, Ford executives either were absent or uncommunicative. From someone close to some of the Ford officials, however, it has been learned that serious differences of opinion as to the conduct of the business have existed for some time. This seems to be borne out by the statement made by Mr. Klingensmith, who said:

"I have resigned from the Ford Motor Company because I am not in full accord with some of the business policies contemplated by the company in the future.

"This disagreement has been present for the past year and has finally culminated in the present severing of my relations.

"Undoubtedly the many rumors afloat during the past few days have arisen from this condition and were the inevitable result of that situation."

While Mr. Klingensmith does not say so, it has been learned that the train of events leading to the crisis started last September when Ford prices were reduced to the pre-war level, to which action the vice-president of the company and others were strongly opposed, because they did not believe that such action would lead to the increase in sales which the Fords themselves saw. Furthermore, the dissenting officials were of the opinion that not every manufacturing concern was in the same position as the Ford company and could not be expected to do things which Ford might do with the desired results. Then again, were those concerns supplying materials to Ford who absolutely refused to make any price concessions, as Mr. Ford thought they would.

Reasons for the Shut-Down

Three products are especially mentioned in this connection—steel, maple wood and corduroy. The Ford company had contracted for steel, among others, from the Cambria Steel Company and Jones & Laughlin, and when these firms declined to cut prices the Ford company, so it is said, cancelled its contracts, there issuing a suspension of steel supplies, as this material was not obtainable by Ford from other sources. On maple wood and corduroy the Ford company wanted a 20 per cent reduction in the then existing prices, but this concession was turned down. The result was the closing of the Highland Park factory. The assembly plants remained operations January 3, using parts on hand, of which there is an ample supply.

In addition to these unpleasant events, it is said that sales of Ford cars, which had picked up rapidly for about three weeks after prices had been reduced last September, suddenly started to fall off. This, it is said, was due to a variety of causes. In the first place a rumor gained headway throughout the country that Ford intended to make a further price reduction. Then came the report that a new model was soon to be marketed. Notwithstanding denials by Ford officials, the reports were taken and still are taken by many to be the truth.

On top of this were reports that Ford needed money—many millions—and that the banks were reluctant to grant him loans beyond a comparatively small sum. In this connection it is said that when some months ago the company offered the New York banks, to which it still owed $25,000,000 or $35,000,000 on the $60,000,000 loan of two years ago, one-third and asked to be allowed another time extension on the balance, the eastern financiers promptly demanded payment in full. The money was obtained, not without much difficulty, so the report goes, and it required the good will and efforts of about a score of Michigan banks to furnish Ford with the money to discharge the eastern obligation. And today, so it is said, Henry Ford is in need of more millions and is not finding a willing hand among the bankers to assist him. Incidentally, it may be added that the bankers' attitude is by no means directed against Ford's enterprises alone. Several other of the largest automobile manufacturers are said to have been refused several million dollars of loans asked.

Anti-Semitic Campaign Enters

Another cause of the present troubles in the Ford organization is said to be the attitude of Henry Ford against the Jews, or rather the anti-Jewish campaign conducted by the Dearborn Independent, which is owned and published by Henry Ford. This campaign is said to have resulted in the loss of much business to the company.

Frank L. Klingensmith had been with the Ford company some 15 years, starting in as an office assistant and working up to various higher positions, to that of vice-president and treasurer to which he assumed five years ago upon the retirement from the company of James Couzens, who, it was said, also had differences of opinion with Henry Ford as to business policy.

In speaking about his resignation from the company with which he had been associated since 1914, Mr. Brownell said that it is due especially to the ill health of Mrs. Brownell, necessitating her removal to California. Just how long Mr. Brownell will be absent from Detroit is a matter he does not know, but it will probably be for some months, during which he will decide about his future activities. He has had several propositions in mind for some time and it is quite likely that he will start in business for himself in the advertising and merchandising field in Detroit.

Mr. Brownell, who has been in the advertising business for more than 30 years, told the writer that one of his ambitions in life had been achieved, namely, to be with the concern which would be the first to make 1,000,000 cars in a year. Although he joined the Ford company only in 1914, Mr. Brownell, who had been a member of the J. Walter Thompson Advertising Agency, had handled the account of the Ford Motor Company with this agency since 1911, during which year 34,528 Fords were made and sold. That was a sensational record at the time, but Mr. Brownell predicted that the time would come when ten times that many cars would be made by the company in one year. And when this happened in 1915 he is credited with having said that if the world war had not interfered a million Fords would have been manufactured within another two years. It has required five years instead of two.

Instead of reopening its Detroit plant Jann-

Digitized by Google

ary 3, the Ford company notified about 60,000 employes that the works would remain closed indefinitely. The only official explanation given was a copy of the notice posted throughout the plant and which reads as follows:

"When the Ford Motor Car Company closed its plant December 24, Christmas Eve, the factory employes were informed that it would remain closed for inventory, but would resume operations January 3.

"The company has now decided not to reopen the plant next week, but will resume operations as early as possible. The assembly plants throughout the United States will, however, continue in operation as usual."

Aside from this statement no one in authority either could be found, or, if found, was willing to give any further information. But one official said:

"I think that the less the newspapers and trade papers discuss situations of this kind the more wholesome the effect on the whole country. I agree with Judge Gary and other men who know, that the country never was in better shape than it is today and that this readjustment in hastening to a close and that we have passed the crux of the situation. Therefore, I deplore the tumult in which the press keeps public opinion. The uncertainty accomplishes nothing, where if situations of this kind were ignored, we would make headway much faster in our readjustment."

There are all sorts of reports as to the reasons for the sudden action of the Ford company in deferring reopening the Highland Park factory, especially as all the assembling plants throughout the country resumed operations this week. One man, who is a minor official, said that when the Detroit and River Rouge plants begin work again, which, according to him, will not be before the latter part of February, it will be on the new Ford car and truck, concerning which numerous reports have been circulated during the last three or four months.

The reason the assembling plants continue operations is because they will finish all the cars and trucks possible with the materials on hand and such other supplies as will be shipped from the main plant. This means that thousands of cars will be made and distributors will have for some time a fair supply. This, said the Ford man, would make possible the clearing of the main plant and making it ready to start on the new product.

In connection with this matter it might be said that several trade papers have announced within the last few weeks that a new Ford passenger car and a new truck are in the making, but these papers could not obtain an authorative statement to that effect from officials of the company. It is known, however, that one of these officials recently said that the Ford company was well alive to any emergencies and just as soon as it was found necessary to bring out a new car the new product would be ready. Which isn't very far from admitting that the rumors were not mere rumors.

$7,000,000 *Bonus Being Paid*

Coincident with the postponement of the reopening of the Detroit plant came the announcement that the company had started the distribution of the annual bonus under the profit-sharing plan which applies to the entire Ford organization. Between $7,000,000 and $8,000,000 will thus be distributed among 70,000 employes. The same day this was announced a report was published in some eastern newspapers to the effect that Ford might not "be able to pay the advertised bonus for some time to come."

Figures given out by the Ford company show that during 1920 a total of 1,027,677 Ford cars were made, of which number approximately 15 per cent, or in round figures, 154,000, were trucks. In addition, there were produced 69,123 Fordson tractors. These figures, whether for passenger cars, trucks or tractors, are considerable over 50 per cent above the pro-

(*Continued on Page* 16)

Brown & Sharpe Cutters



B. & S. Cutters are backed by fifty years experience in the manufacture and use of milling cutters. For increased production and lowered operating costs *"Specify B. & S. Cutters."*

BROWN & SHARPE MFG. CO.
PROVIDENCE, R. I.



Brown & Sharpe Hobs

Digitized by Google

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 1:20 p. m. Toledo only. 7:20 p. m.

TOLEDO EXPRESS—8:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—8:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 6:10 p. m. Sundays only, 11:00 p. m.

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

SPRUNK
Engraving Co.
700 Marquette Bldg.
MAIN 1491
EXCEPTIONAL SERVICE IN ENGRAVINGS AND ART WORK

Automotive

AUTOMOTIVE ACTIVITIES RESUMED

The Packard, Cadillac, Paige-Detroit and Studebaker plants in Detroit have opened some departments with a few employes back at work. The Columbia plant will call back 200 men January 10, the Buick plant in Flint contemplates reopening January 10, and the Dort factory will resume operations February 1.

NEW FIRESTONE SALES OFFICIALS

L. G. Fairbanks, formerly manager of the steel products division of the Firestone Tire & Rubber Company, Akron, has been made sales director. G. A. Richards will have charge of Michigan manufacturers' sales and general activities in this state.

BARLEY MOTOR CHANGES NAME

The Barley Motor Car Company, Kalamazoo, has changed its name to Roamer Motor Car Company. The company, which is capitalized at $2,500,000, manufactures the Roamer automobile.

DUPLEX TRUCK STATEMENT

The annual statement issued by the Duplex Truck Company, Lansing, reviews the progress of the last year and the prospects for 1921. The report shows current assets of $1,137,851.86, with current liabilities of $538,436.29 and a surplus of $249,276.25. At the close of business in October the company charged off $200,0000 depreciation. A year ago the company "junked" $100,000 in "good will."

NEWTON HEADS APEX SALES

The Apex Motor Corporation, Ypsilanti, announces the appointment as sales director of F. T. Newton, who has had considerable experience in the automotive industry, being at one time assistant sales manager and later sales manager of the old Jackson Automobile Company, and for three years sales manager of the Lewis Spring & Axle Company.

Another newcomer in the Apex organization is H. F. Greene, district sales representative. Mr. Greene formerly was with such well known concerns as the Ford, Hudson, King, Metzger and the old E-M-F.

A. J. WHIPPLE JOINS REPUBLIC

A. J. Whipple, who has been general manager of the Diamond T Motor Truck Company, Chicago, has become general sales manager of the Republic Motor Truck Company, of Alma. Mr. Whipple is an old timer in the automotive industry and has been a director of the National Association of Motor Truck Sales Managers. He is now a member of the truck committee of the National Automobile Chamber of Commerce.

JACQUET'S NEW CONTRACT

The Jacquet Motors Corporation, Belding, has received a contract for 100,000 gas generators for the B. J. Steam Gas Generator Company, Grand Rapids. The concern also has made a deal whereby it has obtained the manufacturing and selling rights for this new device for the states of Michigan, New York, New Jersey, Kentucky and West Virginia.

WILL MAKE A NEW WHEEL

The Hanchar Wheel Manufacturing Company, capitalized at $1,000,000, has been formed in Toledo, O., to make a newly patented quick change automobile wheel. The concern has obtained for its plant the Consolidated Manufacturing Company's factory building. The officers are J. C. Fair, president and general manager; Ora Justice, vice-president; A. W. Shields, secretary, and J. F. Angell, treasurer. These officers and John Schook, H. G. Brewer and H. G. Brewington, make up the board of directors.

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Need an Elevator?
Ask LEITELT
Modern Designs
Superior Construction
LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

PISTON PINS
Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production
MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
1085-7-9 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

CHERRY 6788
The Photo-craft
212 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

Digitized by Google

TIRE SALES IMPROVING

Business of the General Tire & Rubber Company, Akron, O., is steadily increasing, according to a statement by M. O'Neill, president. Mr. O'Neill is credited with stating that orders were increasing in 75 per cent of the country. Several other tire makers report a decided improvement in sales.

LANSING DELEGATES AT N. Y. SHOW

Lansing automotive manufacturers will be well represented at the New York national motor car show this month. The Reo Motor Car Company, the Olds Motor Works and the Motor Wheel Corporation officials and sales representatives will attend. Arrangements have been made for a special Pullman car over the Michigan Central by H. F. Harper, president and general manager of the Motor Wheel Corporation. The companies will have exhibits at the show.

NEW GMC DIRECTORS

K. W. Zimmerschied, C. F. Kettering, Dayton, O., and F. D. Brown have been elected directors of the General Motors Corporation. Messrs. Brown and Zimmerschied also have been named vice-presidents. Mr. Brown will be financial officer of the corporation. L. R. Beardsley has been made assistant secretary.

MEREDITH JOINS MAXWELL STAFF

As general works engineer of the Maxwell-Chalmers Company, Inc., which he has recently joined, Harry P. Meredith will have charge of building design of plants in Detroit, Dayton, O., Newcastle, Ind., and Canada. Mr. Meredith formerly was with the Curtiss Aeroplane & Motor Corporation, prior to that with the Pennsylvania railroad, and at an earlier date with the Cadillac Motor Car Company and du Pont, De Nemours & Company.

NEW YORK SHOW MEETINGS

In connection with the national automobile show in New York city, the week of January 8, the following meetings will be held: Foreign trade, patents, highway and motor truck committees of the National Automobile Chamber of Commerce, on Tuesday; N. A. C. C. directors Wednesday; Society of Automotive Engineers, Tuesday and Wednesday; S. A. E. carnival, Wednesday evening; N. A. C. C. annual dinner, Tuesday evening; S. A. E. annual dinner, Thursday evening; Automotive Service Association of New York, Monday.

FIRESTONE SALES FOR 1920

The sales volume of the Firestone Tire & Rubber Company for the year just closed is reported at $114,980,969.26, an increase of 26 per cent over 1919.

NEW WILLARD SALES MANAGER

The Willard Storage Battery Company, Cleveland, has appointed Howard S. Gardner, Kansas City, general sales manager. He was formerly with the Midwest Storage Battery Company, Kansas City.

DU PONT MOTORS MOVES

The Du Pont Motors Company has moved their production machinery and administration organization from Wilmington, Del., to Moores, a suburb of Philadelphia, where the new plant is located.

REUSHAW, REO DIRECTOR

R. C. Reushaw, who recently became general sales manager of the Reo Motor Car Company, Lansing, has been made a member of the board of directors.

EVERYBODY HOPES TO OWN A MARMON

For Sale—The prettiest Marmon Coupe in Michigan; driven less than 12,000 miles; has a recent excellent power plant and is fully equipped; everything in fine condition. Box W, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit.



"NEW BRITAIN"
SCREW PRODUCTS DEPARTMENT
QUALITY SERVICE ECONOMY

THE confidence that we are in a position of unusual advantage to serve you in the matter of screw products has, we believe, a strong basis.

Our Screw Products Department is equipped with "New Britain" six-spindle automatic screw machines and other suitable machinery for handling all classes of large and small work.

The ability of the "New Britain" automatic to do accurate work—a logical result of correct design and substantial construction—is eloquently attested by their general use among automobile and other manufacturers.

As to productive capacity these machines have no peer. The greater tooling capacity of their six spindles eliminates the necessity for rehandling complicated work; enhances production of average work by subdividing the larger operations; and on the simpler work, makes possible the finishing of two or three pieces at each indexing. The advantage in output over other machines ranges from 50 to 200%.

In short, the "New Britain" Screw Products Dept. offers you a quality service at a cost made possible only through the employment of methods and machinery of extraordinary efficiency.

Phone our Detroit office for quick service.

The New Britain Machine Company
New Britain, Conn., U.S.A.
Detroit Office:
4612 Woodward Ave. Glendale 1354

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Pittsburgh—The recent order for 200,000 tons of rail placed by the Pennsylvania Railroad Company is generally regarded in New York financial quarters as being another step in bringing about renewed confidence as to an early return of normal business. The order exceeds last year's almost twice over. It means that other roads, if they order proportionately, will assist in keeping many men from idling. Certain steel manufacturers have gone on record as saying 1921 will approach a high record in steel manufacture, adds the Boston paper. Conditions favor an advance rather then a decline in rails. Large orders from railroads are looked for within two or three weeks.

Washington—Hereafter railroads cannot buy supplies and equipment from corporations in which they are interested as organizations or through connections of officials. President Wilson has vetoed a measure which would have permitted interlocking interests, and which had been approved by the interstate Commerce Commission.

Detroit—Judge Tuttle, in federal court, has set January 17 as the date for the hearing on whether the present 3 cents a mile railroad fare in intrastate traffic shall be continued permanently. At the hearing 13 Michigan railroads will petition for an injunction restraining the state from enforcing the 2½ cents a mile rate provided by state statute.

Washington—In the matter of the complaint of Chatterton & Son, of Toledo, Ohio, against the rate charged on beans, in carloads, from Pere Marquette Railway stations in Michigan to various destinations, and receiving transit service at Toledo, the Interstate Commerce Commission has decided that the rate was unreasonable and has awarded reparation. The shipments involved were made July 1, 1918, and June 1, 1919. The complaint was listed as No. 11,309 on the Commission's docket.

Washington—The Illinois Central Railroad has filed application for permission to issue $6,953,000 of first mortgage bonds with the Interstate Commerce Commission. The railroad claims it has not been able to earn the 6 per cent provided by the Transportation Act.

WICKES BOILERS

Michigan Standard
Return Tubular
Boilers



Built in accordance with the State of Michigan Boiler Law now in effect.

Ask for Catalogue on Workmanship—sent free.

The Wickes Boiler Co.
SAGINAW, - - - MICHIGAN
Michigan Sales Office:
1116 Penobscot Bldg. - DETROIT, MICH.

Factory, Warehouse and Railroad property *exclusively*. Personal service and personal knowledge of all available Railroad property in the city.

J. H. Cowley
509 Moffat Block. Main 2816.

Cost accountant, twelve years' experience in steel and metal working plants as cost expert, seeks permanent position with industry in Detroit manufacturing district. Thoroughly grounded in every branch of cost work. Address Box F, Michigan Manufacturer and Financial Record, Detroit, Mich.

D. T. A. Begins Campaign For Dump Truck Members

The Detroit Transportation Association has inaugurated a campaign to bring all dump truck operators into the Association. Fourteen Detroit and Wayne county truck dealers have co-operated with the Association by furnishing a list of recent buyers of dump trucks, and with this list to work with, two membership teams will begin canvassing.

For a period of 30 days the membership fee will be reduced to $1, and the monthly dues will be lowered to the same figure for 90 days. The city has been divided into two sections, one lying east of Woodward avenue and the other west of the avenue. Fifteen teams have been organized, one in charge of H. P. McDermott and the other captained by Darwin T. Smith.

The team captains are D. C. Gould, E. S. Barnett, Charles Nielson, O. G. Moebs, A. H. McCleary, A. J. Smith, George Harris, S. U. Blake, A. S. Locker, Joseph Bunting and Frank Smith. Several captains will handle more than one team.

More Changes Forecast In Ford Organization

(*Continued from Page* 13)

duction of any other manufactrner in thes same lines in the world.

Impressive as these totals are from the production point of view, it is the money involved in them, the value of the product, which is making Wall Street and other financial quarters take special notice of the Ford activities. While the Ford company does not give out figures concerning sales, it is possible, however, to get a fair estimate as to the business of the company from the sales prices of its products. Of the 1,027,677 cars made, approximately 722,279 might be listed as sold under the war-time prices, and the balance, or 305,398 cars, at the new pre-war prices. The old prices range from $525 for the chassis of the passenger car to $975 for the sedan; the new prices effective since September 21, range from $360 for the chassis to $795 for the sedan. From several Ford dealers the writer is led to believe that a fair and near correct sales average price for the sales up to September 21, is $575 and for those for the balance of the year $500. On the basis of these figures the sales value of the Ford cars up to the time of the price reduction was $415,310,425 and the value of those cars made beginning September 21, $152,699,000. Thus the total list price value of the 1920 Fords was $568,009,425, possibly more, but not very likely less.

As for the tractors, their old sales price was $850; the new price since September is $790. Of the 69,123 tractors made, it is said that 60,000 had been completed before the price reduction. It thus seems reasonable to give the tractors an average sales price of $800, which would mean total sales aggregating $55,298,400 and bring the total value of the manufactured cars and tractors to $623,307,825.

But there is still another important part of the Ford business—that of parts for its cars and tractors. On this subject nothing very definite has been obtainable, but here again, if the opinion of Ford dealers is anywhere nearly accurate, it may be said that the Ford parts business during the last twelve months totaled at least $25,000,000. This added to the other sales brings the total of the Ford sales at listed prices up to $648,307,825.

NEW AUTO INSURANCE COMPANY

Licensed to do business in Michigan, Illinois, Indiana and Ohio, the Michigan Automobile Insurance Company, Grand Rapids, capitalized at $250,000, has been organized, succeeding the Michigan Automobile Exchange. The officers are: President, Herbert B. Webber, Grand Rapids; vice-president, Brinton F. Hall, Belding; vice-president, Harlan J. Dudley, Grand Rapids; secretary-treasurer, Henry J. Kennedy, Grand Rapids.

VULCANIZING CONCERN FORMED

The Brackett Rubber Footwear Vulcanizing company has been formed by Carl Brackett, Lansing, to put on the market a new device which is being manufactured at the plant in that city. It is a simplified vulcanizing process which patches all rubber footwear quickly and economically. Mr. Brackett has applied for a patent. About 50 machines are in use. They are being sold to shoe repairers. Michigan territory will be served before a national campaign is started.

Digitized by Google



COLD DRAWN "COLUMBIA SPECIAL" STEEL

COLD ROLLED AND COLD DRAWN STEELS

FREE CUTTING SCREW STOCK

COLD DRAWN 40-50 CARBON AXLE STEEL

COLD ROLLED STRIP STEEL

TURNED STEEL SHAFTING

COLD DRAWN 3½% NICKEL STEEL
(S. A. E. 2320 and 2330 Specifications)

COLD DRAWN 1½% NICKEL CHROME STEEL
(S. A. E. 3120 Specifications)

GENERAL OFFICES AND WAREHOUSE
336 to 350 West Fort St.

Digitized by Google

The Organization Committee,
Detroit Chapter of the

NATIONAL ASSOCIATION OF COST ACCOUNTANTS

will hold a MEETING in the BOARD OF COMMERCE Building, on JANUARY 12th, 1921, at 8:00 P. M.

WILLIAM M. LYBRAND, of Lybrand, Ross Bros. & Montgomery, President of the NATIONAL ASSOCIATION OF COST ACCOUNTANTS, will address the meeting.

J. P. JORDAN, Vice President and Director of Operation C. E. Knoeppel & Co., Inc., will present a paper on

THE OPPORTUNITY OF THE COST ACCOUNTANT

Admission is free, but due to the limited capacity of the hall, will be by ticket. Write or telephone immediately for tickets.

CONRAD B. TAYLOR, Secretary,
924 Book Building,
Detroit, Michigan.
Telephone Main 8848.

The urgent problems of the moment, inventory valuation; true cost in periods of subnormal production; expense control from the executive standpoint, and matters of equal interest, are discussed at the monthly meetings of the Association.

ELREDGE AGENCY IN MERGER

Frank M. Eldredge, president of the Frank M. Eldredge Company, Detroit, announces the merger of his business with that of the Brearley-Hamilton Company, Grand Rapids. The latter advertising agency renders national advertising and merchandising service for a goodly list of accounts.

It will maintain branch offices in Detroit, in the Stevens building, formerly occupied by the Eldredge company, with Mr. Eldredge in charge. Mr. Eldredge has been prominently identified with the advertising fraternity of Detroit for the last eight years, both in an executive capacity for various Detroit automotive corporations and in business for himself for the last three years

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Washington—Senator Calder is the author of a bill which would establish a Bureau of Construction and Housing as a part of the Department of Commerce, with a director paid a salary of $8,000. The work of the bureau would be to establish a uniform code of building regulations and assist in home building.

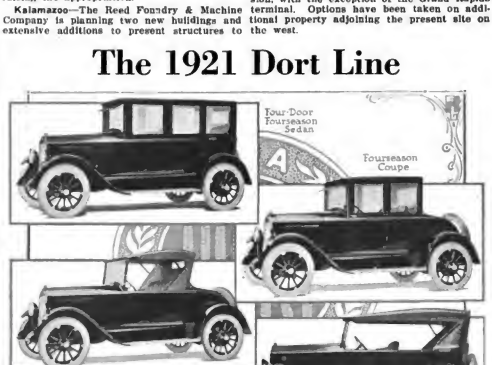
Detroit—Following Mayor Conzens' veto of the action of the common council in rejecting all bids for work on the Belle Isle bridge, the council has postponed action on bids indefinitely. The aldermen desire to wait until the April election to get a vote on the question of raising the appropriation.

Kalamazoo—The Reed Foundry & Machine Company is planning two new buildings and extensive additions to present structures to provide facilities for manufacturing a new kerosene and gasoline engine for Reed tractors. Construction work will be started in the spring.

Detroit—Expenditures for bridges and roads in Wayne county during 1921 will total $4,200,000, it is announced. The road commissioners have goodly supplies of materials on hand and are prepared to undertake the largest road building program in the county's history.

Hastings—The Michigan Central Railroad has authorized the expenditure of sufficient funds at Hastings to erect a new station, 23 by 92 feet, which will be the finest on the division, with the exception of the Grand Rapids terminal. Options have been taken on additional property adjoining the present site on the west.

The 1921 Dort Line



THE 1921 DORT MOTOR CARS

DISTINCT among features of the New York automobile show which opens today is the first appearance of the new Dort family, rather a radical departure from the accepted lines of this car. In this Dort exhibit, which is the same as that which will be displayed at the Chicago show later in the month, then at the Detroit and other dealer shows, are four types—sedan, coupe, touring car and roadster—all mounted on the same chassis.

What commands attention is the new and striking lines of all bodies. It has taken two years to bring into existence this new Dort family. J. Dallas Dort and William A. Henderson, the latter for seven years chief body designer for Holbrook & Company, co-operated; bodies were designed, built and rebuilt, and finally came the line now in production. Incidentally, Mr. Dort induced Mr. Henderson, who is said to have created more special bodies for notables of this country and Europe than any American, to accept the management of the Dort body plant at Kalamazoo.

The radiator on these new Dort models is indicative of a certain European maker, but the cars are exclusively Dort. A soft green, designated as Dort green, is the standard color, chassis and fenders being of black enamel.

There is an abundance of room for driver and passengers, together with greater storage space. Side curtains on open models open and close with the doors. Appointments of the sedan and coupe are complete. Carpets and silk curtains match the upholstery, windows are of plate glass and the windshield built-in, with rain visor adjustable for ventilation.

The four-cylinder Dort motor, 3½ by 5 inches, is made more efficient through minor refinements which have suggested themselves. There is a change in tire sizes, the new line calling for the 31 by 4 inch size, front and rear.

Digitized by Google

Horace H. Lane Takes Two Business Partners

Horace H. Lane, one of Detroit's prominent industrial engineers, has announced the association with himself of H. Daziel Davenport and A. A. Peterson. The new concern will be known as Lane, Davenport & Peterson, with offices at 2320 Dime Bank building, and will, of course, engage in a general architectural and engineering practice.



HORACE H. LANE

Mr. Lane, the senior member of this firm, began his career as a machinist's apprentice with the Cambria Iron Company, at Johnstown, Pa. It was not long before he was at the head of a concern manufacturing a line of machinery and doing a general engineering business. A few years later, Mr. Lane was engaged by a large engineering concern in New York city to supervise the design and erection of a number of industrial plants and power houses throughout the country. His first experience near Detroit, some twenty years ago, was in connection with the construction of the power plant of the Rapid Railway at Mount Clemens. The following year he had charge of the construction of the steel car plant and power house for the American Car & Foundry Company, and subsequently he handled the construction of the power plant of the Detroit Edison Company, at Delray. Among the other industrial establishments he has built are the $2,000,000 plant of the Eastern Car Company, near Halifax, N. S., the Haskell & Barker Car plant, at Michigan City, Ind., the Scripps-Booth Motor Car factory, Detroit; and the Wyandotte plant of the Detroit Ship Building Company.

H. D. Davenport, the second member of the firm, graduated in architecture at the University of Michigan and afterwards completed his training abroad. He has been engaged in practicing his profession for a number of years in Grand Rapids and Detroit.

A. A. Peterson, the other member of the new organization, is a structural engineer with several years' experience in the structural design of steel and reinforced concrete buildings. He is a graduate of Purdue University and has been associated with Mr. Lane for the last nine years in the design and layout of manufacturing buildings of all types.

Mr. Lane is a member of the American Society of Mechanical Engineers and a past president of the Detroit Engineering Society, while Mr. Davenport is a member of the Michigan Society of Architects and Mr. Peterson's name will be found on the roster of the Detroit Engineering Society.

DETROIT TRUST ELECTION

The Detroit Trust Company has re-elected or reappointed the following officers: President, Ralph Stone; vice-presidents, Sidney T. Miller, James E. Danaher, Lawrence K. Butler, Charles P. Spicer, McPherson Browning, Harry L. Stanton; secretary, Charles E. Hilton; treasurer, Fred Wirson; assistant to the president, Julius C. Peter; assistant secretaries, Frederick J. McGavin, Albert A. Chilman, Julius H. Moeller; manager of public accounting department, Ralph C. Miller; manager of real estate department, David T. Lorimer; manager of sales, bond department, E. K. Matlock.

It is announced that H. A. Oswald, chief engineer of the Hamilton Motors Company, Grand Haven, will soon bring out a new passenger car.



Much time can be saved by operating the tools in both turrets simultaneously. Here is a job done on a Warner & Swasey No. 4 Universal on which almost 50% of the time was saved in this manner.

A Production Engine Lathe

This is the right term for the Warner & Swasey No. 4 Universal Turret Lathe, as it does all that an Engine Lathe can do, and a great deal more. The carriage with feeds in both directions and equipped with the standard taper turning and chasing attachments, makes it capable of doing all kinds of work accurately and quickly.

Two No. 4 Universal Turret Lathes at the Kelsey Wheel Company, Detroit, have just replaced six Engine Lathes in their tool room. Other tool rooms in great number use these machines for blanking out taps, reamers and other tools that take so much time on Engine Lathes.

Are you doing work on an Engine Lathe that should go on a Warner & Swasey No. 4 Universal Turret Lathe?

Ask for descriptive folder and list of adjacent users.

World's Largest Manufacturer of Turret Lathes.
4½" x 44"—21" Swing to ⅝" x 4"—10" Swing.

The Warner & Swasey Company
CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, JANUARY 8, 1921

Mr. Fordney's Reassuring Statements

IT IS DOUBTFUL whether the members of the Wholesalers' Bureau of the Detroit Board of Commerce who listened to Congressman Fordney's address last Friday evening set the fullest value upon the message which the chairman of the ways and means committee of the House of Representatives carried to them and through them to the country. Mr. Fordney is so much of a Michigan product, and his eminence in national affairs has changed him so little from the "Joe" Fordney whom Michigan knows and loves so well, that the easy-as-an-old-shoe method of discussing great national problems may not have been invested with enough magnificence to be considered in the serious light which it deserves. But Congressman Fordney has arrived at the position in our government said to be only second to that of the President, the chairmanship of the committee which practically determines how Americans are to be taxed for federal purposes. Moreover, the House is in political accord with him, and the chairman of the committee on appropriations of that body is in economic accord with him. When the committee on appropriations is in harmony with the ways and means committee of the popular branch of our Congress, any program of national expenditure, whether it be one of economy or extravagance, may be carried out. When both are in accord in the direction of national economy in administration, it may be set down as a good deal of a certainty that they will carry out their program. When, in addition, the executive department of the country is also in political accord with the Congress, it becomes even more certain that such a program will be carried to final success. This condition will exist after the fourth day of March, which is the date at which Mr. Fordney's program promises to go into effect.

Let us examine this program, as laid down by Mr. Fordney, and note the promise that it contains for American business. Its first point is that the excess profits tax, conceived as a war measure, and applied as such, may be and will be repealed, because the occasion for it has passed away. This, in itself, means much to American business, because between the authorization of the tax by statute and the administrative regulations which have been applied to it, the temptation to American business has been to spend money on things which would not normally be considered as prudent expenditure, the excuse being that if the money is not so spent, much of it will go to the Government for taxes. The other economic effect of the tax was that the incentive to profit which has heretofore driven American business ahead has been in large part withdrawn, because the profits once realized, are seized by the Government for its support, and they do not accrue to the people whose industry, energy and foresight have led to their making.

Secondly, the program as outlined, is one of economy intended to bring the expenses of the Government down to three and a half billions a year, of which a billion, practically, is the interest on the national debt, as funded in bond issues, and the unfunded debt now represented by certificates of indebtedness. The maximum cost of the federal government in the pre-war days was a billion dollars a year. The work of government with an increased field of operation and an increased population should not, in Mr. Fordney's scheme, run into a sum more than twice the old cost. To this a billion of interest and a half billion of contingencies are added, making three and a half billions. It seems quite within the power of the American people to give up this sum annually to the federal government without to great burdening of the annual national income. This is a practical and definite program to which the people should give their most grateful assent.

Thirdly, it is the announced fiscal policy of the ways and means committee to look to the executive and legislative branches of the Government to provide for the refunding of the obligations of the Government over a long period of years, rather than to provide for their payment by the immediate present generation. The refunding of our governmental obligations over a long period has been uniformly accompanied by a reduction in the interest rate, which makes them acceptable to investors. The only question involved in the conversion of our present debt is its magnitude, but we are and the world is becoming more and more accustomed to large figures in finance than was the case in the past. There is no reason for burdening the present generation with the costs of the war, if its purposes and effects were and are to be what they have been so magniloquently described. The refunding of the debt on a half-century basis is in accord with good financial principles and good tax economics, so far as spreading the costs on the largest number benefitted is to be considered. At any rate, the payment of the debt is to be removed from the demands to be made on the American people in the immediate future.

Fourthly, we are to have a protective tariff, immediately; this to be accomplished by the re-enactment of the Payne tariff as soon as Congress meets in extra session. This procedure is to avoid the economic difficulties into which we invariably get during the period of discussions about the tariff which are sure to result in higher schedules of duties. These difficulties have come from the dumping on our shores of vastly greater quantities of foreign products than we can currently consume, in anticipation of the higher prices to which they will be marked up when the advanced schedules are made effective. This procedure, from the standpoint of those who believe in a protective tariff—and that group seems to include a vast majority of the people—is a safeguard which has the merit of inventiveness and good management.

Speaking of the tariff, Mr. Fordney has brought out a new point, and one which, coming from so good an authority, must be treated with due respect. We have been treated to a good deal of advice along the line that the protective tariff must be rather gently created if we are to allow our foreign creditors to sell us their goods and pay their debts. Our creditors are Europeans, and it was largely against them and their productions that the schedules of former tariff measures were directed. But Mr. Fordney declares now that it is within the knowledge of government and business that our future competitors are to be the nations of the Orient, whose peoples have a low standard of requirements for living and housing, who have a compensatory low standard of wages, and whose ability to produce in volume and with great cheapness threatens the American standard of living even more than did the low standards that prevailed in Europe before the war and that continue to prevail, even in worse degree. That being the case, the tariff must be adjusted to a point which will lay foreign goods down on our shores in even competition with our American producers. At that point either the quality of the goods laid down or their need by our consumers become their selling advantages, a condition with which no American and no foreign producer should find much fault.

One other point not generally known to our people is made known by the distinguished chairman of ways and means. That is that by virtue of Treasury decisions we have been levying the duties which are now collected on incoming foreign goods on their foreign prices and in terms of the depreci-

Digitized by Google

ated sterling pounds, German marks, French francs and Italian lira which now prevail. In other words, the very spirit of the Underwood tariff is being violated, it being the intention at the time it was drawn that the duties for which it provides should be paid upon the old-time values of foreign monies. A reversion to a condition which will value articles imported at the rates which were existent under the former stable system of exchange will mean very much in revenue and a great deal in principle in dealing with our importations.

Mr. Fordney has set forth a coherent and orderly scheme of national revenue-getting and of protection to American industries during the period of readjustment. Even those who do not accept the theory of protection as academically sound must recognize that the country is committed to it for a long time to come, and that, if it is to be applied, it must be applied honestly and intelligently to produce the largest amount of revenue by indirect taxation, to take the place of the direct forms of taxation to which the country has become so unpleasantly used. The message which the chairman brought to the wholesalers of Detroit was the first coherent one which has been given to the country. It comes from an authoritative source and is to be believed.

Quite incidentally, it may not be out of place to remark that the two American statesmen who know most about federal taxation in this country today are Senator Reed Smoot and Congressman Joseph W. Fordney.

Labor Unions and the Anti-Trust Law

THE DECISION of the United States Supreme Court, this week, that labor unions are amenable to the provisions of the federal anti-trust laws when they conspire to boycott employers or induce others to boycott them in an effort to force compliance with organized labor's demands, should be hailed as a victory for good government, inasmuch as the principle underlying the decision is that there can be no immunity under the law for any man or group of men who set out to commit unlawful acts. In other words, the court's decision merely reaffirms one of the fundamental tenets of Americanism—a tenet which the labor unions had been seeking to avoid on a technicality.

It has been argued by labor's representatives—in this case the lawyers representing the International Association of Machinists, an organization which boycotted the Duplex Printing Press Company, of Battle Creek, Mich., and thus established the conditions on which the application for injunction originally was filed—that they were immune from prosecution under Section 6 of the Clayton Act, which sets forth that the "labor of a human being is not an article or commodity of commerce." It also was contended during the course of the litigation that under Section 20 of the same act, the courts were specifically restrained from issuing injunctions such as that for which application was made. In answer to the contention with respect to Section 6, the majority opinion of the court says that the law assumes that the normal objects of a labor union are legitimate, and that there can be no immunity from prosecution when the union departs from its legitimate objects and engages in a conspiracy or combination in restraint of trade. With respect to Section 20 the court's decision is equally clear, being that "there is nothing here to justify defendants or the organizations they represent in using either threats or persuasion to bring about strikes or cessation of work on the part of employes of the complainant's customers or prospective customers—and of thereby constraining complainant to yield the matter in dispute."

The position of the minority of the court that the acts complained of were in reality a part of the strike at the Duplex plant and therefore did not fall within the scope of the anti-trust laws, and that, furthermore, while the machinists' union undoubtedly was pursuing a course which would injure the employer's business, it was not doing so maliciously, appears a narrowly technical interpretation of the law when one sets it over against the principle governing the majority opinion—that nothing must be allowed to defeat the broad intent of the law, which is to prevent restraint of trade through unlawful acts.

The decision likewise is important in its specific application, in that it means that the labor unions are to be held accountable when they resort to strong arm methods of this category. The next step must be the incorporation of the unions so that they can be held to their contracts, just as in the case of employers. When that is done, there will be less irresponsible leadership among organized labor.

Short Measure Stuff

SOME NEW YEAR RESOLUTIONS

I will not abdicate again—if I can help it.—*King Constantine.*

I will not keep Mr Burleson at his present job.—*President-Elect Harding.*

I will not be satisfied with less than $8,690,000 for the University of Michigan.—*President M. L. Burton.*

I will not be satisfied until some of these cut stone fellows are breaking rocks.—*Samuel Untermeyer, leading the New York Building probe.*

I will not throw any more pies until the price goes down.—*Charles Chaplin.*

We will not let the street car question get out of politics.—*Detroit Street Railway Commission.*

This jews-harp is great stuff.—*Circulation Manager, the Dearborn Independent.*

We will welcome contribs, the more the merrier.—*Us.*

* * *

The Holiday Grouch was listening to the bells and whistles welcoming in the new year.

"That's a lot of fuss to make over the first of the month," he said. "The Christmas bills will make 'em groan louder than this."

* * *

IF THE ANCIENTS HAD KNOWN SLANG

The prodigal son was going up the front steps.

"What's ma got in the house to eat?" he said.

"Roast veal," said the indulgent father, intriguingly.

"That the best she could do? What was the matter with killing a chicken or a duck. Don't you know how fond I am of chicken?"

"Nix," said the indulgent father. "With eggs worth a dollar a dozen, it just couldn't be did. The stockyards are so full of cattle that they are a drug on the market. So our little fatted calf had to be the goat."

* * *

What has become of the old fashioned bob sled?

* * *

I'm glad when winter
Starts to go,
Because I hate
To shovel snow.

* * *

The anti-Semitic Campaign seems to be developing into an anti-Ford one.

* * *

Are any of the Christmas toys left unbroken?

* * *

SLANGY

I'd like to give
The man a crack,
Who speaks of coin
But calls it "jack."
—*Detroit Free Press.*

I'd prove to you
By my lean wallet,
It doesn't come,
Whatter I call it.

* * *

Now the Congress has passed a bill over the President's veto. The legislative branch is in such a state of mind toward the executive that we doubt if it would even accept a resignation from Mr. Wilson.

* * *

Have you been mentioned for a cabinet position yet?—*A. F.*

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

ONCE UPON A TIME a certain mule loaded with bags of sugar stopped at the middle of a bridge to gaze down into the water. His load was heavy and the water looked inviting, so he plunged in. Before he reached shore the sugar had dissolved and he went his way, rejoicing at the success of his venture in disposing of a disagreeable load. Next trip over that bridge the mule plunged in again, hoping to repeat the trick; but, alas, this time he was loaded with sponges, which sucked up water and he was drowned.

There is a striking likeness between this story and the act of Congress in reviving the War Finance Corporation; and a possible prophecy. While another billion of new credit is being used the next few months, business should respond readily. Many debts will be paid, many men given work, the country will have many of the appearances of revived business. At any rate it will give us a chance to find out whether the price declines have been the result of economic laws or, as the farmers claim, a conspired result brought about by gamblers in food and commodities. I am of the opinion, however, that the result of it all will be mainly to put off pay day and that the reaction from all such artificial stimulants such as this eventually will offset any temporary benefit therefrom.

No one seems to know just where the helpful billion is to come from, except in a busy way that the United States Treasury has the means at its disposal to furnish $500,000,000 capital for the War Finance Corporation. The Treasury already has announced a deficit for the current fiscal year estimated at $2,000,000,000, but never mind that, for that deficit estimated for the fiscal year 1921-22 is going to be only $1,500,000,000. The Treasury, it is true, has a book credit in favor of the old War Finance body to something like $375,000,000, but this is of little avail if the Treasury is without the surplus funds; but let's go along and see where the $500,000,000 capital is to come from.

The Treasury, not having funds, will turn of course to the Federal Reserve Banks and some of the large commercial banks, and offer its Certificates of Indebtedness. The Reserve Banks can take the certificates and merely credit the sums to the Government, an easy operation, but apt to result in the end in a lowering of the gold ratio. But never mind that part of it. The commercial banks which take the certificates either have to deny their customers an equal amount of credit or go to the Federal Reserve Banks and replace the credit granted to the Government through purchase of the Treasury Certificates. Thus far we have floated the War Finance Corporation again with $500,000,000 capital (all directly or indirectly furnished by the Reserve Banks) and have asked the Secretary of the Treasury to assess another $500,000,000 taxes against the people generally to provide funds for the corporation, which is to do what? First it will issue bonds to an amount for which it has demand for funds—say $1,000,000,000 to start with; and there being so much money lying loose these days awaiting investment, the bonds will, of course, not be taken by the general public, and not likely anyhow, because we should not ask the farmer to pay more than 7 per cent; with the result that the bonds will find their way into the Federal Reserve Banks and the Reserve Banks will charge up so much of bonds on the asset side and credit an equal amount on the deposit side. Presto, the structure has been reared and is ready for business!

The first problem to confront the Corporation will be to find a market for the crops which the farmers are now holding. That will be easy, but the task of finding buyers in foreign lands whom we can trust is another proposition, and we have in the authority of the Treasury Department that this is an entirely new venture for the Finance Corporation, except for a matter of $46,000,000 of exports (one-half of which were business done by General Electric, International Harvester and Bethlehem Steel Corporation) which was handled after the Armistice. Official returns now show that we have exported about 200,000,000 bushels of our wheat. The July 1 total was 950,000,000 bushels and domestic needs are considered as 630,000,000 bushels. Six hundred and thirty plus 200 equals 830, and if we keep 100,000,000 bushels in reserve against possible crop failure, it would seem that our 950,000,000 bushels July 1 is pretty well spoken for. The unsold part of the 1919 crop on this basis of figuring would be available for export. Thus, so far as wheat is concerned, the war finance body will have to look at home for the purchaser of the 630,000,000 bushels, and it is highly doubtful that domestic purchasers are going to pay a higher price to the farmer just because credit has been made more plentiful. But, "On with the dance;" if, lack of credit is all that has been holding the buyer back, we shall at least have that remedy supplied. Don't forget pay day, however, and that the capital for the finance body is furnished by the taxpayers and that the expenses of the same body also come out of taxes; and not the least to remember is that any losses which the Corporation may sustain by reason of poor management must also come out of taxpayers.

The outlook is much brighter this week. Liberty bonds made a nice recovery, foreign exchange on every point is up except Austria, and in that case variations beyond .00255 don't count for much, anyway. Bank clearings are smaller in volume but are following closely the trend of a year ago. The bond markets made a substantial advance, but this is explained possibly because many who are afraid of having dividends on stocks cut off have sold stocks and are buying bonds. The stock markets started to come back the last day of 1920 and maintained the gains quite well until Wednesday.

Money in Detroit has not changed materially, although it was gratifying to note from bank statements (state banks December 28 and national banks December 29) that the community has got down to business using more than 3 per cent on the average of the total deposits since September 8. The closing of the Ford Highland Park plant will be a temporary blow to Detroit. Many smaller concerns supplying parts have been relying almost entirely on the orders from this company for sustenance, but the announcement of opening of many other plants both in Detroit and throughout the state show the trend of things, and what we lose by the Ford closing now may be chalked up against what we gained during November and December when it was running while many others were closed.

GRAND RAPIDS BANKS PAY $110,250

The Old National Bank, Grand Rapids, paid 5 per cent, making 10 per cent for the year, and paid the taxes. The Kent State Bank paid the regular 3 per per cent semi-annual, 2 per cent extra, making 16 per cent for the year. Fourth National and Commercial Savings paid regular monthly of 1 per cent. Grand Rapids Savings and South Grand Rapids State paid regular quarterly of 3 per cent. Michigan Trust paid regular 6 per cent quarterly and 8 per cent extra on the old capital and Grand Rapids Trust paid 21 per cent semi-annual. Kent State paid a 5 per cent semi-annual bonus to employes on Christmas and the Old National paid a 10 per cent bonus. Other banks paid bonuses in varying amounts.

National Bank Dividends in Stock Held Illegal

Acting Attorney General Frierson has rendered an opinion to the Secretary of the Treasury holding that stock dividends by national banks are illegal. The text of the opinion follows:

"Provisions of the Revised Statutes provide for an increase of capital from time to time, but no increase of capital shall be valid unless the whole amount of such increase is paid in, and notice thereof has been transmitted to the Comptroller of the Currency, and his certificate obtained specifying the amount of such increase of capital paid in with his approval thereof, and that it has been duly paid in as part of the capital of such association.

"It is thus enacted that no increase in capital stock shall be valid unless the amount has been duly paid in as part of the capital of such association. It would seem, therefore, that the mere conversion by a transfer of entries on the books of profits owned into capital stock and thus keeping in its business permanently what it previously was at liberty to distribute among stockholders, is not equivalent to paying in an equal amount of money, as a part of the capital of the corporation. No part of it has been paid into the corporation, and I cannot think that the conversion of it into capital stock will be an increase of capital in the manner provided by Acts of Congress.

"The foregoing is the construction which the Comptrollers of the Currency have in the past uniformly placed upon these statutes. If I were less sure of the conclusion I have reached, I think this long-continued construction placed on the law by the administrative officers would be entitled to sufficient weight to justify my conclusion."

C. R. WILSON STOCK DIVIDEND

Directors of the C. R. Wilson Body Company, Detroit, in annual meeting December 29 authorized a 300 per cent stock dividend to all stockholders of record December 29. In spite of financial depression this concern has just passed the biggest year in its history, and its present financial excellence is borne out by the authorization of this large dividend.

In the year just passed the company expanded its plants to three times their former capacity, building additions and installing new equipment. The executive officers are looking forward to an even greater year in 1921. There is now a constant increase in orders, with indication that the demand for bodies will step up to tax the plant's capacity by the spring of the year.

Digitized by Google

Michigan Bond Items

The city of Detroit is advertising for bids on sewer and filtration plant bonds to the amount of $14,000,000.

The First National Company, Detroit, is offering $33,000 of Marine City 5 per cent public improvement bonds to yield 5.40 per cent, and due serially up to 1948.

Because it is believed the Wayne county supervisors have no authority to issue bonds without an enabling act by the state legislature, the construction of the West Jefferson avenue and Fort street bridges over River Rouge has been postponed once more. Wayne county electors have twice voted these bond issues.

A resolution that the proposition of bonding the city for $45,000 to raise money to pay for pavings streets of Charlotte be submitted to the voters at the next general city election to be held April 4, 1921, was adopted by the city council at last week's meeting.

The city of Saginaw is taking steps to issue $5,000,000 of bonds for the purpose of completing the bay water project. A bill is to be prepared to amend the home rule act so that it will be possible for a city of Saginaw's class to bond for 8 per cent of the assessed valuation for water works plants, says the Saginaw News-Courier. The home rule act limits to 2 per cent of assessed valuation the amount of bonds any city of 50,000 or more population may issue for the construction or purchase of any public utility.

Cerro de Pasco Copper Company stockholders have approved the issuance of $8,000,000 in 10-year, 8 per cent convertible bonds.

United States Rubber Company 7½ per cent 10-year definite bonds will be delivered to subscribers on surrender of the temporary bonds to the United Mortgage & Trust Company, New York.

NEW DIME SAVINGS BANK, HAMTRAMCK

According to present plans, the new Dime Savings Bank of Hamtramck will open for business January 17. Officers are Walter L. Dunham, president; T. W. Palmer Livingstone, vice-president, and Frank Winiker, cashier. Winiker, who will be actively in charge of the bank, has been general teller at the main office of the Dime Savings Bank for some years. The board of directors is comprised of Messrs. Dunham and Livingstone, together with Jas. B. McKay, Karl Steilwagon and Edward Herzog. Capital stock will be $100,000. The new bank will occupy a new building at Holbrook and Lumpkin avenues.

The Dime Savings Bank of Detroit will open a new branch, Monday, January 10, at Dix and Artillery avenues.

TRANSFERRED TO GRAND RAPIDS

H. E. G. Clarke, who for a year has been Kalamazoo sales manager of the Shiffet-Cumber Company, investment banker, has accepted the managership of the Grand Rapids offices of the company. The Grand Rapids office has been established for a number of years and is one of the largest in the state.

IRONWOOD BANK DIVIDENDS

The Merchants & Miners State Bank of Ironwood has paid 5 per cent. Gogebic National paid the regular 5 per cent and an extra of two per cent, besides a Christmas bonus for employes. Annual meetings of the other Ironwood banks will be held in January.



American Business!
Forward—*March!*

The advance of American business into the markets of the world never halts. Some line is always moving forward. Despite various obstructing circumstances General Demand, commanding the economic situation, has given the order "Forward March!" to the whole industrial army—agriculture, manufacture, merchandising, transportation.

Chicago, in strategic position, reflects the business conditions of the nation. In Chicago, The Continental and Commercial Banks are at the financial service of American business, equipped and eager to aid in the great forward movement.

National and international facilities make for these banks an important opportunity for serving American business.

The CONTINENTAL *and*
COMMERCIAL
BANKS
CHICAGO

INVESTED CAPITAL MORE THAN 50 MILLION DOLLARS
RESOURCES MORE THAN 500 MILLION DOLLARS

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

MANAGED BY MEN YOU KNOW

How You Can Take a Winter Vacation

Busy men are able to take needful vacations by employing our services as business agent. Officials of wide experience and mature judgment handle their affairs while absent—manage businesses, collect rents, supervise investments, pay taxes, represent them competently in various capacities.

Plan to take your family to California or Florida this winter. Talk over with us how we can safely care for your affairs while gone.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan
CAPITAL AND SURPLUS $ 450,000.

MATTHEW FINN
High Grade Municipal
and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

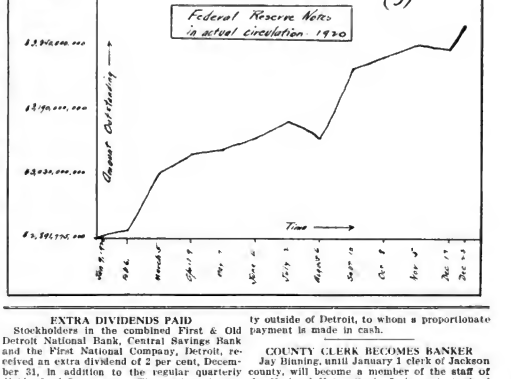
Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Dec. 30, 1920	Dec. 23, 1920	Jan. 2, 1920
Total gold reserves	$2,089,323,000	$2,055,892,000	2,067,615,000
Legal tender notes, silver, etc.	189,830,000	180,952,000	58,657,000
Total reserves	2,249,163,000	$2,236,764,000	2,121,272,000
Bills discounted—Sec'd by Gov't war obligations.	1,141,036,000	1,177,263,000	1,484,262,000
All other	1,579,098,000	1,554,428,000	746,925,000
Bills bought in open market	256,702,000	241,167,000	574,641,000
Total bills on hand	2,974,836,000	2,972,858,000	2,805,818,000
U. S. Government bonds	26,859,000	26,859,000	26,836,000
U. S. Victory notes	69,000	69,000	64,000
U. S. Certificates of indebtedness	261,262,000	261,253,000	349,090,000
Total earning assets	3,262,027,000	$3,261,039,000	3,181,808,000
Bank premises	18,450,000	18,168,000	16,369,000
Uncollected items, other deductions gr. deposits	717,227,000	761,005,000	1,171,778,000
5% Redemption fund against F. R. Bank notes	12,787,000	12,652,000	12,120,000
All other resources	8,598,000	8,417,000	5,732,000
Total resources	6,269,517,000	$6,218,035,000	6,504,890,000
LIABILITIES			
Capital paid in	99,770,000	99,458,000	87,423,000
Surplus	164,745,000	164,745,000	129,120,000
Government deposits	27,639,000	26,649,000	24,320,000
Due to members—Reserve account	1,748,979,000	1,721,391,000	1,922,800,000
Deferred availability items	522,638,000	529,261,000	944,884,000
Other deposits, including foreign gov't credits	22,161,000	23,652,000	116,307,000
Total gross deposits	2,321,417,000	$2,310,353,000	3,022,811,000
F. R. notes in actual circulation	3,344,686,000	3,404,521,000	2,998,992,000
F. R. Bank notes in circulation—net liability	216,960,000	218,832,000	258,561,000
All other liabilities	121,529,000	119,716,000	16,073,000
Total liabilities	6,269,517,000	$6,218,035,000	6,504,890,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	48.4%	48.1%	43.7%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	50.5%	49.8%	49.5%

How the Banks Stood By Business in 1920

(*Continued from Page 6*)

month from July 2 to August 6. On November 5 the curve started down, but on December 17 it started up again and the last report at hand, December 2, showed an increase of notes outstanding. Federal Reserve notes expanded from $2,914,368,000 January 9 to $3,344,000,000 December 17.



EXTRA DIVIDENDS PAID

Stockholders in the combined First & Old Detroit National Bank, Central Savings Bank and the First National Company, Detroit, received an extra dividend of 2 per cent, December 31, in addition to the regular quarterly dividend of 3 per cent. This makes the annual return for 1920, 14 per cent. The banks pay all state, county and Detroit city taxes against their shares of stock, except those owned by stockholders residing in Wayne county outside of Detroit, to whom a proportionate payment is made in cash.

COUNTY CLERK BECOMES BANKER

Jay Binning, until January 1 clerk of Jackson county, will become a member of the staff of the National Union Bank, Jackson, instead of going into the state banking department, which service he intended to take up. Before his election as county clerk Mr. Binning was connected with the Jackson State Savings Bank.

Digitized by Google

COMPANIES AND DEALERS APPROVED

At meetings of the Michigan Securities Commission, December 9, 16 and 23, 1920, the following companies and dealers were given approval:

Companies—Converse Rubber Shoe Co., Malden, Mass.; Chattanooga Coke & Gas Co, Chattanooga, Tenn.; Louisville Gas & Electric Co. (notes), Louisville, Ky.; Michigan Motor Sales Co., Saginaw, Mich.; Hercules Corporation (notes), Evansville, Ind.; Channell Chemical Co., Chicago; United Fruit Growers of California, Bluefield, Mich.; St. Antonio Mining & Exploration Co., Sault Ste. Marie, Ont., Acme Beet Harvester Co., Alma, Mich.; McLaren-Sleight Corporation, Niles, Mich.; Hayes-Ruppel Manufacturing Co., Grand Rapids, Mich.; Municipal Pig Farms Corp., Grand Rapids, Mich.; Peerless Novelty Co., Grand Haven, Mich.; National Foundry & Machine Co., Ypsilanti, Mich.; Chattell Loan Co., Grand Rapids, Mich.; Detroit Graphite Co., Detroit Mt. Clemens Truck Body Co., Mount Clemens, Mich.; Boyle Ice Co. (bonds), Chicago; Hunter Co., Inc., Niles, Mich.; Garwood Electric Co., Detroit; McMullen Machinery Co., Grand Rapids, Mich.; Samuel Joseph (bonds), Detroit; Midland Gravel Co., Midland, Mich.; La Salle Steel Co. (bonds), Chicago, Arthur E. and Wm. A. Fiarl (bonds), Detroit; Auto Locking Robe Rail Co., Lansing, Mich.

Dealers—Roy A. Winslow, Kalamazoo, Mich.; Central Bond & Mortgage Co., Chicago; Royce E. Thomas, Bay City, Mich.

The applications of the California Hotel Company, Pasadena, Cal.; "Kum Bak" Co-Operative Stores Company, Detroit, and Security Oil & Refining Company, Scottsville, Ky., were disapproved.

Licenses of the Friend Motors Corporation, Pontiac, and Curran-Detroit Radiator Company, Detroit, were revoked.

Elston & Company, Chicago, were reinstated.

INTER-STATE BUSINESS REINSURED

The Inter-State Fire Insurance Company, Detroit, has completed an arrangement with the Commonwealth Insurance Company, New York, whereby all its agency business has been reinsured as of December 31, 1920, which enables the Detroit company to release a large part of its unearned premium reserve and add materially to the surplus. Through the agreement made with the eastern company it will also be possible for the company to increase its lines on desirable risks.

INCOME TAX RULING

Merchants and manufacturers may adopt "cost or market, whichever is lower," as a basis for valueing their inventories for 1920 income tax under regulations issued December 30 by the Bureau of Internal Revenue. The regulations also provide that the difference caused by the fall of price during the year may be deducted in arriving at the value of the stock.

UNION TRUST CHANGES

B. H. Manning, who has been with the Union Trust Company, Detroit, 18 years, as manager of the real estate department, has been elevated to the position of vice-president and real estate officer. Charles H. Adams, Merrill C. Adams and Harry Slater have been elected assistant vice-presidents and John A. Reynolds and Lawrence J. Toomey appointed assistant secretaries.

BYLLESBY'S DETROIT OFFICE

H. M. Byllesby & Company, investment bankers and property managers, Chicago, have announced the opening of a Detroit branch, in charge of T. E. Flanegin, formerly with Blair & Company. Byllesby & Company were one of the pioneer operators in public utility securities and have a long list of successful flotations to their credit.

NEW N. Y. C. FINANCING

An agreement has been executed supplemental to the New York Central Railroad Company Equipment Trust of 1920, under which the Guaranty Trust Company of New York is trustee, providing for an authorized issue of $6,420,000 par value deferred 6 per cent equipment trust gold certificates to be dated as of December 23, 1920, and to mature serially December 23, 1921, through 1935.

In Detroit It's the

SECURITY TRUST COMPANY

FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

"Callable at ____"

It is reasonable to assume that as soon as money rates become stabilized—and the time is not far distant—many of the borrowers of capital who have been paying 7% and 8% will exercise the "callable" option of their notes and other obligations.

In fact it would be poor business judgment for these borrowers not so to do.

This redemption clause—prevalent in the high rated securities—defeats the purpose of investors who seek a steady yield over a period of years.

The maturity of our First Mortgage Bonds is predetermined and irrevocable.

Your investment will not be disturbed.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

C. C. COAL COKE OREY.

1303-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JANUARY 8TH

LISTED STOCKS	Bid	Asked	Par	High-Low 1921 to date	Sales	High-Low 1920	Cash	Stk.	Annual Indicated Dividends When	Last Dividend When Paid	Cash	Stock	Total This Yr. Cash	Stk.	Capitalis'n
Am. Chicle, pfd.	63	68	100				6%		Quarterly	Jan. 3, 1921	1½%		1½%		$6,000,000
American Light & Traction Co., com.	76	74	100	76 - 69	604	86 - 45	4%	4%	Quarterly	Nov. 1, 1920	1%	1% %			$26,473,900
Do., pfd.			100				6%		Quarterly	Nov. 1, 1920	1½%				$14,636,600
Auto Body Co.	4	6	10			12½ - 5½				Jan. 26, 1917		25%			$1,674,000
Do., pfd.	7½	9	10			10¾ - 10¼	6%		Semi-Ann	Aug. 1, 1920	3%				$527,600
Bower Roller Bearing Co.	15	..	10			29¾ - 16	Varies		As Decl'd	July 1, 1920	10%				$600,000
Charcoal Iron Co. of America, com.	2	3½	10	2½ - 2	5	5 - 1½				Apr. 1, 1919	2%				$2,649,656
Do., pfd.	3½	3¾	10	3¾ - 3½		5¾ - 3¾				July 1, 1919	3%				$8,317,250
Cities Service Co., com.	632	644	100		350	350 - 76	*6%		Monthly	Jan. 1, 1921	1½%	1½ %	1½ %	1½ %	$40,066,245
Do., pfd.	62¾	64½	100		70	65 - 16	6%		Monthly	Jan. 1, 1921	½%		½%		$78,165,844
Cohuila Lead & Zinc Co.	..	..	1	6 - 6	23	6 - 6	Varies		As Decl'd	Nov. 15, 1917	20%				$600,000
Columbia Sugar	13½	14½	10	14½ - 14½	200	11½	12%		Quarterly	Jan. 2, 1921	6%		6%		$3,000,000
Commerce Motor Car Co.	7	10	10		18	18 - 6½	12%		Quarterly	July 1, 1920	3%				$500,000
Commonwealth Power	12¾	16½	100		45	19½	4%		Quarterly	Nov. 1, 1917	1%				$18,586,900
Do., pfd.	66	65	100		66	26	16%		Quarterly	Nov. 6, 1920	1½%				$17,956,900
Continental Motor, com.	4½	5%	10	6% - 5¾	118	8 - 4½	4%		Quarterly	Dec. 20, 1920	1%				$14,549,250
Do., pfd.	96	98	100		100	96	7%		Quarterly	Jan. 15, 1921	1¾%				$2,787,500
Detroit & Cleveland Navigation	68	..	50		100	67	8%		Quarterly	Jan. 1, 1921	2¼%		2½%		$4,826,440
Detroit Creamery Co.	20	..	10		84	16	8%		Quarterly	Dec. 24, 1920	4%				$21,600,000
Detroit Edison Co. XD	97	97½	100	97¾ - 97	114	92¾	8%		Quarterly	Oct. 15, 1920	2%				$27,655,600
Detroit Fir. & Malleable Wks.	97¼	100	100		96	97	6%		Monthly	Jan. 1, 1921	½%		½%		
Detroit United	..	..	100				6%		Quarterly	Dec. 1, 1920	2%				$15,000,000
Edmunds & Jones	11	..	None		64	9¾	$4.00		Quarterly	Jan. 1, 1921	50c		50c		40,000 shs.
Do., pfd.	75	85	100		78	78	7%		Monthly	Jan. 1, 1921	1¾%		1¾%		$1,000,000
General Motors	14½	15	10		42	12%			Quarterly	Nov. 1, 1920	25c	1-40 sh.			$6,564,358 shs.
Federal Truck	17½	19	10		82	16¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	226	267	100	228 -220	460	610	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Aluminum & Brass Mfg. Co., com.	10½	10	10		11¾ - 11		Varies		As Decl'd	Oct. 1, 1920		5%			$1,066,750
Gladys Belle, com., XD	64	67	100	.65 -.58	1 22 - .66		16%		Quarterly	Oct. 1, 1920	4%				$6,407,000
Do., pfd. XD	62	69	100	.65 .63	1.18 - .61		16%		Quarterly	Oct. 1, 1920	4%				$2,500,000
Godchaux Sugar, com.	16	61	None		59¾ - 39¼										$70,000 shs.
Do., pfd.	64	76	100				7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$2,500,000
Hanna Furnace, com.	66	28													
Do., pfd.	96	96	100												
Hall Lamp Co.	16	10			36½ - 16		Varies		As Decl'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	6	10	10		8½	24 - 7½	Varies		As Decl'd	Dec. 15, 1920	5%				$1,500,000
Holland-St. Louis Sugar Co.	8	6¼	10		16½ - 7¾		16%		Quarterly	Oct. 15, 1920	2%				$2,000,000
Iron Silver Mining Co.	65	46	50		42 - 42		20c		Semi-Ann	July 1, 1919	10c				$2,500,000
S. S. Kresge	125	129	100		153	153	6%		Semi-Ann	Jan. 1, 1921	3%		6%		$10,000,000
Do., pfd.	95	96	100		95	100	7%		Quarterly	Jan. 2, 1921	1¾%		1¾%		$6,000,000
Lindenmeyr Steel, com.	13¼	14¼	100		64½ - 15½		16%		Quarterly	Jan. 1, 1921	4%		1½%		$1,000,000
Lincoln Motors, Class A	17¾	19	50	18 - 17¾	50¾ - 13¾		$5.00		Quarterly	July 30, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co.	..	..	10		10½ - 9¾				Semi-Ann	Dec. 1, 1914	4%				$750,000
Michigan Drop Forge, com.	35	..	None		50 - 35¾		$3.00		Monthly	Jan. 1, 1921	25c		25c		$12,500 shs.
Do., pfd.	..	..	100		90 - 90		7%		Quarterly	Oct. 1, 1920	1¾%				$250,000
Michigan Stamping Co., com.	17½	..	10		20 - 14		9%		Monthly	Jan. 1, 1921	1%		¼ %		$1,000,000
Mich. Sugar Co., com.	6	8¾	10	8¾ - 7¾	13¾ - 7¾		12%		Quarterly	Dec. 1, 1920	6%				$7,471,140
Do., pfd.	8	..	10		9¾	9¾	6%		Quarterly	Nov. 15, 1920	1½%				$1,000,000
Miles-Detroit Theater Co., XD	16	..	10		21 - 15¼		*16%		Quarterly	Oct. 10, 1920	4%				$650,000
Motor Products	67	..	None		69¾ - 37¾					Oct. 1, 1917	$1.00				$100,000 shs.
Motor Wheel	6½	8¾	10	8¾ - 8½	16¾ - 6		*8%		Quarterly	Nov. 20, 1920	2%				$4,500,000
Murray Mfg.	..	..	10		36 - 66		16%		Monthly	Dec. 15, 1920	1%				$764,450
National Screw Co.	95	101	100		116 - 85		8%		Quarterly	Dec. 1, 1920	2%		2%		$2,000,000
Do., pfd.	88	95	100		157 - 90		6%		Semi-Ann	Jan. 2, 1921	6%		6%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	115	..	1.00	1.15-1.10	2.00-1.05		*18%		Quarterly	Jan. 1, 1921	1½%		4½%		$1,000,000
Packard Motor Co., com.	9¾	10	10	10¾ - 6¾	284 - 9¾		16%		Quarterly	Oct. 15, 1920	2½%				$13,885,100
Do., pfd.	71¾	72	100	72 - 70½	96 - 67		7%		Quarterly	Dec. 15, 1920	1¾%				$15,228,900
Paige-Detroit Motor Car Co.	13	14	10	14¾ - 10¾	45¾ - 16		*12%		Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.	97	25	25	98¾ - 94	117¾ - 95		*16%		Quarterly	Jan. 3, 1921	8%		8%		$11,838,850
Penfield Injector, pfd.	8	..	100				8%		Quarterly	Jan. 1, 1921	2%		2%		$500,000
Reo Motor Co.	18	18¾	10	18¾ - 17½	28¾ - 16¾		16%		Quarterly	Jan. 1, 1921	2½%		2½%		$6,937,250
Scotten-Dillon Co.	82	82½	100		90 - 82		6%		Quarterly	Jan. 6, 1921	2%		2%		$1,500,000
Timken-Axle, com.	25¾	26¼	10	27½ - 26¼	863¼ - 26		12%		Bi-Month	Nov. 15, 1920	2%				$3,000,000
Do., pfd.	..	..	100		63¾ - 81		7%		Quarterly	Dec. 1, 1920	1¾%				$5,000,000
Trus.-Con.-Steel Co., com.	28	36	10		63¾ - 29½		16%		Quarterly	Jan. 1, 1921	4%				$1,450,250
Do., pfd.	..	6¾	10		9¾ - 9¾		7%		Quarterly	Dec. 1, 1920	1¾%				$1,632,260
U. S. Radiator, com.	12¾	17	100		21¾ - 20										$1,000,000
Do., pfd.	81	..	100		95¾ - 80		7%			Jan. 25, 1920	7%				$2,800,000
Waring Hat Co., com.	..	..	25	None											
Do., pfd.	92	100	100				8%		Quarterly	Jan. 1, 1921	2%		2%		$2,500,000
Western Knitting Mills	9¼	10	None	8¾ - 8¾	60% - 8¾		$2.00		Quarterly	Nov. 25, 1920	50c				1140,000 shs.
White Star Line	..	..	50		50½ - 50½		7%		Aug.&Nov.	Aug. 15, 1916	7%				$750,000
Wolverine Portland Cement Co.	2½	4	10		5¾	2¾				Dec. 15, 1917	1%				$1,000,000

*Old 590-570; new 66¾-27. †7% in 1913, 7% in1660, only dividends since organized. *Extra dividend. †Scrip. ‡Increase to $600,000 authorized. §Book value, $1,014,992. Ed. & J. ‖Book value, $6,216,627, Godchaux. Book value, $6,626,765.00, Western Knitting Mills. ‖Book value, $5,084,450, Motor Products. ‖Old. xTaken from other exchanges.

Foreign Exchange

Country	Par	Nov. 10, 1919	Nov. 8, 1920	Jan. 5 1921
Canada	1.0000	.95846	.9405	.95
London	4.8665	4.14	6.4465	6.6275
Switzerland	.1930	.1759	.1455	.1575
Paris	.1940	.1105	.06276	.0599
Belgium	.1940	.11736	.06656	.0625
Holland	.40166	.4725	.60675	.6162
Italy	.1660	.08787	.03658	.03465
Greece	.1960	.18	.0945	.0763
Spain	.1940	.1940	.1685	.1528
Vienna	.20263	.0105	.006	.0026
Berlin	.66821	.0280	.0126	.01646
Denmark	.66799	.2600	.1650	.1395
Norway	.2665	.2100	.1343	.1595
Sweden	.2680	.1890	.1960	.2045

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Jan. 5, 1921	Dec. 27, 1920	Nov. 17, 1920	July 1, 1920	Jan. 2, 1919	July 1, 1919	Jan. 2, 1918	July 1, 1918
U. S. Liberty 3½s	96.50	96.60	96.00	91.00	99.20	99.78	99.86	99.52
U. S. Liberty 1st 4s	85.50	85.62	87.50	85.00	93.00	94.90	96.00	94.12
U. S. Liberty 2nd 4s	86.30	84.10	85.80	85.00	91.58	93.84	93.04	94.10
U. S. Liberty 1st 4½s	86.35	85.50	87.50	85.16	96.46	98.14	96.50	....
U. S. Liberty 2nd 4½s	86.30	84.64	85.80	85.00	96.60	94.06	95.70	....
U. S. Liberty 3rd 4½s	90.04	87.20	86.30	85.66	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	86.46	84.96	85.86	85.56	96.75	100.10	....	....
Victory Bonds, 4¾s	96.48	94.90	88.10	88.50	94.00	95.09	95.62	96.92

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement Book Val.	Capital	Deposits	Dividends Annual Rate	How Paid	Detroit Stock Exchange Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Last Sale	Jan. 5, 1921 Bid	Ask
American State	190	$1,000,000	$19,989,342	12%	J-A-J-O 1st	317	217	220	200	210	---	215
Detroit Savings	240	1,500,000	22,862,206	12%	9 Jan-Jul 1st 3 Feb Jan	258	258	259	259	259	252	---
Dime Savings	253	1,500,000	22,676,653	14%	1 Monthly 1 Jan-Jul	---	259	262	259	259	257	260
First and Old Detroit National	194	5,000,000	69,654,332	*12%	J-A-J-O 1st	278	262	262	270	270	220	
Central Savings Bank	142	1,000,000	17,768,929									
First State	159	1,000,000	12,789,961	10%	J-A-J-O 1st	---	---	---	---	---	187	195
Highland Park State	193	1,000,000	14,287,245	20%	J-A-J-O 1st	---	---	295	295	295	---	300
Merchants National	168	2,000,000	9,789,667	8%	J-A-J-O 1st	---	---	163	142½	142	145	---
National Bank of Commerce	232	1,500,000	14,417,843	10%	J-A-J-O 1st	250	240	240	230	230	205	215
Peninsular State	161	2,500,000	21,523,787	12%	J-A-J-O 1st	---	---	220	218	215	220	---
Peoples State	279	5,000,000	100,783,895	12%	J-A-J-O 1st	260	260	285	266	285	260	---
United Savings	148	500,000	6,932,984	12%	Monthly	---	---	215	209	209	200	212
Wayne County Home	297	4,000,000	74,972,277	15%	Monthly	---	---	247	209	247	245	251
American Loan and Trust	124	500,000	.....	9%	J-A-J-O 1st	---	---	155	155	155	---	---
Bankers Trust	115	500,000	.....	2%	J-A-J-O 1st	---	---	---	---	---	---	---
Guaranty Trust	175	500,000	.....	2%	J-A-J-O 1st	---	---	143	143	143	---	150
Detroit Trust	409	2,000,000	.....	14%	J-A-J-O 1st	---	---	---	---	---	245	260
Security Trust	238	500,000	.....	12%	J-A-J-O 1st	---	---	---	---	---	---	229
Union Trust	190	1,000,000	.....	2%	J-A-J-O 1st	---	---	197	195	195	179	---
Commonwealth-Federal	124	750,000	10,325,127		None	---	---	120	---	---	105	115
Bank of Detroit	124	1,000,000	18,469,189	10%	J-A-J-O 1st	---	---	---	---	300	295	300
Michigan State	116	250,000	3,365,576			---	---	---	---	---	---	---
American State, Dearborn		.....	.....		None	---	---	---	---	---	---	---
American State, Highland Park	122	200,000		6%	J-A-J-O 1st	---	---	132	122	132	113	132
Peninsular State, Highland Park	320	100,000		10%	J & J	---	---	---	---	---	---	---

* Under one ownership—stock combined.

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Columbia Motors	4½	5	14	4	4½
Hoover Steel Ball	18	24½	18	18	18½
Great Lakes Eng.	105	120	*118	*118	117
Liberty Motor	35	45	130	65	65
Noble Oil, com.	72	74	1.20	.50	.74
Invader Oil	1.65	1.75	1.88	1.78	1.75
Mich. Cop. & Brass	18	26	19½	20	
Un. Mtg. 90% com.	1½				
Un. Mtg. 90% com. pf.	10¼				
Federal Discount	8	11½			
Det. Mort., com.	12½	8¾			
Det. Mort., pfd.	15½	5¾	9¼	9½	9¾
Det. Cop. & Brass, pfd.	15	25			
Wilson Truck	5	9			
McCord Mfg. com.	13	20			
McCord Mfg., pfd.	70	80			
Dupiex Truck	5	9			

* Old basis. †Nominal. ‡Invader Oil sold ex. dividend Dec. 15, 2% cash, 100% stock.

Detroit Listed Bonds

Name	Bid	Ask	Jan. 5 Last Sale
Cons. Pow. Co.—5s, 1926	77¼	78½	81
Detroit & Flint—5s, 1921			92
Det., Ft. W. & T. L.—5s, 1927	20½	29	78
D., M. & T. Short Line—5s, 1922	89	94	
Det. & Northw'n—4½s, 1951	90	98	92
Detroit & Pontiac Ry.—5s, 1922	95	98	95
Detroit & Pontiac—4½s, 1926			
Det. & Ft. Huron S. L.—5s, 1930	25	35	
Detroit Railway—5s, 1931	60	70	
Det., Ypsi. & A. A.—6s, 1924		100	
D., Y. & A. A., Jackson—6s, 1926		89½	
Det. United Ry.—4½s, 1932	75		
Detroit Edison Co.—5s, 1933	27		
D. Edi. Co.—1st & ref. 5s, 1940	76¾	80	
East. Mich. Edison—5s, 1931	50	84	
Detroit Edison deb.—7s, 1918		98	
Detroit Edison deb.—7s, 1929	98	92½	
Detroit Edison deb.—7s, 1930	94	96	
D. C. Gas Co., G. M.—6s, 1913-23	91¼	94¾	
D. C. Gas Co., P. L.—6s, 1922	95	94¾	
Detroit & Sub. Gas Co.—5s, 1928	80		
Mich. State Tel. Co.—5s, 1924	28	90	
Tol., Fremt'n & Norw'k—5s, 1929			
Wyan. & Det. River—5s, 1918			
Ry.-Prod. Coke Corp.—6s, 1936			
Detroit Rock Salt Co.—6s, 1932		81	

SCOTTEN-DILLON STOCK DIVIDEND

Clark, Emmons, Bryant & Klein & Brown, attorneys for the Scotten-Dillon Company, have advised the Detroit Stock Exchange that stockholders at the annual meeting January 25 probably will authorize a stock dividend, as of December 31, 1920. Persons who purchase stock since December 31 are advised to obtain from the seller a special authority directed to the company directing it to issue such stock dividends, if any, to such purchasers.

A Word to Michigan Corporations

THE financial editor of this publication will appreciate your sending in copies of your annual report to stockholders, balance sheets, earnings statements and lists of officers and directors, or any of such information as you wish published. This is especially desired of corporations whose fiscal year ended December 31, 1920.

Active Bonds and Notes

Security—Maturity	Bid	Ask
Am. T. & T. 6s, Oct. 1, 1922	99½	97
Anaconda 6s, Jan. 1, 1929	58	64
Anglo-Am. Oil 7½s, Apr. 1, 1925	99½	100
Balt. & Ohio 6s, July, 1929	91½	92
Bel. Govt. R. F. 7½s, June 1, 1949	99½	97
Beth. Steel 7s, July 15, 1922	94½	97½
British 5½s, Nov. 1, 1921	97½	98
British 8½s, Oct. 1, 1922	94¾	95
Canada 5½s, Apr. 1, 1926	90	90½
C. C. C. & St. L. 6s, July 1, 1929	88	90
Brok. Union 6s, Mar. 1, 1931	89	91
Ill. Cent. 5½s, Jan. 1, 1924	89	90
Jap. Govt. 6s, Jan. 1, 1931	96½	97
Jap. Govt. 1st 4½s, Feb. 15, 1925	78½	79
N. Y. Central 7s, Sept. 1, 1930	104	104½
Norway 8s, 1940	99½	100
Penna. Ry. 7s, Apr. 1, 1930	103½	104
St. Paul 4½s, Jan. 1, 2014	60	61
Solvay 8s, 1927	99¾	100¼
Swedish Govt. 6s, June 15, 1939	79	80
Swiss Govt. 8s, July 1, 1940	81	85
U. S. Rubber 7½s, Aug. 1, 1930	95½	96
Virginian Ry. 5s, May 1, 1962	85	87
Western Elec. 7s, Apr. 1, 1925	97½	98¼

MISCELLANEOUS MOTOR STOCKS

	Bid	Asked
Briscoe Motor	¼	½
Chalmers Motor	1	3
Curtis Aeroplane	7	10
Goodrich, com.	70	75
Hartman	1	1¾
Lee Tire	16	19¼
Nash	200	225
Pierce Truck	21	21½
Republic Truck	18½	19¾
Saxon	2½	3¼
Stromberg Carb.	10	13¼
White Motors	28	36

Grand Rapids Stocks

The Corrigan Company, Grand Rapids, reports the following quotations on Grand Rapids stocks as of January 4:

Cities Service, com.	329	221
Cities Service, pfd.	92¼	91¾
Cities Service, Bankers shs.	29¾	29¼
Cities Service, Debenture B	115	118
Cities Service, Debenture C	89	86
Cities Service, Debenture D	92	86
Commonwealth Power & Light, com.	12¼	12¾
Commonwealth Power & Light, pfd.	22¾	22¼
American Public Utilities, com.	9	10
American Public Utilities, pfd.	19	20
United Light & Railways, com.	32¾	33½
United Light & Railways, pfd.	92	94

Detroit Bank Clearings

Week of Jan. 5, 1921	$197,665,894.88
Week of Dec. 29, 1920	211,778,258.57
Week of Dec. 22, 1920	3139,899,208.09
Week of Dec. 15, 1920	3107,814,259.92
Week of Dec. 8, 1920	$109,818,309.30
Week of Dec. 1, 1920	8 91,143,143.26
Week of Nov. 24, 1920	116,512,264.31
Week of Nov. 17, 1920	124,877,217.79
Week of Nov. 10, 1920	3123,292,351.99
Week of Dec. 28, 1919	3 25,280,447.39
Week of Dec. 21, 1918	$141,574,624.91
Week of Dec. 14, 1918	159,249,029.49
Week of Nov. 16, 1918	119,942,072.92
Month of January, 1921	$407,251,877.18
Month of February, 1920	489,866,898.74
Month of March, 1920	570,426,859.14
Month of April, 1850	940,872,969.96
Month of May, 1920	484,284,990.85
Month of June, 1920	892,706,267.47
Month of July, 1920	888,684,142.91
Month of August, 1920	983,886,408.21
Month of September, 1920	961,388,940.28
Month of October, 1920	919,486,780.77
Month of November, 1920	468,088,440.27
Month of December, 1920	492,981,849.21
Total for year 1920	$9,101,228,903.84
Total for year 1919	$4,564,886,159.88

STUDEBAKER RESUMES JANUARY 10

The plant of the Studebaker Corporation at South Bend, Ind., will reopen for production January 10 instead of January 17, according to official announcement. The factory has been closed for inventory.

A Bank with a Reputation, 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
MEMBER FEDERAL RESERVE SYSTEM
45-47 Fort St., West. 14 Branches
Penobscot Building.

Digitized by Google

Wayne County & Home Savings Bank

Detroit, Michigan

COMPARATIVE STATEMENT

RESOURCES

	Dec. 28th, 1919	Dec. 28th, 1920
Real Estate Mortgages	$22,549,609.96	$24,830,074.34
Bonds	7,161,096.18	8,575,559.43
Collateral Loans	10,769,252.80	9,806,239.32
Loans and Discounts	12,580,427.69	16,683,118.45
U. S. Govt. Certificates	8,275,000.00	7,538,000.00
U. S. Liberty Bonds	6,821,056.01	6,739,606.73
Customers' Liability, Letters of Credit	20,000.00	7,100.00
Banking House and Branches	1,651,394.00	1,853,377.58
Stock of Federal Reserve Bank	210,000.00	270,000.00
Cash on Hand and in Banks	10,189,483.04	8,152,813.17
Total	$80,227,319.68	$84,455,889.02

LIABILITIES

Capital Stock	$ 3,000,000.00	$ 4,000,000.00
Surplus Fund	4,000,000.00	5,000,000.00
Undivided Profits	741,552.75	1,376,511.22
Letters of Credit	20,000.00	7,100.00
Bills Payable, Federal Reserve Bank	700,000.00	None
Savings Deposits	50,075,101.10	56,096,831.34
Postal Savings Deposits	947,791.63	74,914.76
Commercial Deposits	20,742,874.20	17,900,531.70
Total	$80,227,319.68	$84,455,889.02

OFFICERS

CHARLES F. COLLINS, Chairman

Julius H. Haass, President
George Wiley, Vice-President
W. V. Moore, Vice-President
Wm. S. Green, Vice-President
Edwin J. Eckert, Vice-President
Arthur E. Loch, Vice-President
Rupert Pletsch, Vice-President
Geo. H. Johnstone, Cashier
Geo. J. Pipper, Auditor

Hugh R. Burns, Ass't Cashier
Wm. H. McClenahen, Ass't Cashier
Lyman L. Rosier, Ass't Cashier
Geo. C. Johnson, Ass't Cashier
Chas. H. Northrop, Ass't Cashier
Geo. F. Buhrer, Ass't Cashier
Frank A. Grosfield, Ass't Cashier
Geo. A. Burns, Ass't Cashier
John W. Schmitt, Ass't Cashier

Who's Who In Michigan Finance

Frank W. Merrick, Commissioner Michigan State Banking Department

Frank W. Merrick was born np in the Thumb country of Michigan in 1872, the son of a farmer. His father came to Huron county in 1867 and in 1869 engaged in the manufacture and sale of boots and shoes at Port Austin, which business was continued until 1875. In the fall of 1874 he was elected sheriff of Huron county and re-elected in 1882. In 1884 he was elected judge of probate. Strangely enough, the father was a staunch democrat, and the goodly majorities he received in the elections are abundant evidence of the esteem which the people of Huron county had for W. H. Merrick.



FRANK W. MERRICK

Mr. and Mrs. W. H. Merrick were plain people of very limited means and are remembered by the old residents of Bad Axe as wonderfully fine characters. Frank Merrick was obliged to go to work while very young, and from 1882 to 1894 he worked as clerk in the Bad Axe stores. On account of having to work from the age of 10, his opportunities for education were limited; nevertheless he became a good penman and obtained a fair education. His conscientiousness, coupled with the forcefulness which has ever since been his most conspicuous trait of character, attracted Frank W. Hubbard, who took him into the Hubbard bank in 1894 as a clerk. From 1894 to 1907 he was employed by the Hubbard banks in various capacities, spending part of the time in Pinconning as cashier and also looking after the Hubbard banks at other points in Michigan. In so doing he obtained a wide range of experience and a splendid knowledge of Michigan.

In 1907 he established the Farmers Bank of Pigeon, which later became the Pigeon State Bank. His record as a banker is enviable. On one occasion a local implement dealer questioned the correctness of a series of dealings extending over a period of years and when the issue came to trial the records kept by Mr. Merrick of the entire transaction were so complete and minute and so completely disproved the allegations of the complainant that the case was thrown out of court. The dealer attempted at two later times to bring action on his claim, until three attorneys had successively given up the fight and the three actions had been successively thrown out of court. This attribute of conscientiousness and the methodical carefulness with which Mr. Merrick managed his bank gained him early in his business career the confidence and respect of the community and when Governor Sleeper was casting around for a banking commissioner in 1915 his choice fell on Merrick. He has served his first term of four years as commissioner and was reappointed in 1919 by Governor Sleeper for a second term, which will expire in 1923.

There have been those who have disagreed with Mr. Merrick, but few who have not benefited by the close attention he has given the affairs of the banking department the last five years. The cumulative benefit of the comprehensive supervisory methods he has installed will be felt for a long time to come. The Michigan department stands high in the realm of bank supervising circles, as is evidenced by

Purchasing Agent as Assistant

Young executive experienced in buying general office supplies and appliances, also specializing in purchasing iron and steel and mill supplies for high grade manufacturing concern, wishes to connect with a progressive manufacturer or company. Member of N. A. P. A. Services available after Feb. 1st, 1921. Moderate salary to start. Box Y, Michigan Manufacturer & Financial Record, 611 Free Press Bldg., Detroit, Mich.

Factory Building For Rent

7,000 square feet, ground floor, with power boiler. Corner location, in Detroit east side. Apply Mr. Sink,
People's Outfitting Co.
Detroit, Mich.

Digitized by Google

the fact that Mr. Merrick has twice been elected president of the National Association of State Supervisors. He is not a seeker of publicity; never has been, and doubtless never will be, for the results of his endeavors have spoken with more effect than those of a press agent. Many have been the occasions where prompt action and accurate judgment have been required, and it is the testimony of many who have been closely associated with Merrick that he is not easily taken off his guard. He is quick to size up a situation, but deliberate, and once his mind is set on a course of action it takes the most convincing evidence to change him.

Mr. Merrick now lives in Lansing, having moved his family there from Pigeon in the fall of 1919. There are two young Merricks growing up who are sure to give good accounts of themselves to the coming generation of business men.

New Bank Building Manager Appointed

Burton Newcomb, for seven years engaged in managing business properties on the Pacific Coast, has been engaged by the First and Old Detroit National Bank and Central Savings Bank to become rental and operating manager of their twenty-four story bank and office building, under construction at Cadillac Square and Woodward avenue, the foundation work of which has just been completed.



BURTON NEWCOMB

In retaining a professional manager at this time, before the building is above ground and more than one year before its completion, the bank is following the practice recognized as necessary in large enterprises of this character in order that the construction, arrangement and general equipment of the building may best serve the requirements of a renting clientele and be put on a satisfactory basis as a revenue producer.

Mr. Newcomb has been engaged for several weeks in going over plans, specifications, business policies, etc., with this end in view, and will be retained in an advisory way up to the time the building is completed and ready for occupancy, when he will assume active management of the property. Mr. Newcomb will bring to bear in his new connection a business experience covering a period of more than twenty years in New York, St. Louis, New Orleans, Houston, Omaha, and more recently San Francisco and Los Angeles.

AUTO SCHOOL DISTRIBUTION

Of the 72 employes of the Michigan State Auto School, Detroit, 28 have been with the institution more than a year and are participants in the dividend distribution of $3,500 as a New Year's reward for their united effort. Of these, 16 have been with the school more than two years, and half of these nearly five years. It is the regular policy of the school, A. G. Zeller, president, announces, to distribute a similar bonus every six months to employees who have been with the company a year or more.

DETECTIVE ORDINANCE BLOCKED

Federal Judge A. J. Tuttle's temporary injunction restraining the enforcement of the Detroit detective ordinance adopted at the November 2 election will stand until the constitutionality of the measure is tested. It is declared confiscatory by opponents.

DETROIT TRUST COMPANY

STATEMENT OF CONDITION

At Close of Business December 28, 1920

RESOURCES

Collateral Loans, time and demand	$ 1,485,068.67
Loans on Real Estate, Mortgages in office	3,442,209.86
Loans on Real Estate, Mortgages with State Treasurer	208,670.00
Bonds	3,274,134.18
Trust Company Building	544,825.15
Advance to Trusts	319,558.23
Cash in Banks, Cash and Cash Items	2,023,864.38
Total	$11,298,330.47

LIABILITIES

Capital Stock Paid in	$ 1,000,000.00
Surplus Fund	2,000,000.00
Undivided Profits, Net	1,176,153.41
Trust Deposits	6,971,695.15
Accrued Interest and Taxes	130,481.91
Reserve for Dividends	20,000.00
Total	$11,298,330.47

BOARD OF DIRECTORS

John H. Avery
William T. Barbour
Thos. J. Bosquet
McPherson Browning
Arthur H. Buhl
Edward H. Butler
Lawrence K. Butler
James Couzens
Joseph J. Crowley
David S. Carter
James E. Danaher
James E. Davidson
Charles A. Dean
Samuel T. Douglas
Walter L. Dunham
John M. Dwyer
Julian H. Harris
Benton Hanchett
Oren S. Hawes
Richard P. Joy
Wm. R. Kales
Henry G. Stevens
Sidney T. Miller
Fred T. Murphy
John T. Nichols
Daniel L. Quirk, Jr.
Horace H. Rackham
Charles M. Roehm
Walter Scotten
Allen Shelden
Charles P. Spicer
Edward D. Stair
Thomas C. Starret
Ralph Stone

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910
Municipal Bonds.
CHICAGO.

Dime Bank Bldg., Detroit
W. H. Dunham, Representative.

Digitized by Google

CONDENSED REPORT OF THE

COMMONWEALTH-FEDERAL SAVINGS BANK

OF DETROIT, MICH.

At the close of business on December 28th, 1920, as called for by the Commissioner of the Banking Department.

RESOURCES

Bonds, Mortgages, Loans and Discounts	$ 9,378,853.22
Real Estate, Branch Offices and Fixtures	323,525.11
Cash and Reserve	1,559,381.90
	$11,261,760.23

LIABILITIES

Capital Stock	$ 750,000.00
Surplus and Profits	183,632.38
Deposits	10,328,127.85
	$11,261,760.23

OFFICERS

M. E. GALVIN, Chairman of the Board
J. W. McCAUSEY, President
FRANK WOLF, Vice-President
COMFORT A. TYLER, Vice-President
F. H. TALBOT, Vice-President and Cashier
A. R. MOORE, Vice-President
JOHN A. SEYMOUR, Assistant Cashier
H. W. JORDAN, Assistant Cashier
E. P. LOMBARD, Assistant Cashier

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Hanna Furnace Co. Stock Listed on Detroit 'Change

The Detroit Stock Exchange announces the listing of the common and preferred stocks of the Hanna Furnace Company. This corporation is a recent consolidation of the Detroit Iron & Steel Company, United Iron & Steel Company, Penn Iron & Coal Company and Hollister Mining Company.

The Hanna corporation's balance sheet as of November 1, 1920, shows assets of $23,706,358.28. The preferred stock is cumulative, bears 8 per cent interest and amounts to $750,000. There are outstanding 189,500 shares of common of the par value of $10.

The Detroit Iron & Steel Company, which before the consolidation was separately listed on the Detroit Stock Exchange, operates two blast furnaces having a combined daily capacity of 685 tons of pig iron. The United Iron & Steel Company operates furnaces at West Middlesex, Pa., and Leetonia, Ohio. These furnaces with their complete equipment have a capacity of 735 tons of pig iron a day. The United Company also owns 204 beehive coke ovens at Leetonia, with 523 acres of coal adjoining the company's plant and a fully equipped mine with an annual capacity of 150 tons. The Penn Iron & Coal Company owns one blast furnace at Dover, Ohio, having a daily capacity of 450 tons of pig iron. The company also owns a modern by-product coke plant having a daily capacity of 350 tons of coke. The Hollister Mining Company has two thoroughly equipped operating mines capable of producing over 500,000 tons of ore a year and undeveloped reserves all under lease on a royalty basis located on the Menominee range near Crystal Falls, Mich.

CONSOLIDATED GENERAL BALANCE SHEET STATEMENT AS OF NOVEMBER 1st, 1920

ASSETS.

Investments		
Property, equipment & leases	$9 453 489 97	
Less depreciation & depletion	1 742 179 13	
	$7 710 310 85	
Stocks and bonds of mining, vessel, coke and other Cos.	2 655 726 13	
		$11 106 054 36
Current Assets		
Cash and government bonds	$ 275 491 84	
Notes receivable and advances	396 062 39	
Accounts receivable	4 294 922 36	
Advanced payments on ores undelivered	463 396 66	
Finished products on hand	1 160 432 36	
Raw materials	5 292 046 12	
Material and supplies	432 894 27	
		12 821 760 11
Deferred Assets		
Working funds advanced, advanced royalty, etc.		43 829 41
Unadjusted Debits		
Prepaid insurance, taxes, freights, etc.		154 861 75
Total assets		$23 706 305 28

LIABILITIES.

Bonds		
Bonds of consolidating companies		9 183 354 99
Current Liabilities		
Notes payable	$1 400 000 00	
Wages and accounts payable	2 084 427 11	
M. A. Hanna & Co.	2 000 654 82	
Detroit Furnace Co.	332 613 22	
Rent accrued	51 666 67	
Other accrued liabilities	155 160 17	
		9 183 354 99
Unadjusted Credits		
Depreciation for relining stacks and stoves	$ 40 114 96	
Federal tax for 1920, estimated	600 560 75	
Other unadjusted credits	26 062 18	
		666 737 86
Long term liability		
Trust property to which title is taken under lease		1 941 227 90
CAPITAL STOCK AND SURPLUS.		
Stock		
Preferred 8% cumulative	$ 750 000 00	
Common—189,500 shares at $10 per share	1 935 000 00	
		2 685 000 00
Surplus—Capital surplus provided upon consolidation		8 926 077 45
Total liabilities, stock and surplus		$23 706 305 28

It is assumed for the purpose of this statement that all stock of consolidating companies has been exchanged as of November 1st.

Digitized by Google

New Michigan Corporations

FOR WEEK ENDING DECEMBER 31, 1920

The Clare Road Machinery Co., Clare: manufacturing, selling and dealing in road machinery and road equipment of all kinds; F. M. Paine, John Northon, A. H. Horton, Clare ..... $ 20,000

Morisite Process Co. (Of, New Jersey): J. Campbell Morrison, Detroit, Michigan agent 500,000

Gratiot County Herald, Ithaca; printing, publishing and sale of newspapers, magazines and periodicals; also office supply business; John N. McCall, Ithaca, Ernest J. and W. Webb McCall, Mt. Pleasant; Romaine McCall, Ithaca 22,000

The Tribune Lunch Co., Detroit; engage in restaurant business; John and Charles Tatros, 127 Monroe Ave.; Anthony Pappas, Detroit 15,000

Detroit Sewer Construction Co., Detroit; constructing sewers; Charles N. McNaughton, 1222 Edison Ave., Lester F. Dodd, Charles N. Toohey, Detroit 1,000

Axton-Cozene Manufacturing Co., Detroit manufacture, buy, sell and deal in and with auto-tops, curtains, devices for operating auto curtains and other accessories; Isaac T. Axton, 2206 12th St.; Milton M. Plumb, Samuel H. Cozene, Detroit 60,000

William Wright Co., Detroit; carry on a combined manufacturing and mercantile business, manufacturing, buying and selling interior and exterior decorations for public and private buildings, including household furniture, furnishings, finishings, painting, glazing and decorating, make, buy and sell all materials and articles of every description; Charles W. Bacon, 239 Farlow Ave.; Herbert A. Wheeler, Herbert F. Davis, Albert Brown, Detroit 100,000

American Cigar Co. (F.), Jersey City, N. J.; John M. Enright, Detroit 50,000,000

Bailey Motor Car Co., Inc. (F.), New York, principal office, Chicago; C. F. Stephenson, Kalamazoo, Michigan agent 200,000

The Outlet Co., Detroit, buy, sell, deal in men's, women's, misses' and children's wearing apparel; Charles Berlin, Detroit; Max Weisman, Charles Bernstein, 151 W. 26th St., New York

Kalamazoo Industrial Realty Co., Kalamazoo; buy, sell, lease and deal in real estate, E. G. Bailey, C. E. Stephenson, Harry C. Howard, Kalamazoo 10,000

The Saint Lawrence Co., Lansing; purchase, hold, lease and deal in real estate in Michigan; Walter S. Heck, trustee, William Brogan, James J. Carey, Lansing 50,000

Saginaw Dairy Products Co., Saginaw; retail and wholesale milk, butter, ice cream, etc., Charles J. Butzin, James H. Koehler, Forbes K. Merkley, Saginaw 15,000

Gleaners' Co-operative store of Hartford; co-operative buying, shipping, selling processes, dry goods, farm implements, Charles E. Klett, Melvin J. Conklin, trustee, Decatur; Elmer H. Frederick, Hartford 10,000

Flour Buyers' Service Association, operations at Minneapolis, Minn.; office at Port Huron; furnish information, etc., to customers on market conditions, assist in purchase of grain, etc.; C. H. Jenks, C. W. Welsh, M. M. Sharpe, Port Huron .....

Hall Realty Co., Highland Park; real estate, H. LeRoy Hall, May Benford, 14049 Woodward Ave., Detroit, Highland Park 15,000 1,000

The Cleveland-Cliffs Iron Co. (F.), Cleveland, O.; M. M. Duncan, vice-president, Ishpeming, Michigan agent 10,000,000

The Athens Iron Mining Co. (F.), Cleveland, O.; M. M. Duncan, Ishpeming, Michigan agent 1,500,000

The Negaunee Mine Co. (F.), Cleveland, O.; M. M. Duncan, Ishpeming, Michigan agent 500,000

The Munising Paper Co. (F.), Cleveland, O.; E. F. Strong, secretary, Munising; common stock 30,000 shares, non-par value, preferred..... 750,000

Osceola County Creamery Co., Fairview; buy, deal in milk and cream and manufacture cheese, ice cream, butter, etc., also deal in eggs and poultry; F. F. Stutsman, M. S. Steiner, W. A. Miller, Fairview 12,500

(Continued on Page 36)

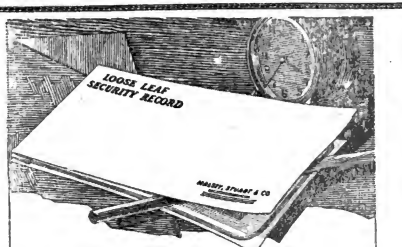
DIME SAVINGS BANK
FORT AND CHISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison

Personal Acquaintance

is always cultivated by us with the officers of financial institutions. Realizing fully the greater measure of mutually satisfactory relations which personal contact promotes, we are always glad to have our correspondents make our quarters their "headquarters" when in or near Detroit.

Capital and Surplus $3,600,000.00



A Convenient Record Book for Investments

Good business demands a systematic record of your investment holdings. Federal Income Tax requirements make it imperative

HALSEY, STUART & CO.'S "Loose Leaf Security Record" meets this need exactly. Thru its use, investors have always at hand complete information regarding their holdings—their amount of maturity, interest payment dates, prices paid, taxable status, etc.

The Record book is compact, practical and capable of expansion with the accumulation of your holdings. Included in its contents is a bond interest table, also a chart giving information regarding all issues of Liberty and Victory Bonds.

A copy of this Security Record will be sent without charge upon request for Booklet PG-7

HALSEY, STUART & CO.
Incorporated—Successors to N. W. Halsey & Co., Chicago
FORD BUILDING, DETROIT
Telephone Main 720
CHICAGO NEW YORK PHILADELPHIA BOSTON ST. LOUIS MINNEAPOLIS MILWAUKEE

Digitized by Google



To the development of the commercial enterprise of the nation this bank has contributed the best of its banking facilities and experience.

Established 1856

THE NATIONAL PARK BANK
OF NEW YORK
214 Broadway
SAFE DEPOSIT VAULTS

Subscribe for the

MICHIGAN MANUFACTURER
and
FINANCIAL RECORD

The Recognized Authority on All Michigan Matters

Every Week for a Year for Five Dollars

Highways—Where and How

(*Continued from Page* 10)

granted a year's leave of absence to serve as director of the work to be done by the new Federal Highway and Highway Transportation Committee, and with Pyke Johnson, highway representative of the National Automobile Chamber of Commerce.

Prof. Tilden is one of the best known engineering educators in the country. He was called some time ago from Johns Hopkins to Yale to undertake a reorganization of the engineering courses. At one time he was a professor at the University of Michigan. Pyke Johnson is an well known in automotive circles as Prof. Tilden is in engineering education.

Prof. Tilden and Mr. Johnson visited Detroit last week for a conference with Roy D. Chapin, president of the Hudson Motor Car Company, relative to the forthcoming conference on highway and motor transport problems at University of Michigan, February 23. This and similar conferences to be held at all the universities and technical schools where engineering is taught, are fostered by the federal committee previously mentioned, and are part of a definite program of highway development to be undertaken, the nature of which will be discussed in a series of articles in this paper, of which this is the first.

Two Things Necessary

The writer asked Prof. Tilden and Mr. Johnson to tell him just what might be expected from the Government in highway development in the next few years, and what he learned will be most encouraging to manufacturers, dealers and users engaged in the automotive business, and to those men who are waiting for the opportunity to establish the motor vehicle upon a transportation basis.

"Two pressing needs in highway transport facing this nation today are legislation for the present requirements and education and research for future needs," said Prof. Tilden. "We need legislation such as the Townsend bill would provide—legislation establishing a Federal Highway Commission of five men selected by the President with the approval of the Senate. It may be possible that such a commission would eventually be included in a federal Department of Public Works, should such a department be established. However, it may be two years or more before the Government has such a department. The Reavis resolution provides for a reorganization of the government departments, but the investigation preliminary to any recommendations concerning this reorganization will take at least two years, and highway development cannot wait that long.

"We must have a budget for highway work prepared for 1922 and 1923, and considerable work must be done during the next year. The urgent needs in road work would be best met by the establishment of a Federal Highway Commission to begin laying out a system of trunk roads in co-operation with the states. This commission could take over the personnel and work of the present Bureau of Public Roads of the Department of Agriculture."

Mr. Johnson remarked that there would be opposition to a Federal Highway Commission on the ground that it would result in the organization of a new political machine of dangerous dimensions.

"This we do not want," Mr. Johnson said. "For that reason we believe that existing agencies in highway construction should be utilized where efficient. State highway organizations should be used as well as the present force of 900 or more good road men now working from the Bureau of Public Works. The real work of a Federal Highway Commission would be to co-ordinate the road work throughout the country and eliminate the expense that results from duplication, unavoidable under the present system.

"At present if a state wants federal aid for a piece of work, the government engineers inspect the road in question and the state engineers also make inspections and reports, an unnecessary duplication of work which could be eliminated by having the strictly national roads laid out by the federal commission, and the work done by state and federal units operating under the federal commission's supervision."

Where Research Comes In

Prof. Tilden called attention to another weakness in the present system, notably the construction by the Government of highways having no primary importance or value.

"The need of commercial highways in this country," he said, "is too great to waste time building second or third class roads traversing small sections of the country, but having no connection with roads of primary importance. This type of road building may serve a political purpose, and probably at some future time might be connected with a trunk highway, but it does not meet the real national problem.

"And this problem introduces the subjects of research and education. The first task of a Federal Highway Commission would be to make a survey of the whole country to ascertain where the primary trunk roads should be

Digitized by Google

located, the most comprehensive routes to be covered, with the thought of economy always in mind. It is one thing to determine where a trunk highway can be laid out with the greatest degree of accessibility to the largest territory, but it is quite another problem to apply the acid test of economy to location desirability.

"It will often be found that while the locations and routes suggested are admirable as to accessibility and comprehensive service, the engineering problems involved and resulting from the topographical nature of the territory prohibit economical construction. The fact of the matter is that we do not know much about building roads. This is an odd statement to make and probably will invite debate. It is the point where education enters.

"The United States government has a billion dollars to spend for road construction, yet A. T. Goldbeck, engineer in charge of tests in the Bureau of Public Works, says there is not an engineer in the country who can lay down a rational plan of design for highways to meet the new traffic conditions.

More Road Engineers Wanted

"Up to five years ago engineers showed marked ability in building roads. No one can reasonably criticise the highway construction of the years prior to 1915. They served the purposes for which they were intended; but what was good, sound construction then has no weight today. We are facing a new traffic problem of motor transport. Roads built for light passenger vehicles will not sustain the heavy duty freight truck. They even suffer from the heavy volume of passenger car travel. And before we can meet this new condition efficiently we must train a new school of engineers. Men trained as railroad engineers cannot build roads. This country needs today more road engineers than all the colleges and technical schools in the country can graduate in five years.

"Thirty and forty years ago the railroads absorbed the output of engineers. Then the problem of railroad building was new and there was a great amount of this kind of construction work to be done. Railroad building today is infinitesimal, yet railroad engineering is still the basis for such highway engineering instruction as is offered. Because so many graduate engineers never engage in the profession it is necessary to train 5,000 students in engineering to get 1,000 engineers who will follow the profession as a life work.

"If we could proceed with highway building with the prodigality of the Romans or the indifference to cost and conditions of military engineers in time of war, the task would not be so difficult. We cannot lay six-foot foundations as the Romans did, nor recruit an army at $30 a month per man as the War Department did in the World War. I am confident we can build 20-foot roads to withstand all that modern traffic implies and build them economically when once we get started.

"Our first efforts must be directed at establishing a standard curriculu on highway construction for the universities and technical schools of the country. Under road structure alone there are 100 problems to be distributed to colleges and technical schools. Modern road building involves economics, under which heading we have comparative costs of highway and other forms of transportation, the relation of highway costs to highway use, traffic sensing, number, type, percentage of types of vehicles now using the roads, and the tonnage problem.

Motor the Chief Medium

"Highway transportation must consider highway transport mediums, and motor transport is the chief medium to be considered. If we are to move 20 tons on wheels over highways, we must know all about the vehicle before we can

(*Continued on Page* 34)

CARBONIZING CYANIDING SMALL
HARDENING AND GRINDING
ANNEALING & TEMPERING STRAIGHT CYLINDRICAL



HARDENING
We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.
GRINDING
Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.
Piston Pins — Dowell Pins Hardened Straight — Headless Shackle Bolts
Valve Roller Pins — 101 Pump Plungers — Universal Joint Pins
Roller Clutch Pins — Roller Bearing Rolls Straight — Small Gear Shafts
Differential Gear Pins
Detroit Machine Tool Company
6543 St. Antoine St. Telephone Market 575

Digitized by Google

(*Continued from Page* 33)

thoroughly understand what kind of a road to build for it.

"Under the head of physical engineering we have surfaces, road structures to fit the needs of traffic, and location factors. The subject of public policy is all important. Our instruction in safety is a part of this problem, but only the beginning. We must have definite standards by which to determine administration, financing and regulation. The subject of maintenance is important. Not until just before the war did this country have any definite program of maintenance, because we were never able to get the money. It must be apparent to anyone who studies these problems that there is an urgent need of a storehouse of scientific data which will serve as a source for a textbook on highway transport similar in character to Wellington's 'Economic Theory of the Location of Railways.'

"With the proper support of the Government through legislation, the aid of the educational institutions in providing adequate highway transport and highway engineering education, and the thorough understanding of the public as to what its highway needs are, we will eventually be able definitely to prove the truth of President-elect Harding's statement that:

"'Transportation has made every avenue of civilization. It is the one agency for putting every community in the republic on the way to commercial progress.'"

Getting the Power to the Machine

(*Continued from Page* 8)

again at the other side, being thus crossed over. It is evident that a rope threaded on this drive would, after running a few minutes, have distributed the tension equally to all strands and that the tension would remain so in spite of variation in load or speed. This single-groove pulley must necessarily be of large enough diameter to extend from the top of the sheave at the one side to the bottom of the sheave at the other. This pulley is enclosed in a sliding framework to which is attached a cable which suspends (over a pulley) a 1,700-pound weight, thus keeping the driving rope at the proper tension, which tension can be varied by increasing or decreasing the weight. This system of tightening the rope is the most common where the American system of rope driving is used. One of the chief disadvantages of the English method is that a complicated system of tighteners has to be used or the ropes have to be spliced, and inasmuch as ropes stretch with continued use, this becomes a serious fault.

The advantage claimed for the English system is that if one rope breaks the others will carry the load; while if the rope breaks on the American drive, the unit it is driving is down and out until repaired. One of the advantages of the rope drive is that a higher speed is possible than with the belt. Probably the fastest rope drive in American is one in Cleveland, where 19 two-inch ropes travel 7,800 feet a minute over a driving sheave 14 feet 4 inches in diameter, transmitting approximately 1,400 horsepower. The longest known life of a rope drive is in England, in a Lancashire cotton mill. This was installed in September, 1878, and is still doing satisfactory duty, delivering 820 horsepower at about 4,400 feet travel a minute. It is not unusual to find cotton ropes doing duty for 20 years and over.

The Silent Chain

The silent chain has gained favor rapidly in the last few years as a medium for power transmission. The construction is simple, consisting of stamped links of steel pivoted together into a multiple chain. Besides permitting high speeds without excessive noises, silent chains are not affected by heat or dampness. The greatest advantage of the silent chain lies in the fact that the drive is positive, no slippage being possible as with a belt, and that the chain can be run slack on a short drive, which is practically impossible with a belt. It can also be run at high speeds without the disagreeable noises attending gear drives using the ordinary sprocket chain.

The Link-Belt Silent Chain consists of a series of leaves or plates, the joints of which consist of segmental case-hardened bushings and case-hardened steel pins. This construction limits the natural wear on the pin and the inside surface of the bushings. The gear wheels are designed for this purpose and the teeth carefully cut by an accurately generated cutter. The larger gears are usually made of cast iron and the pinions of steel.

The Morse Silent Chain also consists of a series of heat-treated steel leaves or plates, but the connection between the links consists of two pins, one of which is called the seat pin, and the other the rocker. Each is held securely in its respective end of the link, thus eliminating motion at this point. The seat pin has a plane surface against which the edge of the rocker pin rolls or rocks as the chain engages or leaves the gear. This rocking bearing, operating as it does on a sliding friction principle, makes joint wear to a minimum. The operation of the chain on the gear is similar in both instances, the shape of the link being such as to spread the load pressure over a number of the gear teeth, thus dividing the strain and wear.

The co-efficient of friction of various kinds of belts depends very largely on the kind of pulley with which the belt is operating. The original pulley was, of course, a wooden one, and wood pulleys are preferred today by many users. In fact there are more wood pulleys in use today than any other kind. This type usually costs less than the iron or steel pulley, and will stand rough handling and hard work. Iron pulleys are preferred by many, on the ground that an iron pulley will wear much longer than a wooden one, due to its more solid construction and greater tensile strength.

The relative friction value of leather on wood is so much greater than that of leather on iron that a certain pulley manufacturer has produced a pulley which is intended to combine the strength and safety of the iron pulley with the pulling power of the wood pulley. The hub and arms are of solid cast iron, machined so that the weight is equally distributed, and the inner rim, which is also of cast iron, is bored and turned and otherwise finished all over before it is bolted upon the iron center. Over this is laid a wood rim composed of hard maple segments, properly laid up in glue, with "breaking joints" in the several courses, and dried under heavy pressure to insure good gluing. It is claimed that a pulley of this construction can be operated at the highest rim speeds known in commercial practice, will carry the heaviest loads that a leather belt can put upon it, will withstand shock loads, operate without vibration and combine the strength of the iron pulley with the tractive pull of the wooden one. And the extra traction is worth considering. Assuming that 50 per cent of the circumference of the pulley is embraced by the belt, following are the relative values of leather belt operating on wooden and iron pulleys as given by two acknowledged authorities:

	Wood	Iron
Morin-Appleton's Encyclopedia of Mechanical Arts	4.38	2.41
Haswell-Engineers' and Mechanics' Pocketbook	4.40	2.40

Pulleys of Paper and Leather

The steel pulley has been coming to the fore in the last few years, due to its strength for the weight involved. The steel pulleys of a few years ago were badly formed, did not run true on the shaft and were easily damaged. The steel pulley of today, however, is well constructed, the hub is pressed true with the rim, cast hushings are used, and the edges of the rim are faced true with the bore. Another pulley which has been gaining in popularity for certain uses is the paper pulley. The co-efficient of friction of paper pulleys is very high, which is a necessary quality where power is to be transmitted from motors to lineshafts. An electric motor runs at a very high rate of speed; therefore the driving pulley must necessarily be small, and a small pulley, of course, presents a very small amount of surface to the



Top—Dodge Iron Center Wood Rim Pulley, split type, single arm.
Center—Chapman Ball Bearing.
Bottom—S. K. F. Ball Bearing Hanger With Cap Removed.

Digitized by Google

belt. There being no shrinkage strains in a paper pulley as there are likely to be in cast iron, nor numerous pieces as there are in wood pulleys, it may be run at a high rate of speed with safety. Paper pulleys are about one-half lighter than cast iron pulleys, are not easily damaged and are practically non-breakable. Paper being a non-magnetic material, it is not subject to the attraction of motor or dynamo fields, thereby relieving the armature shafts and collars of end strains.

Another pulley which is very good for the same purpose and for the same reasons is the leather pulley. As the friction of leather on leather is five times that of leather on iron, the efficiency of the leather pulley is evident.

Some engineers claim that under the influence of the heat which is produced by friction, the tannic and sebacic acids contained in the leather of the belts unite chemically with a certain amount of the iron in an iron pulley and form a hard compound in the belt which rots the leather. This of course is avoided by the use of the leather pulley. A leather or paper pulley will admit of running the belt looser, also, thus relieving the strain on the belt and saving the bearings on the motor, machine or lineshaft.

Bearings

The subject of bearings is receiving a greater amount of attention in the last few years than it used to. Up to very recent years, a plain cast iron bearing or, at most, one lined with babbitt was good enough for the line and countershafts. Very recently however, mechanical engineers and factory owners have become aware of the fact that the friction generated in the lineshaft journals is felt in the coal pile or at the watt-meter. The result is that some very good ball and roller bearings have appeared on the market, and the results which have been obtained have been surprising. Ball bearings offer the least friction resistence of any known type of bearing. In the Chapman ball bearing a double row of balls approximately one-third the diameter of the shaft is used. These are of chrome alloy steel, accurately ground to .0001 of an inch. The raceways are made of a special grade of steel heat adapted to this purpose, carefully heat-treated, ground and polished. A substantial two-piece pressed steel cage, electrically welded, acts as a separator between the balls. The general design is such that while the load is distributed over the whole bearing, each row of balls is a unit in itself.

The S. K. F. ball bearing has the inner surface of the outer race of the bearing ground in the form of a sphere whose center is at the center of rotation of the bearing. The inner ball race, together with the double row of balls, is free to rotate within this spherical surface at any angle, which makes the bearing self-aligning. The inner race tilts with the shaft. The bearings are gripped on the shaft by means of a tapered sleeve between the inner ball race and the shaft, this split sleeve being drawn up and held securely in position by a locknut and set screw. Shafts in cast iron, babbitt or bronze bearings frequently become set if the shafting equipment is idle for any length of time. The oil is pressed out of the bearings and the rubbing of metal to metal generates friction which requires an abnormal amount of power to overcome. A ball bearing does not depend upon a film of oil to support the load; consequently this difficulty is eliminated.

Roller bearings are preferred by some engineers, on the ground that the roller bearing has a longer bearing surface and should therefore wear longer. A common example of this type of bearing is the Hyatt, which has a bearing surface composed of hollow, cylindrical rollers, each being wound from flat strip steel into a closed helical coil. Thus they are flexible and can adapt themselves to slight in-

(*Continued on Page* 36)



PRODUCTION FOUNDRIES COMPANY

We have successfully specialized to

SAVE YOUR DOLLARS
by our modern intensive production methods applied by an expert organization in our

40 TON

GRAY IRON FOUNDRY
OF ANN ARBOR, MICHIGAN

On Michigan Central Main Line for Carload Lots

BRANCH SALES OFFICE
315 Park Building, Detroit **Telephone Main 8336**

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Digitized by Google



Getting the Power to the Machine

(*Continued from Page 35*)

regularities in either journal or box without causing excessive pressure. The cylindrical hollows in the rollers serve as storage space for lubricant and the helical interstices distribute the oil the entire length of the box. Half of the rollers have a left-hand helix and the other half, right-hand. The shafting bearing is of the standard type with a horizontally split box so that it can be put on a shaft anywhere and does not have to be slipped on over the end. The box contains linings of hardest steel against which the pressure is received, and an oil wiper is provided in each end to prevent leakage of oil. A test made comparing Hyatt standard lineshaft bearings with babbitted bearings showed a saving for the roller bearings of 64.9 per cent. The test was made with a shaft 2 15-16 inches in diameter, and 152 feet long, supported by 20 hangers.

BERKEY & GAY'S MELTING POT

Twenty-one nationalities are represented among the workers of the Berkey & Gay Furniture Company, Grand Rapids, which is one of the largest concerns in this line in the country. A chart compiled during November shows the following percentages as to the nationalities: American, 47.87 per cent; Polish, 15.52; Dutch, 14.20; German, 6.88; Russian, 3.38; Lithuanian, 2.63; Swedish, 2.48; Austrian, 1.90; English, 1.61; Canadian, 1.46; Irish, .58; Italian, .58; French, .43; Syrian, .43; Bohemian, .28; Norwegian, .28; Scotch, .28; Roumanian, .28; Danish, .16; Armenian, .16; Turkish, .16.

A Clean Floor Board



This little lever moved by the thumb selects the speeds.

The appearance of any car is enhanced by taking out all the trappings sticking out of the floor board. In closed cars this appearance is a decided advantage.

In an open car where a lap robe may be used, there is a further advantage of getting rid of the "Wobbiestick" hand gear shift lever and the emergency brake lever.

This can be done by removing the hand gear shift lever and placing the emergency lever to the left of the steering wheel. The C-H Magnetic Gear Shift eliminates the hand lever.

The clear floor board, free from levers and other trappings, is well worth considering when designing or purchasing a car.

THE CUTLER-HAMMER CO.
Magnetic Gear Shift Department.
Milwaukee and Detroit

C-H **Magnetic Gear Shift**

FOR RENT

13,000 Square Feet; Manufacturing Space; 2nd and 3rd Floors; suitable for machine tool work; also offices. Modern, fireproof, central location (½-mile circle); passenger and large freight elevators.

LOUIS G. PALMER & CO.

558 Penobscot Bldg. Detroit, Mich.

New Corporations

Continued

INCREASES

Baltjes Pitel & Building Material Co., Grand Rapids, from $100,000 to.....	$ 200,000
Rice Machine & Tool Co., Jackson, from $3,000 to.....	30,000
Warner Electric Co., Kalamazoo, from $14,000 to.....	50,000
Turtle Lake Lumber Co., Grand Rapids, from $400,000 to.....	600,000
West Detroit Auto Sales Co., Detroit, from $25,000 to.....	100,000
Mollock Knitting Mill's, Grand Rapids, from $50,000 to.....	100,000
Hayes Ionia Co., Ionia, from $1,287,500 to.....	1,000,000
Rudy Furnace Co., Dowagiac, from $250,000 to.....	650,000
American Cigar Co., N. J., Jersey City, N. J., Detroit, from $20,000,000 to...	60,000,000
Crest of Highlands Co., Detroit, from $20,000 to.....	60,000
Grand River Manor Realty Co., Detroit, from $30,000 to.....	60,000
Van Dyke Avenue Farms Co., Detroit, from $30,000 to.....	60,000
Van Dyke Development Co., Detroit, from $50,000 to.....	100,000
Ironsville City Lands Co., Detroit, from $30,000 to.....	60,000
Riverbank Manor Realty Co., Detroit, from $15,000 to.....	30,000
Grafiot Little Farms Co., Detroit, from $20,000 to.....	40,000
Chicago Land Co., Lansing, from $15,000 to.....	30,000
Grafiot Macomb Development Co., Detroit, from $90,000 to.....	180,000
Brookline Hills Realty Co., Detroit, from $30,000 to.....	60,000
Centre City Lumber Co., Jackson, from $20,000 to.....	100,000
Russel Wheel & Foundry Co., Detroit, from $750,000 to.....	1,150,000
Grand Rapids Show Case Co., Grand Rapids, from $150,000 to.....	1,500,000
Grand Rapids Veneer Works, Grand Rapids, from $360,000 to.....	500,000
Charles P. Limbert Co., Holland, from $300,000 to.....	600,000
Johnson Furniture Co., Grand Rapids, from $90,000 to.....	360,000
American Enameled Magnet Wire Co., Muskegon, from $250,000 to.....	690,000

(*Continued on Page 38*)

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354



Joseph & Feiss Co., Clothing Factory, Cleveland, Ohio

Abundant light



good ventilation and clean open floor space are as important to other industries as to a clothing plant. It is easier to recognize the need than to attain the result—our experience will help you.

LOCKWOOD, GREENE & CO.
ENGINEERS
45 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK
CLEVELAND
Montreal, P. Q.
PARIS, FRANCE

MOTCH AND MERRYWEATHER MACHINERY CO
THE
METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

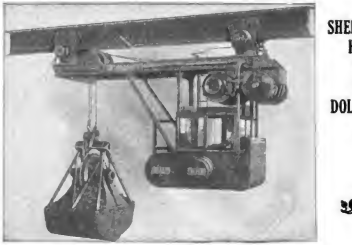
Digitized by Google

CHERRY 3096 CADILLAC 5877

W. C. DU COMB. JR.
E AN ELIVER
FROM STOCK
HIGH GRADE POWER TRANSMISSION
DISTRIBUTORS

SKF BALL BEARING SHAFTING HANGERS & PILLOW BLOCKS
KARGE CUSHION TRANSMISSIONS FLEXIBLE COUPLINGS
SKF SELF ALIGNING BALL BEARINGS FOR SERVICE.
BALL BEARING LOOSE PULLEYS & CLUTCH PULLEYS
MOTORS, PULLEYS, GEARS, COLLARS, SHAFTING, BELTING
JOHNSON FRICTION CLUTCH
MILLWRIGHT SERVICE
137-141 Woodbridge St. East, Detroit, Mich.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 18 W. COLUMBIA ST. DETROIT CAD. 6164

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

(*Continued from Page 36*)

W. A. Hurt, Inc., Detroit, from $1,000 to $20,000
Michigan Screw Co., Lansing, from $500,000 to $1,000,000
Kawneer Co., Niles, common stock, from $500,000 to $875,000
Welch Manufacturing Co., Grand Rapids, from $225,000 to $325,000
Worden Grocer Co., Grand Rapids, from $1,000,000 to $1,500,000
Clallam Lumber Co., Grand Rapids, from $2,500,000 to $2,600,000
Lloyd Mfg. Co., Menominee, from $1,000,000 to $2,000,000
J. W. Wells Lumber Co., Menominee, from $650,000 to $2,000,000
W. H. Hill Co., Detroit, from $100,000 to $1,000,000
Anti-Skid Device Co. of Kalamazoo, Mich. (name changed to Automotive Equipment Co.), Kalamazoo, from $5,000 to $20,000
Girard Lumber Co., Menominee, from $20,000 to $750,000
McKenzie Milling Co., Quincy, from $25,000 to $125,000
Wayne Realty & Investment Co., Grosse Pointe Farms, from $50,000 to $120,000
Peoples Lumber Co., Detroit, from $20,000 to $50,000
Plymouth Lumber & Coal Co., Plymouth, from $30,000 to $75,000
Detroit Soda Products Co., Delray, from $50,000 to $150,000
Michigan Crown Feeder Co., Ypsilanti, from $200,000 to $500,000
L. H. Field Co., Jackson, from $100,000 to $500,000
Steel Furniture Co., Grand Rapids, from $50,000 to $250,000
Austin & Raup Co., Detroit, from $40,000 to $60,000
Special Furniture Co., Grand Rapids, from $50,000 to $150,000
Flint Cornice & Roofing Co., Saginaw, from $2,500 to $10,000
Robert Smith Co., Lansing, from $100,000 to $250,000
Andrew C. Sisman Co., Detroit, from $600,000 to $700,000
McRae & Roberts Co., Detroit, from $395,000 to $645,000
Carl E. Schmidt & Co., Inc., Detroit, from $1,000,000 to $1,400,000

DECREASES

Art Cenier Corporation, Detroit, from $200,000 to $90,100
Kawneer Co., Niles, pref. st. dec., $410,000 to $225,000
La Salle Improvement Co., Detroit, from $36,000 to $7,800
Bloomfield Estates Co., Detroit, from $23,760 to $7,820
International Trunk & Bag Co., Detroit, from $50,000 to $5,000

CHANGE OF NAME

Barley Motor Car Co. (name changed to Roamer Motor Car Co.), Kalamazoo $2,500,000

NOTICES OF CHANGES OF ATTITUDE

Otsego Cattle Co., Vanderbilt 1,000
Bloomfield-Highlands Co., Pontiac 20,000
Vassar Milling Co., Vassar 25,000
Carson Motor Co., Detroit 25,000
Ewing & Pennell Co., Lansing 30,000
Merrill School of Impression, Detroit 25,000
Frank V. Martin Co., Detroit 10,000
Holly Heiman, Battle Creek 5,000
Compotype Co., Detroit 100,000
Ironclad Co., Detroit 5,000
Standard Hauling Co., Detroit 10,000
Marion Grain Co., Marion 8,000
Holmes Realty Agency, Lansing 10,000
Griswold Drug Co., Detroit 15,000
Michigan Desk Co., Grand Rapids 50,000
Fraser-McEwan Co., Bay City 100,000
Coyote Productions, Inc., Detroit 10,000
Dunton Co., Grand Rapids 25,000
Candler Realty Co., Detroit 26,000
Milford Lumber Mfg. Co., Milford 8,000
Hazlett Park Co., Okemos 7,000

NOTICES OF DISSOLUTION

Pioneer Fox Farming Co., Bear Lake 4,500
Detroit Architectural Iron Works, Detroit 15,000

NOTICES OF WITHDRAWAL

Eberling Machines Sales Co. (F.) (O.), Cleveland, O., Detroit 10,000
Cleveland-Cliffs Iron Co. (F.), Ishpeming 5,000,000

Negaunee Mine, amendment fixing term at Dec. 31, 1929, Negaunee, Cleveland, O. 500,000
Athens Mining Co., amendment fixing term at Dec. 31, 1929, Iron Mountain, Cleveland, O. 1,000,000
Munising Paper Co., amendment fixing term at Dec. 31, 1929, Munising and Cleveland, O. 2,250,000
Munising Woodenware Co., amendment fixing term at Dec. 31, 1929, Munising and Cleveland, O. 50,000

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Property of Michigan State Library



Detroit, January 15, 1921

WITHOUT CONSULTING THE CORPS

(Financial Section Page 1921)
JAN 17 1921

Vol. 27. No. 3 *Price Fifteen Cents*



No Engine is More Efficient Than Its Cooling System

EVERY Long Cooling System is scientifically adapted to the particular engine which it serves, thereby assuring the maximum of cooling efficiency.

Nineteen years of unswerving adherence to a *policy* to produce the best that can be produced; accumulated experience derived from pioneer efforts and subsequent development; foremost engineering skill that meets specific requirement with specific and *proved* application; precision; skilled and long-trained mechanics; exclusive and perfect mechanisms of production; these things have contributed in the creation of the most *perfect* cooling system.

No engine is more efficient than its cooling system.

The Long Cooling System guarantees the accomplishment of maximum efficiency at minimum cost.

LONG MANUFACTURING CO.
Detroit, Michigan

Pioneer Makers of Cooling Systems for Gasoline Engines

LONG
COOLING SYSTEMS

The Recognized Standard for Tractor, Trucks and Motor Cars.

MICHIGAN
MANUFACTURER
AND
FINANCIAL RECORD

Established 1907

CONTENTS

January 15, 1921

	Page
Without Consulting the Corpse. Rumor mongers make all the funeral arrangements for Michigan's retail motor car business. Now it's discovered the patient's condition has been grossly exaggerated. By F. W. Hersey.	5
Michigan Sweetens It..... Something about the state's place in sugar making—processes, plant facilities, money invested, distribution. By Howard Campbell.	7
Tire Business Picking Up.....	9
Freight Rates and Living Costs. By George Dallas Dixon, vice-president in charge of traffic, Pennsylvania Railroad Company.	10
Cars Sell at New York Show....	11
Planning the Port of Detroit....	12
1920 Truck Production Analysis.	13
News of the Motor Industry..14-15	
Transportation Matters	16
The Week's Building.....	18
New Adrian Industries.....	19
Editorial 20-21	
Financial Section ..... Edited by Phil S. Hanna.	22-29
Editor's Mail	30
New Publications	31
New Michigan Corporations.....	36

Vol. 27 Detroit, Mich. No. 3

Published Every Saturday by the Manufacturer Publishing Company
Suite 811 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

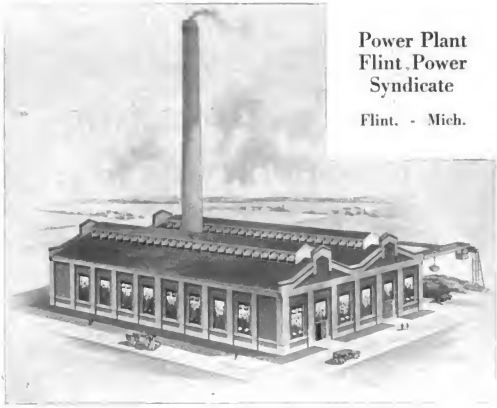
JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google



Power Plant
Flint Power
Syndicate

Flint. - Mich.

BUILDING CONSTRUCTION

W. E. WOOD CO.

DETROIT

MICH.

Equipped by experience to build for you economically and speedily

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

Without Consulting The Prospective Corpse

Rumor Mongers Make All the Funeral Arrangements For Michigan's Retail Motor Vehicle Business; Now It's Found Patient's Condition Is Not Half So Bad

By F. W. HERSEY

AFTER GATHERING a fine collection of ill-sounding rumors relative to the various kinds and depths of ditches into which the retail motor car business in Detroit and Michigan was said to have skidded as a result of the temporary paralysis of the buying public's first finger and thumb, I decided to make a pilgrimage into gasoline alley and view the wreckage.

One beautiful thing about rumor is its self-propelling character. When the observant Chinese shirt polisher remarked laconically: "No pushee, no pullee, hut goee like hellee," he was talking as much about rumor as trolley cars or automobiles. Rumor travels on a thousand wings and enters wherever a door or window is left open.

I gathered from the general parade of whisperings that the retail motor car business had been laid out with candles and was only waiting for the tenor soloist to sing "Flee as a Bird," after which the death march and then the grave.

Grossly Exaggerated!

Another report was that the cause of death was a complication of diseases, one of which was acute indigestion induced by the attempt of the trade to swallow and digest several thousand motor cars sold on time contracts, but thrown back upon the trade because the buyers could no longer keep up payments. I was led to believe that in every salesroom the few salesmen who were left moved about on traveling cranes because the floors were packed so closely with new and old cars, which could never be sold.

I felt that, in setting out on my sad journey, I should wear crepe on my hat and prepare a neat little speech of condolence well-seasoned with expressions of appreciation for the many good qualities of the deceased. I decided that if the motor car business proved to be the charnal house it was depicted by rumor, I should return to the office and write a little something about death having no sting and the joys of the future life where motor car dealers and salesmen had gone.

About the last hours and final dissolution of the business I decided to say nothing, as the less said, the sooner mended.

Ah, but what a great and glorious feeling comes over you when you find the reported death of a friend or relative has been grossly exaggerated!

Not only has the death, hnt even the severity of the illness of the automobile business been grossly exaggerated. There is no use denying it has been sick, hnt the cause was dilitation of the heart. For months the dealers had been signing contracts, counting money and performing the other tasks incident to selling motor cars, at such speed that their pumping systems broke down. Then the buying public suffered a stroke of paralysis of the digits and old Doctor Economics ordered a rest and diet.

I am here to opine that the quick recovery made by the patient is worthy of a long article in the medical journals. The business has had rest and quiet enough. It is showing a restless disposition. I have done considerable pulse feeling along the line on my own hook and am satisfied with results. I stood outside of one of the Detroit's splendid sales and service buildings dedicated to the motor car business and wondered if it conid be possihie that a business which justified such magnificence conid possibly die.

I refused to concede such to be possible, and I find that the trade takes the same view. Gradually, hnt as surely as the tides ebh and flow, the motor car retail business has emerged from the slough of despond to the higher, firmer ground of cheerful optimism. The "rue" has been written into "rumor."

"Business for 1921? Why certainly, if you go after it. We have passed that period when the order taker, masquerading as a salesman, could say crisply: 'You're next. Please don't crowd.'" That is the kind of talk I heard. Figuratively speaking, I removed the crepe from my hat and swallowed my speech. When dealer after dealer told me that his December business was better than that of November, and January had opened strong, i just reversed the order and said: "Sting, where is thy death?"

There is plenty of money in the public sock, in the era of extravagance the leaven of thrift was working. That tide of buying stubbornness, largely the result of unfounded fears and price resentment, has had its flow, and now the ebh has set in. Having displayed its rancor over real and fancied selling abuses, the public is recovering its good nature under the mellow influence of the January sales of commodities of lesser hulk and cost, and, having saved a dollar here and there, is beginning to feel affluent, and affluence suggests motor cars.

Even as early as this—only two weeks, let us say, after the peak of the consumers' strike was reached—improvement is being noted. To the observer who hasn't a nickel invested even in a tire pump, the cautious approach of Mr. and Mrs. Ultimate Buyer within the radius of fascination of the motor car is highly amusing. The new type of prospect is like a butterfly. He flutters about this and that mechanical flower from the automotive garden, and the salesman who catches him will be the boy who carries a net and isn't afraid to get a little dew on his feet. The bargain hunter who left the department store bruised, but happy, approaches the motor car counter with much the same 99-cents-marked-down-from-a-dollar viewpoint as he expressed in the department store.

It is a good sign and works both ways. It indicates a desire to hy a car. it indicates a return to a true conscionsness of values; and where, in the whole realm of commerce, can you get more value for a dollar than in the modern motor car?

Cheerful Angels-to-Be

For men who were supposed to be planning their own funerals, the dealers along automohile row were the most cheerful angels-elect i ever met.

"Are you downhearted?" I asked Sales Manager Mayhew, of Harvey G. Wilson's organization.

"I should say not," he replied. "We are putting 25 cars on the floor and are going to move into a larger place. Compared with what the husiness has experienced, these are quiet times, hnt there is business coming."

I asked him about the "throw-backs"—the cars purchased on terms and turned hack because of inahlity to meet the payments.

"There are bound to be cancellations," he said. "Undoubtedly there have been quite a few within the last two or three months, hut when compared with the enormous number of sales made on such contracts, the cancellations are a small item."

Pursuing this particular subject further, it must impress any thoughtful person that if the cancellations had been as great as rumor has tried to indicate, the retail motor car husiness conld not have weathered the storm as well as

Digitized by Google

it has. It is true that there is considerable unemployment, but the percentage of persons buying good cars on contracts, and who are out of work, cannot be so great, for the reason that such contracts would not have been made unless the certainty of steady income of fair size had been established.

One of rumor's pet reports is to the effect that a dealer handling a line has car had seven new cars sold on contract turned back to him. When the story was run down it turned out that the dealer had one car, and a used car at that, turned back.

From the Detroit factory branch of the Reo Motor Car Company I get the report that dealers from out in the state are asking for cars; that during the last two weeks the general sales situation has brightened up wonderfully. I was told that more persons have been looking at Reo models in the last fortnight than at any time in four months.

"Prospects are looking for good trades," the sales manager said, "and sales could have been made had we been willing to meet trade terms proposed."

"Trade terms proposed" suggests the thought that because of the low demand and the temper of the buying public, some prospects will seek advantages in car purchases which no dealer can make and remain in business. This desire to compel sacrifices on the part of the dealers has shown itself, but among those motor car men I visited I found a general understanding that most of the trades and contract relations would be exercised in the future.

That prospective purchasers with money available are holding off for hoped-for price reductions in cars within the next month or two, I was convinced after making the rounds of the trade. The sales manager at the Detroit branch of the Cadillac Motor Car Company mentioned it.

"There is plenty of evidence of business in the near future," he said. "Price reductions are looked for on the theory that the raw commodities are to be appreciably cut in price, there is no reason why the motor car should not be. Certainly we have reason to believe that there will be a shortage, which would preclude any possibility of reduction."

Some Signs of Revival

W. D. Block, Marmon and Lexington dealer, looks for a buying rush before March.

"I see signs of it now," he said. "For some time there has not been the least interest shown in motor cars by the general public. This apathy has changed within a month to a mild interest, and I believe that following the national shows business will pick up at a lively pace. There will have to be a fixed policy on payments and discount charges. I consider 40 per cent down, 50 per cent if possible, as the least a dealer can accept."

"I would rather work than talk," W. J. Doughty, Franklin dealer, said. "This is a situation which requires good, old-fashioned plugging. Heretofore we have been delivering cars. Now we must sell them. I have seen enough to convince me that there is no cause to worry about the future. I have added men to my service department and am ready for an active sales campaign."

"The voluntary appearance of prospective buyers in our salesrooms every day, I consider the very best evidence of a gradual return of business," said Manager Smith, of the sales department, Simons Sales Company, Overland and Willys-Knight distributor. "There is a desire to buy cars and no evidence of a lack of money. So far I have seen no evidence of dissatisfaction with existing prices, although the tendency is to drive as hard a bargain as possible where there is a used car to be traded in. During December our business showed an increase of 50 per cent over November, and it was surprising the number of buyers who paid 80 per cent of the purchase price where contract payments were desired. We face in this business the demand for a change in sales methods. We must study the needs of prospects, a sort of service which begins before a sale is effected. Organization also will have an important influence upon future sales, because the dependability of the car will be largely judged by the character of the organization handling it. With the proper organization and the right kind of salesmanship, no dealer need be fearful of the future."

The sales manager of the Packard branch in Detroit answered my question regarding business conditions by reporting five new cars and three used cars sold the previous week.

"While we will not have the wild scramble for cars experienced during 1919 and the early part of 1920, there is bound to be plenty of business," he said. "I am inclined to think the public is looking for lower prices, expectations being based upon price reductions in other lines. Once they are satisfied prices are firmly established, buying will begin."

Paige Has Unfilled Orders

Apparently the sales force of the Paige-Detroit Sales & Service Company has discovered the magic talisman that brings business, for the sales manager reported he had more unfilled orders for spring delivery, "three times over," than he had at this time last year.

"We have our new models, which undoubtedly helps a lot," he said, "but it is not all new models. We have improved our sales organization and have taken note of every stray bit of evidence leading to possible sales. People are not broke, but they have not entirely recovered from the suspicion that prices are too high. The salesman with a complete knowledge of the facts and the ability to explain them can make sales."

"I am not denying that business has been slow, nor that we cannot expect the volume we have enjoyed, but I do believe that there will be a demand for good cars at right prices large enough to create a shortage before 1921 is half over."

The general opinion on business at the Bemb-Robinson Company, Hudson and Essex dealer, was that the New York show would stimulate the trade everywhere, and with attention again focused upon the motor car as a result of the shows and the approach of spring, buyers who had been holding aloof for one reason or another would come into the market.

The Thompson Auto Company, Maxwell and Chalmers dealer, looks for a marked change in from 60 to 90 days, while the Miller-Judd Company, which sells the Liberty, reports a lively interest in the cars and a willingness to pay cash where a sale has the appearance of a real bargain.

Want the Trade to Sacrifice

"Between now and the middle of February," the sales manager of Baker-Fisk-Hugill Company, Dort dealer, said, "you will note a gradual increase in motor car sales. A lot of sure-fire prospects want to see the trade make some sacrifices. That is to be expected. They see prices tumbling on every hand, and while they have the money to buy cars, they are inclined to be thrifty. For us December was as good as any December in other years—which is saying something, because this is not the time of year when motor cars sell well, and if times were really as bad as pictured, December, this year, ought to have been a gloomy month. We need to improve our salesmanship to meet the new conditions, for we are in a sellers', not a buyers' market. Buying power and desire are both in evidence."

No gloom pervaded the atmosphere around Manager Comstock, of the Thomas J. Doyle sales organization, which handles the Dodge cars.

"Did a better business in December than in November; expect to do a better business in January than in December," he said. "After

(Continued on Page 34)

Straws

IN CONNECTION with the declaration of its usual quarterly prefarred dividend, the Westcott Motor Car Company, Springfield, O., announces that preparations are being made to operate the plant on a normal basis, beginning February 1.

• • •

The report comes from the Grant Motor Car Corporation, Cleveland, that production is being increased and that the outlook is much better than it was some weeks ago.

• • •

Beginning January 15, all departments of the Republic Rubber Company, Youngstown, O., will resume operation. The plant closed December 23 for the holiday period and for the purpose of taking inventory and making urgent repairs.

• • •

The plant of the Auto Body Company, Lansing, has reopened with 200 men and orders for 750 bodies from the Briscoe Motor Corporation, Jackson, for February delivery, and a release on an order from the Gardner Motor Company, St. Louis.

• • •

DETROIT and South Bend plants of the Studebaker Corporation resumed production January 10. The working schedule will be six days a week to accomplish 75 per cent normal production, the output to be worked up to 9,000 cars a month by July.

The Sparks-Withington Company, Jackson, has resumed operations with a small force, but for the time being production will be confined to stock replenishment. Extensions have been made to the plant, preparatory to the revival of normal activities.

• • •

The Buick factories, at Flint, have opened after a vacation of three weeks, during which inventory was taken. The units will be operated for the present on the part-time schedule placed in effect in December.

• • •

The Continental Motors Corporation is taking on a few men at a time at its Detroit plant, although no definite date for reopening has been set. It is reported that 75 men went to work Monday.

• • •

Between 1,500 and 2,000 men resumed work Monday morning of this week at Plant No. 3 of the Studebaker Corporation, Detroit.

• • •

THE Hupp Motor Car Corporation, Detroit, which has about 800 men at work, is increasing the force daily, it is reported. The same is true at the factories of the Packard Motor Car Company, Hudson Motor Car Company and Columbia Motors Company.

• • •

One hundred men, one-third of the normal force, went back to their benches Monday in the plant of the Studebaker Corporation of Canada, at Walkerville, after a shut-down which started December 24. Edward Mackie, superintendent of the factory, is quoted as saying that the entire force will be taken on next week.

• • •

After having been closed several weeks, the Acme motor truck plant, in Cadillac, resumed operations this week with 100 men, one-third the usual force.

• • •

Announcement is made by the Novo Engine Company, Lansing, that all departments of the plant will resume operations January 17.

Digitized by Google

Michigan Sweetens It

Something About the State's Place in Sugar Making; Process, Plant Facilities, Money Invested, Distribution



SUGAR MANUFACTURE IN THE FACTORY OF THE MOUNT CLEMENS SUGAR COMPANY

At the left is shown a set of evaporators. The syrup is boiled under a vacuum in each tank in turn. At the right are shown some of the centrifugal machines, where the moisture is literally spun out of the syrup, leaving the clean, white sugar in the machine.

By HOWARD CAMPBELL

SUCHROSE, or sugar, is found in a large variety of plants, but is so apt to be accompanied by the characteristic flavor of the plant or other carbohydrates, such as starch or glucose, that unless it appears in relatively large proportions and can be successfully freed from the taint, it does not pay commercially to extract it. For its supply of sugar the world is dependent largely today on sugar cane and the sugar beet.

Cane as a source of sugar was discovered many centuries before the Christian era, although European nations knew little of its use until the thirteenth and fourteenth centuries. Early in the nineteenth century the countries in southwestern Europe became engaged in warfare and a blockade was established which cut off their supply of cane sugar, forcing them to search for something to take its place. A German chemist turned their attention to the beet and a series of investigations followed which resulted finally in the development of the beet sugar industry. Investigation and development by German scientists placed Germany at the head of the sugar producing countries of the world, although in the last few years sugar manufacture has become an important industry in the United States.

Unlike the cane, the sugar beet reaches its highest development in a north temperate climate, such as exists in Michigan. The soil, temperature and moisture of this state are ideal for beet growing, which is evidenced by the fact that in 1919 there were 121,498 acres of sugar beets harvested in Michigan, yielding 1,108,908 tons, from which were produced 132,268 tons of sugar. This was 26 per cent of the nation's supply. Of the 16 states engaged in this industry, Colorado was the only one producing more sugar than Michigan.

The planting of sugar beet seed takes place in the month of May, a planter being used which drills four solid rows of seeds into the ground at each trip across the field. When the plants are about two inches high they are "thinned," this operation being the removal of all except one every six or eight inches. The beets are ready for harvesting about the middle of September, being gathered usually about the time the first frosts come. When suitable for harvesting, the beets are loosened from the ground by means of a puller, picked or "pulled" by hand, "topped," loaded into wagons and brought to the factory or transferred to railroad cars as the case may be. The operation of "topping" consists of removing the beet top, or leaves, with a heavy knife.

The beets are unloaded in the beet shed, where they are thrown into huge bins with sloping walls, at the bottom of which are flumes or sluices provided with board covers. These covers are made in short sections so that they can be easily removed as the beets are fed into the flume. The beets are conveyed into the plant by floating them in in the current of water which runs swiftly through the flume.

As the beets enter the factory they are caught up by a bucket conveyor and dumped into the washing tank, which holds approximately half a carload. Through the center of the tank is a shaft to which are attached a number of paddles which stir the beets as the shaft revolves, thus cleaning off practically all the dirt.

On reaching the outlet end of the washer, the beets are thrown on to a belt conveyor, which carries them along very slowly, so that all weeds, sticks and other refuse can be picked out. The belt spills the beets into the buckets of a flight conveyor, which carries them to the top floor, where they are dumped into a hopper through which they pour on to an automatic scale. When 1,000 pounds have been received on the scale, the bottom of the hopper closes automatically and the beets are dumped into the slicing machine. The scale registers every 1,000 pounds of beets, thus keeping a record of the amount sliced.

The construction of a "beet slicer" is based on the well-known design of a horizontally revolving cutter plate. The machine is approximately ten feet high and eight feet in diameter at the base, where the cutter plate is located. The blades, which are about six and a half inches long, are arranged about the edge of the cutter plate, and the hopper is so made that the beets fall on the knives, those at the bottom being held against the knives by the weight of the mass above. The cutter plate revolves at a rate of 45 revolutions a minute, slicing the beets into long, narrow, thin strips called by their French name, cossettes. The cossettes pass under the disc and are received in a round box from which they are pushed out through a spout on to an endless conveyor belt which carries them to the diffusion battery.

A diffusion cell resembles a tank, being approximately seven feet high and five feet in diameter, and holds three tons of cossettes. When ready for operation the cossettes are dumped or fed into the cell through a manhole in the top. The cell is filled up to about ten inches from the top, then warm water at about 140 degrees temperature is turned in until the

THIS is the third of the "Romance of Michigan Industry" series. The fourth, which will discuss the state's foundry enterprises, will be published next week.

Digitized by Google

cell is foil. This warm water extracts the juice containing the sugar from the cossettes by a process of "osmosis."

When two liquids which, when mixed, do not produce chemical change, are brought in contact and allowed to stand, they mix uniformly without the application of mechanical impulsion or chemical force. Such action is called diffusion. The same action takes place even when two liquids are separated by a membrane, which is simply a fine network of plant or animal tissues. Diffusion through a membrane is called "membrane diffusion," or osmosis. Membrane diffusion may be illustrated by a simple experiment. Fill a sack with a sugar solution and surround it with water in a vessel. After a time an interchange will take place between the solution within the sack and the water surrounding it, the sugar passing out of the sack as the water passes in. This is the action that takes place with each cossette, and as the cossettes are very thin, practically all of the juice is extracted from them in from six to eight minutes.

When this time is up the juice is drawn out of the cell through a calorisator, or heater, and into the next cell. The "battery," as it is called, contains 14 cells; therefore, it is obvious that as the juice circulates it increases in density. After it has passed through a number of cells, its density becomes the same as that of normal juice. At this point it is drawn off into the measuring tank, where a record is kept of the amount of juice obtained. From here it passes to the reserve tank.

The next process is that of carbonation. The sugar solution, known as the "diffusion juice," is almost as black as ink as it comes from the diffusion battery, and therefore must be clarified. This clarification takes place in a "carbonation tank," of which there are six.

A carbonation tank, or "carbonator," is about seven feet wide by fourteen feet high. In the bottom of the tank is a coil of steam pipes for heating the juice and a system of perforated pipes through which carbon dioxide gas is admitted at the proper time. The tank is filled about half full of juice and a certain amount of lime added. The lime sterilizes the juice, precipitating the impurities and killing all the germs which have been introduced from the soil, water, air and other agencies. Carbon dioxide gas is now admitted under pressure, which precipitates the lime, carrying with it the impurities that were in the juice. The juice has to be watched very closely and frequent tests made to determine the point at which the operation should be terminated, although the usual time is about 12 minutes.

Fertilizer a By-Product

When the juice leaves the first carbonation process it contains a certain amount of precipitate of calcium carbonate, which must be removed before it can be subjected to the second carbonation. Therefore, it has to pass through the filter press. A filter press is a series of cast iron plates containing a number of long slots, with corresponding frames. A double thickness of duck and burlap is stretched over these slots and the juice is forced through, leaving lime precipitates within the frame. As more juice is filtered, the lime collects until it has formed a cake, which is then removed and later is used for making fertilizer.

The filtered juice, which now is clear and slightly yellow, passes to the second carbonation, which is practically the same as the first, more lime and more carbon dioxide gas being added. The second carbonation not only reduces the alkalinity but improves the juice as in the first carbonation, though in a smaller degree. The tanks for the second carbonation are constructed exactly the same as those for the first. Here the juice is tested every few seconds until the alkalinity is down to the required point, then the gas-valve is closed and the steam turned on until the temperature of the juice is up to 100 degrees F., in order to break up acid calcium carbonate formations. When the carbonation and heating are completed, the juice is pumped to the second filter press. The second filtration process is the same as the first.

After the second filtration the juice is sent to the sulphuring tanks, through which it passes in a continuous stream. Instead of carbon dioxide gas, sulphur gas is used in this operation, a continuous flow of gas entering the tank and a continuous flow of juice passing through it. This sulphuring process not only further reduces the alkalinity of the juice but also has a decolorizing effect, precipitates such lime as was not precipitated by the carbon dioxide gas, facilitates the crystallization of sugar from the juice, removes a considerable quantity of nitrogen compounds, and the sugar obtained has a better keeping quality, due to the antiseptic property of sulphurous acid. The proper alkalinity of the juice after this third carbonation should be about 1-100 per cent. The alkalinity is regulated by the speed with which the juice is allowed to flow through the tank. The faster the juice flows, the higher the alkalinity, and vice versa. A small amount of soda is also added in this process, and the juice is heated again before passing to the third filter press. The filtration process is the same as before, and then the juice is pumped into the supply tank, from which it is drawn as required for the evaporation process.

There are four of these evaporators, through which the juice passes consecutively. This operation is necessary before the juice is boiled, because (1) the juice contains too large a quantity of water and requires too long a time for boiling down in a vacuum boiler; (2) the juice contains a considerable quantity of substances which separate from the solution when boiled down to a syrupy condition and should be removed by filtration before further concentration, as they would otherwise increase the ash content of white granulated sugar; (3) the alkalinity of the juice should be corrected to the proper degree, since too high alkalinity renders the crystallization of the juice difficult.

The juice enters the first evaporator under slight pressure and passes into a series of copper tubes, of which there are 1,100 in an evaporator. The juice in the first evaporator is boiled by steam from the boilers, but in the second evaporator it is boiled by the vapor from the juice in the first one, and each succeeding evaporator is boiled in the same manner—by the vapor from the preceding one. A steam of any temperature can evaporate a fluid whose boiling point is lower than the temperature of the steam. Steam developed by a certain temperature has the same temperature as that of the fluid from which it has been developed, so long as both remain under the same pressure; hence, in order to evaporate the juice in each tank with the vapor from the preceding tank, the pressure must be lowered. This is done with an air-pump, a vacuum being created in each tank, which, of course, lowers the pressure. A greater vacuum is created in each succeeding tank, thus making it possible for the juice to boil at a lower temperature in each tank in turn, becoming cooler and thicker as it passes toward the last tank. When it enters the evaporating process the syrup contains approximately 90 per cent water. It leaves the last evaporator in the form of a thick, transparent, yellow syrup con-

(*Continued on Page* 32)



FURTHER OPERATIONS IN THE MOUNT CLEMENS SUGAR PLANT

At the left a workman is shown loading a diffusion cell with sliced beets. The cells are below the floor. At the right is a view of the carbonation tanks. Here the impurities in the syrup are precipitated.

Digitized by Google

Tire Business Picking Up, Akron Executives Agree

Although the majority of the tire manufacturers have felt and are still feeling the effects of the slump in the automotive industry, reports from Akron and other tire centers indicate that a revival in the business is noticeable. Most of the leaders in the industry are confident that, just as in the case with the motor car makers, the turn of the road has been reached.

In a special telegram to the Cleveland Plain Dealer, its investigator in Akron quotes a number of men. H. H. Firestone, president of the Firestone Tire & Rubber Company, is credited with having said: "There never was a greater opportunity for sound business than at present, and there never were greater difficulties facing it. The present year is going to be a survival of the fittest in commercial and industrial fields. I believe the next twelve months will be a hard test of management and organization."

The Firestone, Goodrich, Miller and Goodyear concerns all reported substantial increases in sales. The opinion is widespread that there will be a shortage of tires before summer, the Goodyear people believing it will be felt in April or May.

The Wall Street Journal, which also made an investigation of conditions among the tire manufacturers, says in part:

"At the Miller Rubber Company, which is one of the four largest in the city, William Pfeiffer, secretary-treasurer, was reluctant to make predictions, but said that production must be resumed on a larger scale beginning with the new year because business will be coming back with a snap.

"W. O. Rutherford, sales manager of the B. F. Goodrich Company, warned against the spirit of optimism being carried too far at this time, just as the spirit of pessimism has been carried to an extreme. 'There is no way for business today to avoid the economic crisis through which we are passing,' said Mr. Rutherford, 'and therefore I would not like to be too much in a hurry in getting through the period of readjustment. Just as it is better for the patient when convalescing to lie in bed a few days longer, than to attempt to get up before he is sufficiently strong, so it is better that business be not over-hasty in trying to come back to its former swing. However, sales are picking up. There is no denying that. Better business will follow the present depression as surely as the day follows the night. The rubber business is on a sound basis and we are in a position to take advantage of the turn upward as soon as it has been determined that it is definitely with us.'

"H. B. Bixler, consulting engineer for smaller rubber companies and owner of an experimental laboratory where much of the testing is done for them, stated frankly that the smaller companies had more orders than they could take care of, provided they were certain of the credit standing of the prospective buyers. 'Practically every small concern with which we have dealings,' said Mr. Bixler, 'tells us that they have an enormous amount of business on their books but that they are afraid to ship the goods in many instances, because the old-time credit standings have been shaken by the present depression and it requires time to get back this kind of information upon which business is founded. The small rubber company which is in a position to take advantage of the present low market prices on rubber and fabric and also labor certainly is in the best position of its history to make money, and in many instances they are doing it.'"

ACCOUNTANTS IN LARGER QUARTERS

Lybrand, Ross Brothers & Montgomery, accountants and auditors, have moved from Suite 520 to Suite 924, Book building, Detroit, in order to have more space.

STRAIGHT LINE METHODS

Control in Business

CONTROL is the brain of a business in action. It is the irresistible force which determines the value of success. Stability and progress depend upon it. As it is intelligent so it dominates. Organization, System, Method, are hopeless without it. And control is hopeless and worthless, unless founded on, and continually supported by, accurate and usable knowledge based on timely facts and figures.

If this is true, the importance of such knowledge *to the executive who would control* must be apparent. Absolute confidence in the character and source of the knowledge, in the ability of the men who secure it, and in the accuracy of their methods of assembling and co-ordinating it for his use, is imperative. Its fitness, its application to his needs—in factory or office, buying or selling, cost or maintenance—and the assurance that it is timely to the minute, are vital factors in making this knowledge his controlling force.

In this connection—

ERNST & ERNST

offer the service of tried and experienced staffs of business engineers and expert accountants in their application of their

Straight Line Methods
of System, Organization and Control

ERNST & ERNST
AUDITS—SYSTEMS
TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK	CHICAGO	CLEVELAND	CINCINNATI	NEW ORLEANS
PHILADELPHIA	MINNEAPOLIS	BUFFALO	INDIANAPOLIS	DALLAS
BOSTON	ST. PAUL	PITTSBURGH	TOLEDO	FORT WORTH
PROVIDENCE	ST. LOUIS		ATLANTA	HOUSTON
WASHINGTON	KANSAS CITY		RICHMOND	DENVER

STRAIGHT LINE METHODS

Digitized by Google

Freight Rates and Living Costs

Falling Prices Refute Claims of the Alarmists; What the Recent Advance Has Done for the Roads

By GEORGE DALLAS DIXON
Vice-President in Charge of Traffic, Pennsylvania Railroad

THE primary concern of business men in developments affecting the railroad situation lies in securing good service. The precise level at which freight rates may be fixed is a secondary matter, so long, of course, as they are within reasonable bounds and preserve fair relationships. This naturally results from the fact that the producers or merchandisers of articles and commodities quite properly regard transportation costs as an expense which must be included in the selling price charged the final consumer.

That is entirely fair, because the cost of transportation is just as much a part of the expense of getting goods into the consumers' hands as are the factory payroll, fuel bills, the outlay for raw materials, or the charges for the use of capital. Therefore those who condemn the producer for passing on to the consumer his transportation costs, or ridicule his reasons for so doing, are themselves in the wrong, because it is the soundest kind of economics that the consumer must pay the freight.

However, business men do want to know that the rates which must be paid are reasonable, that no one is profiteering on them, that they are not too high for the service rendered and that they are not a burden to the country.

When the Interstate Commerce Commission this summer announced the rate increases which, under the terms of the Transportation Act, it had decided upon as being necessary to put the railroads in self-sustaining condition, there was a flood of extravagant assertions concerning the effect which the advanced rates would have upon the cost of living.

Alarmist statements were circulated based upon the theory that transportation costs, generally speaking, enter not once, but several times into the final cost of a finished article. This theory, which, properly stated and intelligently grasped, is correct, was twisted by a perversion of logic and mathematics into the idea that the real amount paid by the people, by reason of the rate increases, would be four or five times the sum the Interstate Commerce Commission had intended to award. Put into figures, this was publicly interpreted as meaning that instead of giving the railroads a total rate increase of about a billion and a half dollars, the people would have to pay six or eight billions—indeed, even the sum of ten billions was named.

Absurd as such statements were, they received wide currency, as do most sensational utterances coming from apparently responsible sources. I regret to say that persons officially connected in several instances lent their names to this sort of exaggeration. The people were told, and probably many of them believed, that the cost of living would be increased, for the nation as a whole, by as much as ten billion dollars a year.

How far this was from the truth may best be gathered from the undeniable fact that ever since the rate increase was announced, prices have tended to decline the country over and are today, according to all visible indications, headed for generally lower and more nearly normal levels. Events which are actually occuring in the industrial and commodity markets are the strongest possible answer to the unsettling predictions made regarding the effect of the rate increase on the cost of living.

It is easy to show the fallacy of the arguments used. Suppose it is true that on the average transportation charges enter, let us say, four times into the cost of articles and commodities. This might be illustrated by a case in which three tons of raw materials are needed to turn out one ton of finished product. Freight would first be paid on the three tons of materials. Then it would be paid again to get the one ton of finished product into the consumer's hands. Thus, before the single ton of product could be delivered to the user, it would have had to bear the charges for the transportation of four tons. These accumulated charges would of necessity be incorporated into the price which the consumer would have to pay.

Whether that really represents an average state of affairs or not, I am sure I do not know, but if it does, the total freight charges which entered into the cost of the finished product, under the old rates, were a definitely ascertainable sum, consisting of the freight on the raw materials, plus the freight on the finished product. If, now, we increase all these rates by, say, 40 per cent, we only increase by 40 per cent the total freight charges that were paid before. We do not increase them by four times 40 per cent, or 160 per cent; and yet figures were so loosely handled by more than one so-called statistician as to create that impression.

To view it in another way, if all freight charges are raised enough to add a billion and a half dollars to the annual revenue of the railroads, there is no way by which the railroads can make the people pay each charge several times over and so turn the billion and a half dollars increase into one of six or eight or ten billions.

If there is profiteering by dealers on the rate increases, jumping up prices more than the advances in the rates warrant, that is a different matter. The proper course then would be to get after the profiteers, not to starve the railroads. As a matter of fact, I think the public were too generally put on their guard to permit profiteering on any considerable scale. Further, as I have already said, facts are the best answer, and prices and the cost of living are going down instead of up with the higher freight rates in effect.

Julius H. Parmelee, chief statistician of the Bureau of Railway Economics, has approached the subject from an interesting viewpoint, and his general conclusions are very instructive. He says:

"The percentage of all transportation costs to the general national income has been from 4 to 8 per cent. A 35 per cent increase in freight rates, which can be accepted as the general average of this increase, means an increase of 25 per cent on the 4 or 8 cents paid for transportation out of each $1 of retail value, or about 2½ cents on the whole.

"In other words, an article now retailing for $1 should not be increased more than 2½ cents in the future. I have talked, it must be understood, in terms of average, but I have tried to give as nearly as possible just what the freight rate increase should mean to the man who pays the bills, the ultimate consumer."

Two and one-half cents on the dollar is not much of an increase, even if prices on the average had risen as much, and it would be a small sacrifice to make for solvent railroads and the means of restoring good transportation. But anyway, as I pointed out, prices are not going up at all. They are going down under the influence of economic forces, compared with which the entire rate advance is a trifle.

Here is a fundamental and most important truth which should be clearly grasped. The people of the country as a whole must inevitably pay all the costs of the transportation service which they receive. It cannot be otherwise as long as the rules of arithmetic hold good and it continues to be impossible to make something out of nothing.

There are three ways in which the people can pay—in rates, in taxes, or in a combination of both. For several years the last named has been the method followed. All that has happened under the rate increases has been that the proportion of our national transportation costs heretofore paid in taxes has now been transferred to rates. Therefore really nothing occurred to increase the cost of living, because we were paying the full cost of living before, including our transportation bill, for a part of which latter we were taxed. Now we are going to pay the transportation bill in a slightly different way; or, if the figures seems more apt, our national bookkeeping has been reformed.

Having said what the new rates will not do —namely, increase living costs—let us consider what may be expected of them in an affirmative way.

A result which may reasonably be expected, and to which probably too little attention has been paid, will be to release the purchasing power of the railroads. Our own company, now that its earning status is fairly well settled and no longer a matter of guesswork, will probably be in a position to enter the equipment market, at least on a moderate scale, as soon as satisfactory prices can be obtained. General materials and supplies will also be bought a little more. Activities here of industry all around ought to be expected to follow such action on the part of our own and other railroad systems.

Second, the country is relieved of the menace of wholesale railroad bankruptcy. Had the rates not been raised, such an event could not have been averted, and the roads would have been thrown back into the hands of the



—Calbuit in the Toledo News-Bee.
THE NEW TRAFFIC COP

(*Continued on Page 33*)

Digitized by Google

In Shops that Insist on the BEST



You will find **MILWAUKEE MILLING MACHINES.**

Positive alignment of the arbor is provided by the Double Overarm, which gives Milwaukee Milling Machines rigidity and accuracy. They efficiently handle all milling—light or heavy.

The automatic flooded lubrication system lubricates all bearings and gears in the column, feed box and pulley bracket. Each machine also possesses an automatic cutter lubricating system, which is furnished without additional expense. All levers and handles are conveniently located.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

"EVERYTHING FOR THE SHOP"

149-165 E. Larned St. DETROIT Cadillac 7080

Cars Sell at New York Show

That's the Important Thing About the 1921 Exhibit; Display Most Attractive; Sober Atmosphere Noted

NEW YORK, January 11.—They are selling cars at the New York Automobile Show.

That is the big news that is being flashed from the metropolitan city to manufacturers, dealers, bankers and the business and industrial interests of the country in general. That is the good news that has been sent to the one city which is most interested—Detroit, the center of the automotive industry of the world.

And it is because cars are being sold—not by any means by the hundreds as yet, this being only the fourth day of the show—that everywhere activities in the automotive industry are resumed. As one of the leading parts makers told the writer today, the eyes of the entire automotive fraternity are turned toward New York. The captains of the industry are keeping in constant touch with what is going on—are eagerly awaiting reports from their representatives here; are beginning to map out their production schedules according to the developments at the Show.

There can be no question that if the news from this city were to the effect that no sales were being recorded, instead of putting on more men at some of the Detroit plants, or resuming activities this week, most of the plants would be closed down tight today. That was the statement made by a man connected with one of Detroit's industrial organizations, who added that probably more than half of the factories in Detroit and some other Michigan cities were depending upon the outcome of the automobile show—that some of them had already been advised to get going, while others are only waiting the word. While much has been said lately just to stimulate optimism, the situation has so changed that what is being said now may be taken in the majority of cases to be based upon facts, this man asserted.

There are two distinct divisions among those who are visiting this annual exposition at the Grand Central Palace. On one side may be placed the usual visitors—those just interested in the show as they are in many other events of the kind, some being prospects while others never will be. In the other division are to be found the manufacturers, the dealers, and in fact all those connected directly with the trade. Compared with former years, there are quite a few less of the plant officials this year. This is due to a great extent to present conditions, to the desire all around to cut down expenses. In Detroit the writer was told that this year many automobile men who never have missed the "big show" would not be present this year unless they paid their own way. They were privileged to go if they wished—at their own expense; but they are not going, at their own expense.

So that it may be said that this year the attendance from an industrial and business side is a more critical one and much less in the nature of a "honeymoon" trip, as some of the old-timers often described their annual sojourn to Madison Square Garden or the Grand Central Palace. This year it's a business proposition with all, and a joy ride with very few. And while there will be banquets and other entertainments, the opinion has been expressed that all will be in keeping with the present conditions—of a "sober" character. Business, and not pleasure, is the slogan in the industry for 1921.

This year's show is the finest in the history of the twenty-one which have been handled practically without exception by S. A. Miles, manager of the National Automobile Chamber of Commerce exhibits. Every well known car made in the country is on hand and the display from Michigan is naturally the largest. As usual there are new things, although not as numerous as some had expected. A more detailed review of the show from a technical point of view will appear in this publication subsequently, but it may be said that those who have taken in the annual events regularly find from their observations that the 1921 cars represent improvement in many ways.

There are now in New York quite a few of the experts in the European automobile industry who came to get first hand information as to the trend of our industry.

RAIL MEN TO HEAR GRAY

The speaker for the noon day luncheon of the Transportation Club of Detroit, at the Fellowcraft Athletic Club, January 22, will be William J. Gray, vice-president of the First & Old Detroit National Bank. Mr. Gray will discuss current business conditions.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.
Miners and Shippers of Coal
LONE STAR
Mined at Blair, W. Va., C. & O. R. R.
BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam
BLACK HAWK SPLINT
Mined at Big Creek, W. V., C.&O.R.R.
FOR { Malleable Iron Plants / General Steam Purposes
Low Ash *High Heat Units*
Detroit, Michigan Main 4064

Planning the Port of Detroit

Port Development Committee of Board of Commerce And City Plan Commission Meet to Compare Notes

WHILE no definite recommendations relative to future port development at Detroit, which is a serious problem in view of the probability of a St. Lawrence route to the ocean, were made, the conference between the Port Development Committee of the Detroit Board of Commerce, and the Detroit City Plan Commission, January 6, at the Board of Commerce, established a sound basis of co-operation between the two bodies.

William H. Adams, chairman of the development committee, opened the conference with a presentation of the committee's views and what the city's port facilities should be, and its desire from the co-operation of the Commission. Other speakers were Edmund T. Patterson, president of the Commission; W. E. Campbell, chairman of the Commission's sub-committee on port development work; T. Glenn Phillips, consultant and secretary of the Commission; E. M. Walker, member of the Commission, and W. B. Campbell, David Molitor and Charles H. Brodt, members of the port committee.

A study of the port development plan presented by the Commission to the city council revealed that its only definite recommendation was for a charter amendment to provide for a harbor commission and advisory board. A tentative recommendation suggests the establishment of a commercial port at Zug Island, where ocean vessels could unload and load without having to shift, while merchandise would be moved to points in the city and industrial district via river lighters, motor trucks and belt line railroads. It was proposed that the city water front be left to private interests for development as an industrial port, or for any other purpose that might prove desirable. It was felt that the port of Detroit should all be located below the city, in view of the fact that the drift of industry is toward the River Rouge district.

The tentative plan evolved by the Port Development Committee calls for the establishment of an industrial port in the River Rouge district and a commercial port along the city water front; also for a state law creating a Detroit River Harbor Commission, consisting of representatives of Detroit and towns along the river from Lake St. Clair to Lake Erie.

It is the opinion of the Commission that a state constitutional amendment will be necessary before a harbor commission such as advocated by the Port Development Committee can be created. As to the physical features of the harbor improvement plans, it was unanimously agreed that as such considerations are of minor importance so early in the campaign, no final and definite recommendations should be made by the Commission or any other civic body until after investigation and research has been made.

At the conclusion of the session it was the opinion that much light had been shed on the situation and new avenues of investigation opened. Members of both bodies felt that a basis of co-operation had been established and that hereafter the Board of Commerce committee and the commission could work in harmony in making Detroit one of the greatest ports in the world.

DOW ASKS TARIFF PROTECTION

The chlorine products industry must be given adequate protection through customs duties if it is to survive post-war German competition, James T. Pardee, of the Dow Chemical Company, Midland, testified last week before the House Ways and Means Committee. He urged an increase of 28 per cent over the rates provided by the Underwood tariff.

The Dow company, he said, was in the same position as hundreds of others in the chemical industry which expanded their business to take care of war needs and were now faced with European competition, with the added handicap of low labor costs abroad and the adverse money exchange rate.

Mr. Pardee advocated a specific duty of 7 cents a pound on bromines and bromides, plus a 30 per cent ad valorem duty. On chloroform he asked a like specific duty and an ad valorem rate of 33⅓ per cent. Carbon tetrachloride, he said, would be adequately protected by a 2½ cent specific duty and an ad valorem rate of 15 per cent.

JOSEPH H. HUNTER RECOVERING

Joseph H. Hunter, president of the Detroit Insulated Wire Company, has recovered sufficiently from a recent motor accident to be removed to his home, Pasadena apartments, 2170 Jefferson avenue, from Grace hospital.

BENTON HARBOR ACTIVITIES

The annual report of the Benton Harbor Chamber of Commerce reviews an active year and indicates much promise for the future. The Saranac Machine Company is located in its new plant. The Moulds Brass Foundry is building a new works, which will be completed soon. When the company moves from the Werkman factory building, the Baker-Vawter Company will occupy the entire floor space. The new headquarters of the American National Bank in the Hotel Benton Block will be ready for occupancy February 1. Year around transportation will be attempted by the Benton Transit Company, which has purchased the steamer Pilgrim to make weekly trips between Benton Harbor and Chicago all winter as well as in the summer.

PORTLAND CEMENT INTERESTS SOLD

The plants and business of the Burt Portland Cement Company, Bellevue; Ironton Portland Cement Company, Ironton, O., and LaSalle Cement Company, LaSalle, Ill., have been purchased by the Alpha Portland Cement Company, Easton, Pa., and C. A. Irvin has been elected vice-president of the Alpha company and given charge of the territory formerly covered by the other three companies. His office will be at 140 South Dearborn street, Chicago. Sales offices will be maintained at Bellevue, in charge of P. L. McClintic, and at Ironton, O., in charge of J. R. Paul.

ENGINEERS INSTALL OFFICERS

The Detroit chapter of the American Association of Engineers installed officers Monday evening in B. E. Taylor's auditorium, Wayne street and Congress street west. Clarence W. Hubbell, city engineer, became president of the chapter, other officials being L. N. Hayden, D. U. R. engineer, vice-president; H. Hudson, city engineer's office, vice-president; Eugene I. Van Antwerp, Grand Trunk Railroad, treasurer, and Wilbur M. Hankinson, Grand Trunk Railroad, secretary.

ROSS ENGINEERING EXPANDS

The J. J. Ross Engineering Company, 1066 Larned street east, Detroit, has enlarged its quarters to accommodate additional business. The company manufactures battery charging

Digitized by Google

Small Speed Truck Leads All Types in 1920 Output

Despite the depressed business conditions the latter part of 1920, the motor truck industry during the year exceeded its 1919 production by 43,000 vehicles, the total output being 148,000 vehicles. Small speed trucks of three-quarter to one-ton capacity represented 75 per cent of the production volume, an increase of 15 per cent over the ratio of small truck production in any past year. In reality it was small truck demand which held the production level and produced the excess.

According to an analysis made by the Commercial Vehicle, the average prices of all different sizes of trucks had increased only 8½ per cent up to January 1, 1921, as compared with January 1, 1920. Taking the different sizes of trucks separately, those of less than one-half ton capacity increased most in price. Trucks of less than one-half ton capacity jumped 25 per cent in price. Three-quarter tonners increased 19 per cent; one-tonners, 10½ per cent, and one and one-half tonners, 12.3 per cent. Trucks of from two tons capacity up increased individually anywhere from one-tenth of one per cent to 7.3—these low individual price increases helping to bring down the total average price to the figure of 8½ per cent, as given above.

According to the same authority, trucks of one and one-half ton capacity form the most popular model—no less than 100 models, or 20 per cent of the total number of 527 trucks listed on the 1921 market, being of one and one-half ton capacity. The next most popular model is the two and one-half tonner, with 90 models, followed by the three and one-half tonner with 84 models.

An analysis of the final drive situation as made by the Commercial Vehicle shows the predominance of the worm-driven rear axle when considered from both the viewpoints of trucks actually produced and the number of models offered for 1921. The 1921 production of trucks were fitted with the types of drive shown in the table below:

Type	Percentage
Worm	67
Bevel	15¾
Internal-gear	16
Double-reduction	4½
Chain	1¾

When the final drive situation is considered from the viewpoint of the number of different models offered for 1921 with each type of drive, the analysis gives the following percentages:

Type	Percentage
Worm	68¾
Internal-gear	21¾
Chain	4½
Bevel	3½
Double-reduction	2¾

Further analysis of the new trucks for 1921 indicates that pneumatic tires have now become standard equipment on trucks of one-ton capacity. Last year, trucks of this capacity were fitted with solids as standard equipment. The use of four-speed gearsets to produce trucks with greater speed ranges and a greater pulling power at low speeds has increased considerably; and four-speed gear boxes are now average standard equipment on all trucks of two-ton capacity and over.

The trend of design on other truck units shows an increased use of cast case radiators and tubular cores, as against sheet case radiators with cellular cores; dry disk clutches at the expense of other forms—amidships location of the gearset for easy repairs—vacuum fuel feed systems; and the use of metal instead of wood wheels, especially on the heavier models.

U. S. C. OF C. MEETS APRIL 27-9

Joseph H. Defrees, president of the Chamber of Commerce of the United States, announced this week that the ninth annual meeting of the National Chamber would be held at Atlantic City, April 27, 28 and 29.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

Factory, Warehouse and Railroad property *exclusively.* Personal service and personal knowledge of all available Railroad property in the city.
J. H. Cowley
509 Moffat Block. Main 2816.

Hughes
FACTORY EQUIPMENT
STRONG, DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE—ALLEGAN, MICH.

W. D. Hallman
PHOTOGRAPHER
STUDIO BUILDING
4038 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

GOODRICH 50 YEARS OLD

The B. F. Goodrich Rubber Company, Akron, O., celebrated the fiftieth anniversary of its foundation, December 31. It was on that date in 1870 that the Goodrich corporation was organized by the late Dr. Benjamin Franklin Goodrich and 15 others, all Akron men. The latter put up $1,000 each and the company started with a capital of $15,000. When the little plant began operations there were not much more than a score of people employed. Today it is one of the largest rubber goods manufacturing concerns in the world, with business totaling more than $100,000,000 annually. Akron today produces close to 50 per cent of the world's total of rubber goods and two-thirds of all pneumatic automobile tires.

DUPLEX TRUCK RE-ELECTS LEE

Harry M. Lee again heads the Duplex Truck Company as president and general manager. All other directors were re-elected by the stockholders at the meeting last week. Reports showed the company sound as to surpins and assets.

NASH DEFENDS THE BANKS

Speaking before automobile dealers and bankers at a dinner at the Detroit Athletic Club, Detroit, last week, C. W. Nash, president of the Nash Motors Company, Kenosha, Wis., declared that the banks of the country had saved the motor car industry from serious financial troubles and were aiding it effectively during the period of readjustment. Mr. Nash predicted a steady volume of business in 1921.

MOTOR EXPORTS IN 1920

During the first 10 months of 1920 American manufacturers exported 112,376 passenger cars, compared with 67,145 in 1919 and 28,306 in 1914.

NATIONAL AUTO DEALERS' MEETING

The fourth annual convention of the National Automobile Dealers' Association will be held January 31 in Chicago. H. G. Moock is in charge of arrangements.

NEW APEX PLANT BEING HURRIED

Work is being rushed on the new plant of the Apex Motor Corporation, Ypsilanti. Rearrangement of the original factory building for quantity production has been completed. The Apex company was organized a year and a half ago for the purpose of manufacturing 300 Ace cars for one distributor, after the latter had tried out one of the machines. All of the cars since made by the company thus have gone to the Pacific Coast. Plans are now being perfected whereby the car will be marketed generally.

MASON TIRE'S 1920 SHOWING

Net profits of the Mason Tire & Rubber Company, Akron, for the 1920 fiscal year which ended October 31, totaled $527,669. Gross sales were $7,150,798 and gross profits $1,583,839. Total assets are placed at $5,224,060, while current assets show $3,460,548 and current liabilities $834,586. The company has an inventory of $2,625,213; cash of $114,149, and accounts receivable, $721,186. Dividends for the year amounted to $414,834.

NEW $50-POUND CAR PROMISED

A new automobile is to be manufactured by the Gray Light Car Corporation, a Colorado company with capital of $1,000,000, the plant being located at Longmont, near Denver. According to the announcement made by H. A. Gray, president and general manager, this new two-passenger vehicle will be the lightest automobile on the market, weighing 540 pounds without body and 850 with the body. The selling price is to be $450. The car will have a two-cylinder engine of 13 horsepower and which will run 50 miles on a gallon of gasoline, it is claimed. The gear mechanism and transmission are so designed, said Mr. Gray, that gear-stripping is impossible. On the strength of the showing made by the demonstrator, it is said that the company has booked orders for 2,500 cars. Production will begin as soon as the price of steel becomes stabilized. Besides Mr. Gray the other officers of the company are: H. M. Koutz, vice-president; E. J. Kiel, second vice-president; J. H. Vickery, secretary-treasurer; O. E. Cumston, manager. All of the officers are residents of Longmont.

BUICK'S ST. LOUIS OUTPUT

The Buick Motor Company's assembling plant in St. Louis, Mo., is reported to be assembling an average of 50 cars a day. This is one-fourth to one-fifth of the plant's capacity. As conditions warrant, there will be increases in output.

CHANDLER'S 1920 BUSINESS

It is expected that the final figures on the 1920 business of the Chandler Motor Car Company, Cleveland, will show that the year was the best in the company's history, say Cleveland daily papers. The total production probably will be between 24,000 and 26,000 cars, as compared with less than 20,000 in 1919. According to the Plain Dealer, the net profits will be better than $5,000,000, which would be equivalent to about $18 a share on the 280,000 shares of capital stock. The company has no bank loans and it is believed that the present $10 dividend rate can be maintained upon a turnover of only 40 per cent of this year's business.

ROLLS-ROYCE RESUMES

The American works of Rolls-Royce, Springfield, Mass., have been reopened, after a shutdown for inventory, with 600 men regularly employed, and additional workers. The first chassis is now being tested out.

NEW LANSING TRACTOR AGENCY

The Republic Motor Sales Company, Lansing, has taken the agency for the Cletrac tractor, made by the Cleveland Tractor Company, Cleveland, O., for the counties of Clinton, Ionia, Shiawassee, Eaton and Ingham.

N. S. BEEBE JOINS KELSEY

The Kelsey Motor Company, Newark, N. J., which will make the Kelsey friction-drive car, announces that N. S. Beebe has become associated with the company as a financial executive. Mr. Beebe is well known in banking quarters. He handled the financing of the Templar Motors Company, Cleveland, and more recently that of the Northway Motor Company, Boston.

AUTO BODY MEETING JANUARY 17

The annual meeting of the stockholders of the Auto Body Company will be held January 18, at the Lansing Chamber of Commerce. Following the election of directors and transaction of any other business, the meeting will be adjourned to January 27 to permit the completion of the inventories and the statement.

Digitized by Google

MILBURN PUTS 200 MEN TO WORK

About 200 men resumed work in the body epartment of the Milburn Wagon Company, oledo, January 3, when this part of the Mil- urn plant re-opened after having been closed everal weeks. It is said that the force will e gradually increased and that officials be- lieve the crisis in the automotive industry s about over.

FEDERAL TRUCK ANNUAL MEETING

The annual meeting of the Federal Motor ruck Company, Detroit, will be held February , 1921, at 2 p. m., at the offices of the company. tock transfer books will be closed from nuary 29 to February 9, as provided by the y-laws of the company.

DODGE WORKERS GET BONUSES

Bonuses representing from 10 to 15 per cent f wages earned in 1919 have been paid to mployes of Dodge Brothers who have been ith the company five years. The amount paid ut approximates $2,000,000. The force now at ork in the plant numbers about 2,000 men.

FRANKLIN CHANGES HOOD DESIGN

Among the automobile manufacturers show- ng models with distinct changes at the New ork show is the H. H. Franklin Manufacturing ompany, Syracuse, N. Y., maker of the Frank- in air-cooled car, the latest models of which ave a new design of hood of a distinctively oreign character, suggesting slightly the talian Fiat. The former Franklin hood resem- led the early Renault type, although broader nd more graceful. This has been eliminated.

LANSING MAN INVENTS SNUBBER

The Korff snubber has been invented, pat- nted, and will be made and marketed by rancis J. Korff, Lansing. It is a simple netal drum with spring attachments and astens to the frame of the automobile to pre- ent the body from bounding. The snubber vill add less than 10 pounds weight, it is aid. Mr. Korff proposes to retail it for about 7, although devices for the same purpose sell or more. Mr. Korff helped to organize the Korff Manufacturing Company, Lansing, and is ow with the Reo Motor Car Company engineer- ng division. He has perfected a number of echanical work savers which have had a ational sale. The snubber has been given a wo years' test.

GOODYEAR CHANGES FISCAL YEAR

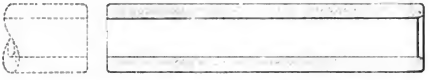
Stockholders of the Goodyear Tire & Rub- ber Company, Akron, O., have decided to change the date of the termination of the fis- cal year from October 31 to December 31, to increase the number of directors from 7 to 11, and to create an executive and finance com- mittee.

WOOLWORTH'S 1920 SALES

Sales of the F. W. Woolworth Company dur- ing 1920 totaled $140,910,267, or $21,409,258 more than in 1919, which is equivalent to an increase of 19.92 per cent. It is of interest to note that this increase of business over the previous year is practically the amount of the sales during the last month of 1920, or in other words, the sales of December which totaled $21,521,793 practically represent the gain for the year. The last month of last year was the biggest in the history of the company. The Woolworth company now has 1,100 stores throughout the country, or 30 more than at the beginning of 1920. Several of these are in Michigan cities and the sales in Michigan are said to have been a sizeable contribution to the total.

EVERYBODY HOPES TO OWN A MARMON
For Sale—The prettiest Marmon Coupe in Michigan; driven less than 12,000 miles; has a most excellent power plant and is fully equipped; everything in fine condition. Box W, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit.

PISTON PINS
from TUBING



Six-at-a-Time—1000 Per Hour

1000 per hour! Six pieces every twenty-one seconds!! Less than four seconds apiece!!!

That's the story of Piston Pin production in the world's largest automobile plant. It's a simple operation—just chamfer and cut off—but what an output! Parts are made from a special grade of steel and subsequently hardened and ground.

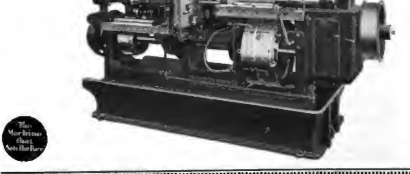
In plants where solid stock is used the Sextuple Automatic is employed with equal advantage. Pins are first cut to length and carbonized. The hole is afterward drilled and the pieces then hardened and ground. By this method the inside of the pin is left soft.

Are you not blanking studs, nuts, sleeves, pipe couplings, rolls, pins, or other simple parts in single-spindle automaties which might be handled with *six-fold production* in the "New Britain" Sextuple Automatic—the machine that feeds, drills, faces, chamfers and cuts off *six* spindle positions *simultaneously*?

Write for Bulletin No. 955 and send samples or blue prints for production estimates.

The New Britain Machine Co., New Britain, Conn., U.S.A.

DETROIT
4612 Woodward Avenue
Phone: Glendale 1354



The Machine that Gets Results

Built for Longest Service

★ NEW BRITAIN AUTOMATICS ★

Digitized by Google

WICKES BOILERS
Vertical Water Tube Type



Steel Cased Setting
Increases Efficiency.
Ask for Bulletin: Magnitude and Prevention of Air Infiltration Losses
Sent Free

The Wickes Boiler Company
SAGINAW, MICHIGAN
Michigan Sales Office:
1116 Penobscot Building, DETROIT, Mich.

Collections of Every Kind and Size

TACTFUL — *Arrow Service* — EFFECTIVE

SCHENECTADY, NEW YORK
System of Collection Psychology
A Service for
Manufacturers and Dealers
Business and Professional Men
Write ——— For Interview ——— Phone
B. APPLEBY Dist. Mgr.
606 Beckmeyer Bldg., Detroit Cherry 4777
MAIN OFFICES, SCHENECTADY, N. Y.
"Results or No Pay"

Builders Iron Works
INCORPORATED
Structural Steel, Ornamental and Miscellaneous Iron Work
Fabricated and Erected at short notice.
Jefferson and Brooklyn Aves. Phone Cherry 3217
DETROIT MICHIGAN

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602 — 680 Fort St., W. DETROIT

PLUMB RETURNS TO GRAND RAPIDS

Walter K. Plumb, who has been general manager of the Clark-Cornelius Corporation, Syracuse, New York, will return to Grand Rapids, where he formerly was secretary of the Association of Commerce. He will be secretary-treasurer and general manager of the National Co-operative Oil Company.

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Detroit—The Detroit Jitney Service, Inc., has been formed with a capital stock of $2,000 to carry passengers in Detroit. The incorporators are A. E. Putnam, K. L. McCunig, Charles J. Morton and Glenn M. Coulter.

Lansing—As a result of several conferences between sand and gravel shippers and railroad officials with the Michigan Public Utilities Commission, it is believed there will be a readjustment of rates to make shipping costs on these materials smaller. County road commissioners declared before the Commission that if present rates continued, road building would be curtailed.

Cleveland—Something new in the way of facilitating the movement of railroad traffic has been started in Cleveland by the railway companies with offices in the city. They have opened what is called an "Over and Short" bureau, says the Plain Dealer, the purpose of which is to match overshipments of less-than-carload freight, which one road may have received, with bills of lading for this freight which the Cleveland station of another road may have received. The bills and freight occasionally get separated, the bills falling into the hands of one road and the freight into the hands of another. To facilitate the rapid matching of such disparities, the new bureau has been established.

New York—A contract for rails involving more than $8,000,000 was placed a few days ago by the New York Central Railroad. It is said that the order calls for 175,000 tons of steel rails to be delivered during the present year and that the contract price was $47 per ton. The Carnegie, Illinois and Lackawanna steel companies are said to have each received a percentage of the business.

Lansing—Charles F. Warden, manager of the Michigan Northern Railroad Company, who is in the South, will go to Washington, D. C., before returning to Lansing to attempt to reopen the case of the company before the Interstate Commerce Commission, which denied its petition, holding that a sufficient showing had not been made to warrant a road from Lansing to Midland, Bay City and Mt. Pleasant.

Detroit—Part of the equipment contracted for by the Michigan Central Railroad has been received. The railroad has ordered rolling stock and other supplies to the amount of $5,050,000, for which bonds and notes payable to the New York Central, of which the Michigan Central is a subsidiary, have been issued. This equipment comprises 26 locomotives, 35 cabooses, 38 passenger, baggage, dining and postal cars and 1,950 freight, refrigerator and stock cars. During the last year the railroads of the country spent $349,500,000 for new equipment, of which $135,000,000 was for 45,000 freight cars. Financial arrangements are being made for the purchase of 40,000 more freight cars; 15,000 refrigerator cars, to cost $67,500,000; 1,500 locomotives, to cost $105,000,000, and 1,200 passenger cars, to cost $42,000,000. The Pullman Company has ordered 500 new cars.

Lansing—Negotiations which will affect the transportation facilities of a dozen east side factories are pending between the Grand Trunk Railroad Company and the officials of the Lansing Connecting Railroad. It is understood the Grand Trunk has offered to purchase the connecting line, and if this plan is carried out it will assure connection with the trunk line, giving the plants two outlets, one over the Pere Marquette and other over the Grand Trunk. The Lansing Connecting Railroad was organized by the late J. H. Moores to care for the future business of factories which might locate in the southeastern part of the city. It recently has been re-organized with the following officers: President, H. M. Weed, Lansing; vice-president, H. O. Moores, Rutherford, N. J.; secretary, S. V. Weed, Lansing; counsel, Joseph H. Dunnebacke; general manager, R. R. Darwin.

No Further Price Cut, Ford Assures Dealers

The Ford Motor Company has sent the following letter to its dealers:

"Several inquiries have recently come to us concerning the likelihood of another reduction in the price of our cars, and as these inquiries no doubt emanate from prospective purchasers, we want to state again with greater emphasis that Ford cars are already being sold at a figure actually below cost and for an indefinite period another reduction or change in design is entirely out of the question and not at all contemplated.

"We believe the public will be fair enough to fully appreciate the frankness of the above when they consider the extent of our recent price cut, which was in fact the equivalent of several reductions in one, in our desire to contribute toward satisfying their demands for lower living costs, notwithstanding our sacrifice in making these figures a loss until we are able to materially reduce present costs through lower material prices and greater manufacturing efficiency. While we have of course made some progress in bringing down operating costs, we still have a long way to go before any thought can be given further reductions in present car prices, so we have no hesitancy in making these open statements to acquaint you with the true situation.

"You can therefore give assurance to prospective purchasers of Ford cars that now is their real opportunity to buy below cost and obtain delivery. Everyone is familiar with the heavy demand for Ford cars in the spring, and this year will be no exception, as in spite of conditions, business is already rapidly accumulating so that many who desire Ford cars will be obliged to wait perhaps until midsummer for delivery, causing considerable inconvenience and possibly financial loss, particularly to commercial customers.

"We expect you to protect the interests of prospective buyers in your community by placing these facts before them."

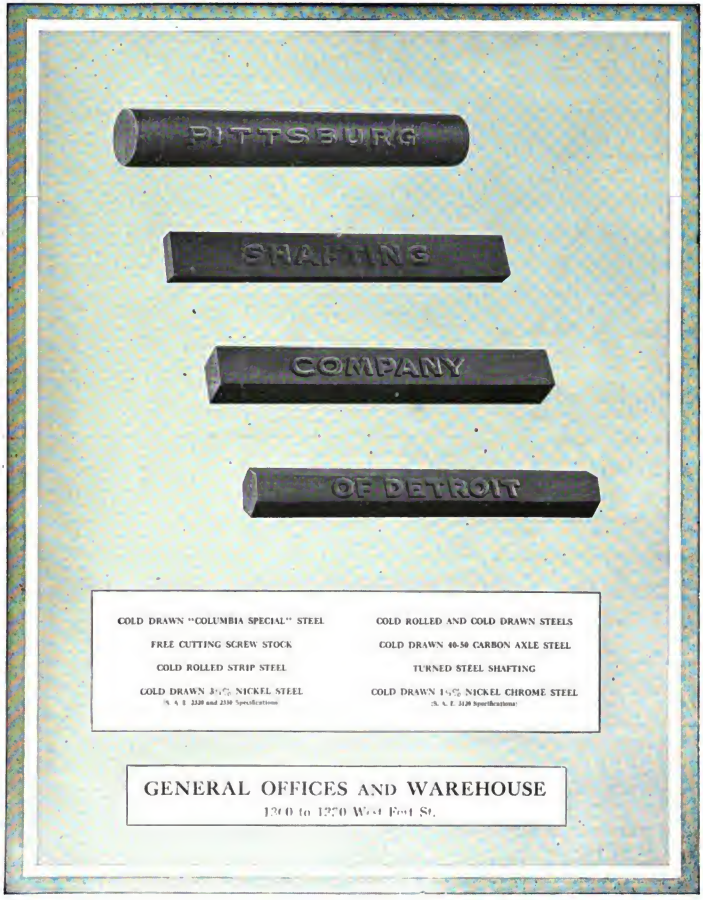
TO WRITE AUTOMOBILE INSURANCE

The Kennedy-Morris-Ames Company has been organized in Grand Rapids to act as representative for the Michigan Automobile Insurance Company in the Furniture city and western Michigan. The members of the firm are William M. Ames, Henry J. Kennedy and William T. Morris. Headquarters are in the Houseman building. The Michigan Automobile Insurance Company was recently incorporated with capital stock of $250,000.

CITY MANAGER HALL RESIGNS

A. W. D. Hall, city manager of Jackson since the removal of former City Manager Cummins to Grand Rapids, has notified the city that he will become city manager of Tampa, Fla. Mr. Hall is president of the National Association of City Managers.

Digitized by Google



COLD DRAWN "COLUMBIA SPECIAL" STEEL

FREE CUTTING SCREW STOCK

COLD ROLLED STRIP STEEL

COLD DRAWN 3½% NICKEL STEEL
(S. A. E. 2320 and 2330 Specifications)

COLD ROLLED AND COLD DRAWN STEELS

COLD DRAWN 40-50 CARBON AXLE STEEL

TURNED STEEL SHAFTING

COLD DRAWN 1½% NICKEL CHROME STEEL
(S. A. E. 3120 Specifications)

GENERAL OFFICES AND WAREHOUSE
1360 to 1370 West Fort St.

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 6515 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for
CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.
TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.
JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.
JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.
FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.
IMLAY CITY LIMITED—3:15 p. m.
PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

SPRUNK
Engraving Co.
700 Marquette Bldg.
MAIN 149
EXCEPTIONAL SERVICE IN ENGRAVINGS AND ART WORK

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—M. H. Hunt & Son, one of the oldest dealers in hee keepers' supplies in the country and the first in Michigan, plan to increase the storage capacity of the local plant, this spring.

Grand Rapids—The Consumers Ice Company has decided to increase its capitalization to care for expansion, which will include an artificial ice plant. A. B. Knowlton has been elected president of the company; Arthur S. Ainsworth, vice-president; C. Carroll Follmer, secretary, and N. Fred Avery, treasurar.

Lansing—Jesse R. McCarthy, secretary and sales manager of the Longstreet Lumber Company, Lansing, declares that lumber prices have reached the bottom and any unusual demand will create competition with a firmer market.

Detroit—Albert Kahn, architect, has been engaged to prepare plans for and supervise the construction of a new police headquarters building, six stories high, of stone, and to cost $1,500,000.

Grand Rapids—Public Service Director Wagner announces that his department will spend approximately $1,096,505 in street improvements and sewers this year, giving employment to 300 men.

Detroit—During the week ended January 5 nothing out of the ordinary transpired in the local building industry, due principally to the holiday period, but it is expected that from now on there will be increased activities. Architects reporting to the Detroit Builders & Traders' Exchange announced that general contracts had been let for the construction of a two-story school and basement building; a one-story and a two-story branch library; also for finishing work on several buildings, such as a factory, a garage and storage structure, an office building and some stores and flats. Most of the reports from architects as to work contemplated involved minor jobs.

Lansing—Gross Brothers, contractors, have begun their work on the spring building campaign because of the favorable weather. Contracts for material have been awarded to the Rikerd Lumber Company and work on two houses has been started by Sherman McDonald. They will be the first of 20 or more which Gross Brothers will build on vacant property during 1921.

Grand Rapids—During the first week of January building permits taken out in Grand Rapids totaled double the amount expended for such work for the corresponding week in 1920.

Lansing—Tentative plans for the new detention hospital to be erected by the city have been approved by the board of health, and if the final plans are satisfactory, work will start early in the spring. The building will be equipped to care for 44 cases, 30 in emergencies, and the cost will be approximately $85,000.

Reforestation Measures Proposed for Legislature

Legislative proposals for the conservation of Michigan's diminishing forests; progressive reforestation and more adequate fire protection, were drawn up to be submitted to the state legislature at a meeting of the state forestry committee of the state, last week. The session was called by the Michigan State Farm Bureau.

A farm bureau questionnaire circulated in every county in the state indicated almost solid public sentiment in favor of careful conservation of Michigan's forest resources, together with sane methods of taxation that will not virtually prohibit reforestation efforts by individuals. Taxation of forested and reforested lands on a basis of their bare land value, with the timber and products taxed only at the time they may be marketed, is a part of the Bureau's legislative program. Present tax methods permit taxes to pyramid over a series of years, thereby encouraging early cutting of timber and discouraging replanting.

According to the Bureau, there is much dissatisfaction throughout the state with present administrative methods in forestry control and conservation, and in fire prevention.

TO BUILD FACTORY TRUCKS

The Lansing Company, Lansing, is pushing its lumbering operations in the central part of the state. It has four camps and mills organized, with a fifth mill planned. This company is also negotiating for a large additional timber acreage. Manager Harry E. Moore estimates that the four mills will manufacture more than 2,000,000 feet for the company's use. About 75 men are employed in the timber operations to date. Tracts owned by the company and which were left standing a year ago because of labor scarcity, probably will be cut this year. Both the plants in Lansing and Poughkeepsie, N. Y., are being operated at capacity. The latter, recently acquired, is one of the oldest manufacturers of wheelbarrows in the world. It is proposed, however, to equip this factory during the year for the manufacture of Reyn-Olds factory trucks and trailers, which will require new machinery and a larger force of men.

FARGO COMPANY INCORPORATED

The Fargo Engineering Company, consulting engineers, Jackson, has been organized with a capital stock of $50,000, all paid in, and articles of incorporation filed. The officers are William G. Fargo, president; Horace S. Hunt, vice-president, and Rolla G. England, secretary-treasurer. The new company is a development of the engineering office opened 30 years ago by William G. Fargo, who has been identified with industrial power development and investigation in the Middle West for the last 20 years.

MAKE LICENSE TAGS IN PRISON

Manufacturing automobils license plates for the state is the latest industry added by the Michigan State Prison at Jackson. The new plant will be in operation by the latter part of February. Warden Harry L. Halburt will go to Boston this month to order the necessary machinery. Warden Hulburt decided to add the auto license plate plant on the suggestion of Secretary of State Charles J. Deland, and it is expected the state will save $24,900 a year by its operation.

NEW ERA PAYS BONUSES

The New Era Spring & Specialty Company, Grand Rapids, has paid its employes the customary annual bonuses, consisting of $100 to those having served one year and more and $50 to those with the company from six months to one year. In addition, notwithstanding the slackening of industry, the company has also made up a list of employes to be entitled to an unestimated amount, which is to be decided upon later and which will be given them when general conditions have improved.

Digitized by Google

Commerce Chamber Policy Brings Adrian Industries

Adrian entered the year 1921 a much better advertised and a much more active community than when it greeted the New Year of 1920, thanks to its Chamber of Commerce. Its bids for industry have given other communities throughout the state something to think about. The Chamber of Commerce rented four buildings formerly used as car shops by the New York Central and converted them into factory units.

Two of these buildings were occupied by the Erwin Foundry & Manufacturing Company, which has outgrown its quarters and would like to have help in financing a factory building. The Mott Manufacturing Company occupied another one of the buildings and has been building its business up rapidly. The fourth building, however, remains unoccupied. Its dimensions are 40 by 120 feet.

When the Atlas Tractor Company, Detroit, signified a desire to locate in Adrian, the Chamber offered to provide a plant with 20,000 square feet of floor space, which the company accepted. The Nelson-Knechtel Tractor Company also desired to locate in Adrian, but has not yet accepted the offer of factory space made by the Chamber of Commerce.

A 10-acre site and financial assistance in erecting a plant was offered the Utility Compressor Company, Detroit, and it is believed the company will locate its iceless refrigerator plant in the city. The inability of the Van Camp Packing Company to obtain milk supply for its condensery plant caused the Chamber to appeal to the farmers to furnish milk so that the plant would not be closed.

The Chamber has approved the request of the Lenawee County Telephone Company for increased rates, but the Chamber believes the rate increase should be allowed only on the promise of the company to effect betterments in service.

DEEDS DETAIL FORD PURCHASES

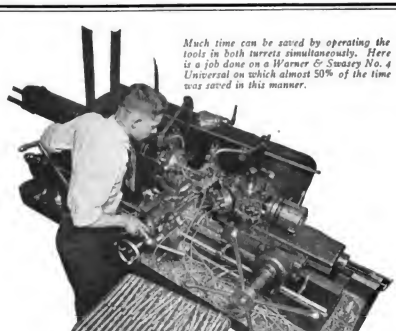
Some idea of the extent of the land purchases made by Henry Ford in the Upper Peninsula of Michigan last year may be had from the publication of the first deeds showing the transfer of some of the properties. The total shown on the deeds was of 65,274 acres in Iron county and 38,762 in Baraga, or, all told, 104,036 acres.

The records in Baraga county refer to the property as coming from the Chase S. Osborn interests, and mention 13,175 acres of mineral lands and 25,587 acres of real estate, or a total of 38,762 for the county. In the case of Iron county the records show one transfer of 51,348 acres and another deed for 13,926 acres, or, all told, 65,274 acres.

In the case of the Iron county transfers, there is attached to the document concerning the 51,348 acres revenue stamps to the extent of $300, thus indicating a price of $300,000, while the $80.50 in stamps on the second deed indicates a transfer value of $80,500, making the total $380,500. This does, however, in no way represent the actual value of the properties bought. They are estimated to be worth many millions.

MACHINE SHOPS IN LARGER QUARTERS

Two of the young machine shops of Battle Creek have just moved into larger quarters. Growth during the last year has forced both concerns to seek more adequate room for the manufacture of their products and general jobbing work. The U. S. Burton Welding Company has moved into a one-story structure recently completed at 10 Short street. The Adolph Johnson Structural Iron Works is expanding, taking over the quarters left vacant by the Burton works.



Much time can be saved by operating the tools in both turrets simultaneously. Here is a job done on a Warner & Swasey No. 4 Universal on which almost 50% of the time was saved in this manner.

A Production Engine Lathe

This is the right term for the Warner & Swasey No. 4 Universal Turret Lathe, as it does all that an Engine Lathe can do, and a great deal more. The carriage with feeds in both directions and equipped with the standard taper turning and chasing attachments, makes it capable of doing all kinds of work accurately and quickly.

Two No. 4 Universal Turret Lathes at the Kelsey Wheel Company, Detroit, have just replaced six Engine Lathes in their tool room. Other tool rooms in great number use these machines for blanking out taps, reamers and other tools that take so much time on Engine Lathes.

Are you doing work on an Engine Lathe that should go on a Warner & Swasey No. 4 Universal Turret Lathe?

Ask for descriptive folder and list of adjacent users.

World's Largest Manufacturer of Turret Lathes.
4½"x 44"—21" Swing to 5/8"x 4"—10" Swing.

The Warner & Swasey Company
CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, JANUARY 15, 1921.

The Tax Exemption of Municipal Bonds

SOMEBODY, wittingly or unwittingly, opened up quite an extensive field for tax discussion in the Detroit Free Press the other day when a suggestion was made regarding the repeal of the exemption of taxes on municipal bonds in this state. The field so opened is especially wide nowadays in view of the tax conditions in Michigan.

We have been spending so much money in this state that the old time figures of state appropriations have become obsolete, so far as expressing the demands of the various agencies of the state for money with which to carry on their activities.

As a consequence, not this year nor last year, but for some time back there has been demand for new sources of state revenue. It was to meet this demand in its incipiency that ex-Gov. Osborn, during his term of office, suggested what was then known as the "corporate excess" tax, and is now quite familiar to federal taxpayers as the excess profits tax.

There have been other suggestions. When we had timber enough standing in this state to make the proposition plausible there was a demand for a timber tax. The proposal for a tonnage tax upon iron and copper ores is neither a new nor an entirely dead one. The Grange has this year declared for a state income tax, although the Lord knows that a people who have had to do with a federal income tax should have no ambitions to impose a state income tax as well. All the time there has been an insistent demand on the part of the people of the various counties for higher and more favorably allocated assessments of the real and personal property in the various subdivisions of the state which are by law made units of assessment.

It will be surprising if, in the general hunt to find new sources of public revenue and new subjects of assessment, there is not considerable attention paid to the exemptions which have been set up for various reasons. So long as any property outside that devoted to religious and educational uses is exempted from taxation there is bound to be complaint about discrimination.

The exemption of municipal bond issues from taxation was the result of a long propaganda which had as its basis the theory that such exemption would bring into investments of this kind large sums of money, already held in the state, at a lower rate of interest than the commercial rate usually ruling. As a matter of practice, under the operation of the law the interest rate for municipal securities has generally followed the commercial rate, being one per cent below it. When the exemption was first made the average rate of taxation on the general property of the state was about one and a quarter per cent. So that the practical effect of the exemption was to give up a cent and a quarter of taxes for a cent of the interest rate, which was not wholly a bad bargain when everything was taken into consideration.

Among the other things considered was that, under conditions of taxation the money which was intended to be attracted to municipal securities would normally remain hidden, and that the interest reduction was nearly a clear gain in the long run.

Conditions have materially changed since the law was passed in 1909 for the exemption of municipal securities from taxation in Michigan. To begin with, the average rate of taxation has gone as high as 2 1 per cent, or twice as much as the rate prevalent when the exemption was authorized. So that, to get 1 per cent advantage on the interest rate, the people of the state are paying considerably better than 2 per cent.

Next, the aggregate amounts of the bond issues affected by the exemption are vastly greater than they were ever expected to be in 1909, when the law was passed. As a matter of fact, the best statisticians estimate the total amount of the bonds now outstanding which were issued by Michigan municipalities, school and road districts, counties and other governmental units at a sum in excess of $205,000,000, besides which $76,000,000 of bonds of other states held in Michigan are similarly free from taxation.

These are commanding figures in themselves but they are liable to even greater enlargement in the near future. For instance, the state has authority to issue $40,000,000 in good roads bonds within the next eight years, and so far no sinking fund for their liquidation has been provided by law. An official of the city of Detroit was recently quoted as saying that the authorized bond issues of the city now total $137,000,000. Of these about $100,000,000 have not been issued. The other cities of the state have proportionately large projects for the expenditure of money to be secured from the issue of bonds.

With the high money markets which now prevail for many years to come, reduction in interest on municipal securities from the commercial rate of interest is no more marked than it was when low rates prevailed. That is to say, when the money market rate on mortgage money, railroad securities, and the like was 5 per cent, municipals sold at a 4 per cent rate, showing a differential in their favor of one-fifth of the right rate, or a 20 per cent reduction in the interest rate. Today with a 7 per cent market for standard railroad securities, the municipal rate is 6 per cent, showing a differential of but one-seventh of the high rate, or a 14 per cent reduction in the interest rate. Meantime this one per cent of reduced interest rate is being paid for by an exemption from a tax rate of approximately two and one-half per cent.

The result of this condition has been further complicated, to the detriment of the general taxpayer, by the operation of the federal income and excess profits tax. Congressman McFadden, chairman of the committee on banking and currency of the National House of Representatives, has been considering the subject from a federal taxation view-point. The federal government can't tax the income from these bonds, either, any more than the state,—and there are many other states than Michigan which exempt this class of securities—and Mr. McFadden has been looking at this income with an eye to taxing it.

The federal government does tax the income on several classes of Liberty bonds. The money for these securities was obtained from the people at a low rate of interest to help nay the bill for making the world safe for democracy and backing up our good boys who went abroad to the war with the material things with which to make war. The market value of these bonds has shrunk as much as 15 per cent in the cases of some of the issues. Yet the income on even these discouraging holdings is subject to taxation by the federal government, after the amounts of the holdings have passed certain limits of exemption. In other words, it is a fact that the income on millions of federal government bonds paying low rates of interest, and issued to get money with which to support the national arms, is taxable, while a sewer bond issued by a Michigan village is taxable neither as to its principal nor its interest.

It is this condition which has very naturally brought about the attractiveness of these investments in preference to investments in real estate or industry which would have to bear the burden of supporting the federal, state and municipal governments. Chairman McFadden has given out information showing the desirability of these securities for investment, in preference to real estate and industrial investments, from which the following statements are taken, with him as their authority:

Digitized by Google

"To a man with $100,000 a year income, a 5 per cent tax exempt bond is the equivalent of a 7 3-10 per cent taxable bond.

"To a man with $1,000,000 a year income a 5 per cent tax exempt bond is the equivalent of a 14 9-10 per cent taxable bonds.

"In other words, so far as a man with a $1,000,000 a year income is concerned, he is justified in demanding that the taxable commercial bonds he buys yield the equivalent of nearly 15 per cent interest if they are to be as valuable to him as the 5 per cent tax exempt bonds that he may buy in any market of the nation."

When these figures are adjusted to the interest rates now prevailing for tax exempt municipal securities, which are 5½ and 6 per cent, they show a desirability of 5½ per cent tax exempt bonds in the two cases quoted above which shows them to be equal to 7.665 and 15.69 per cent returns as compared with industrial and real estate investments, while 6 per cent bonds are proportionately more attractive.

The results of these conditions so far as they affect Michigan industrial and real estate investments are very striking. Nearly a decade of years ago, when tax free bonds were a rarity, a Michigan millionaire told the writer that he was then the holder of $5,000,000 of such securities. The settlement of his estate recently disclosed the ownership of as many more, subsequently acquired. The testimony in the Ford-Dodge suit of some years ago disclosed the distribution of earnings of the Ford Motor Company to others than Mr. Ford to be so much, taken into account with the sums paid these associates of the great motor manufacturer for their respective holdings of stock when he bought them out, that the total is in the neighborhood of $150,000,000. So far as any public knowledge exists not 10 per cent of this huge sum has reappeared in real estate or industry, the ordinary subjects of taxation. Mr. Ford's share has so reappeared and is the subject of taxation. As to the rest, the information which comes to us from bond salesmen and others of authority is that practically 90 per cent of these gains has been invested in the class of securities which we are discussing.

Michigan has become notoriously a sinkhole in the Middle West for tax-free bonds. The great aggregations of personal and family capital which resulted from the gigantic fortunes so rapidly made in the automobile and collateral trades within a few years made such investments attractive, partly from the generosity of return which they showed, partly from the ease which they furnished investors to lay away their money in places where neither risk nor trouble were involved, and partly, in the later days, because of the absolution from federal income taxes which these securities carry with them.

It may be questioned whether any repeal of the exemption now existing will apply to bonds already issued. There are three sides to this. First of all, the law only applies to bonds issued since the act of May 13, 1909, granting such exemptions, was passed; yet easy-going assessors throughout the state are exempting municipal bonds issued before the law did apply. Next, there is a question whether bonds which were issued without an express contract of such exemption can continue to carry the benefit. Third, it is a well settled principle of taxation that the same sovereignty which grants exemption from public burden may withdraw the exemption when the public good or the public needs call for different treatment.

But regardless of these reasons, the municipalities of Michigan will probably issue as much in the next five years in the way of interest-bearing evidences of debt as the aggregate now existing, and if we can avoid, even only as to them, the continuance of the process of exchanging a two and one-half per cent exemption for a one per cent saving in the interest rate we will be doing some good bookkeeping and some accurate cost accounting, and quit fooling ourselves that we are working out an economy when we are only transferring the burdens of government from one kind of property owned in the state to all the other kinds of property.

The people who are looking for new sources of public revenue may very well take a squint at the possibilities that lie behind the repeal of the law exempting municipal bonds from taxation in Michigan. True, some of the capital involved will be re-invested in similar securities originating in other governmental jurisdictions; but not all, nor nearly all of it will go into such investments. As a matter of fact most of the people who invest in such securities would be most likely to turn to real estate and industry as sources of profit, and become at once normal contributors to the carrying of the state's burden. There would be more money for factories, more money for farms, more money for housing projects, all of which are safe and attractive.

There need be no fear that our markets for our public securities would fade away, either. There will for a long time be a sufficient demand from insurance companies, trusteeships and estates outside Michigan and within it to supply the funds on fair terms. There is always a market for long time securities, backed by the taxing power, at fairly low rates of interest. But, whatever the interest rates paid under such a condition they would be open ones, and not composed of two elements, one the rate paid, the other the amount of the exemption.

If the farmers and the representatives of the city homeowners, who are mostly working people, and who are all complaining of the unequal distribution of taxation, were really smart they would find new reliefs from increased taxation in the quarters to which they themselves have been granting exemption in the past.

Short Measure Stuff

THE TIME CLOCK

Ho, for the days when we once more
Might punch the clock by the factory door;
Ho, for the jingle of a bell,
Which says we may work if we do it well!

Days of fortune, days of trial
Stand recorded from that dial;
The winners and failures of industry,
Here find the same opportunity.

When the boys rang in with smiles and cheer,
The clock was a joyous thing to hear;
It greeted Bill and Ed and Jim
In a way that filled them with pep and vim.

When the demagogue sang his hymn of hate,
The clock rang fear out of the men in late;
It seemed to tick with a saddened noise,
As if it missed something in its boys.

And when the factory had to close,
Something within that clock just froze;
It ticked off the minutes in listless style,
As if it missed every worker's smile.

Then ho, for the days when we once more
May punch the clock by the factory door;
Then ho, for the days when we might get to,
The jobs that the Lord wants his boys to do!

* * *

THE FLINT JOURNAL HAS THEIR NUMBER—IF THEY HAVE ONE

THE BAFFLING RACE

Have you observed how, when you've watched the race
(The human one, I mean), and reached a base
To form a working prejudice, you mate
Then knock your fond conclusions through the fence?

I love all automobiles like the pest;
They've spoiled my walks; they mar my Sunday rest.
The folks who drive them often seem to vie
In manners with the inmates of a sty.
Then, when I've cursed them to my utmost gift,
Some cheery party offers me a lift.
If politics I damn with sweeping fling,
Some politician does the upright thing.
And so it goes. With many a hearty jibe
I used to roast the car conductor tribe,
Till, when I boarded car the other day,
A member of it wouldn't let me pay.
Alleging that—It's gospel truth I swear—
The week before I'd dropped a double fare

The more I live, the less my feeble mind
Gets, as it were, the number of mankind.
—Wamba in the Flint Daily Journal.

* * *

Put your good resolutions on ice to keep them good.

—A. F.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

JUST WHAT has caused it is not clear, but the change in sentiment during the past week is remarkable. Outspoken optimists abound, whereas two weeks ago the average man put forth optimism for publication only, and in his private conversation gave way to expressions of fear and doubt. Statistics follow along about in the same order as the undertaker, and while they help to explain why things have happened and also help to point the way to the future, the actual changes that are taking place now which are resulting in the spurring-up of business will only be known a week or a month hence. But the fact remains, do we care what the reasons are, so long as there is improvement?

In Detroit the store windows from the price standpoint begin to look like 1914. A suit with extra trousers for $30, and a good overcoat for $25. There is more tangible proof of revival in the reopening of several automobile plants on a part-time basis. From the East there is word of much resumption of work in the textile and shoe lines and from the West there are more reports that the farmers are beginning to let go of part of their crops.

Foreign exchange rates continued their rise up to Wednesday. The falling off of exports with a continued steady flow of imports would make a rise in rates the logical conclusion. The market for foreign exchange has withstood the offering of large batches of bills several times during the week without weakening, and funds heretofore tied up in speculation of this sort should begin to make themselves manifest in other directions. The bank report of December 31 by the Federal Reserve Banks, which exhibits the changes in condition of the member banks, lends further encouragement. Deposits increased some $315,000,000 the last week of December, and the borrowed money obligations of the member banks were reduced about $72,000,000.

A significant event locally was the rapidity with which the new Detroit Edison bonds were subscribed. It is stated that the issue was something over a million oversubscribed, running that total up to something like $6,500,000, and within a few minutes after the books were opened it was difficult to obtain definite promises of delivery from dealers.

Detroit stocks as well as others the country over have been gaining in market value steadily since the first of the year, which, while not a conclusive barometer of the future, has much weight; and particularly when viewed in connection with the rise in the bond market, there is much evidence that money is going into industry again with confidence.

The big Ford plant at Highland Park has been closed two weeks without antoward effect locally, and this in itself is evidence that reserves of the people are strong. The bank statements show that savings deposits in Detroit have suffered but little since September 8, two banks showing increases in savings deposits and the others showing small decreases of varying amounts.

The pendulum appears to have started back with a good deal more of speed than was thought possible a week before Christmas.

Detroit Bank Changes

American State—Richard M. Heames, treasurer of the Victor Screw Mfg. Co., Detroit, and a member of W. E. Heames & Company, has been elected to the board.

Dime Savings—T. W. Palmer Livingstone becomes vice-president as well as cashier, and Edwin Herzog is also given vice-presidency as well as management of branches.

Peninsular State—H. H. Elferton becomes vice-president; Harry Moxon is promoted from assistant cashier to cashier; E. J. Obendorfer, formerly deputy bank commissioner of Ohio, becomes assistant cashier. H. L. Chittenden, vice-president and credit manager, is added to the board of directors.

Bank of Detroit—George B. Judson, vice-president, is added to the board.

Peoples State—Leo D. Heaphy becomes assistant cashier and manager of branches. He was for three years manager of the Woodward avenue branch.

First State—Herman Darmstaetter has been elected a director, filling the vacancy caused by death of Gustav Darmstaetter.

National Bank of Commerce—Dwight B. Lee, president of the Motor Products Company, becomes a member of the board of directors.

Merchants National Bank—Frank A. Duws and Richard M. Schweitzer becomes assistant cashiers, both having been with the bank since organization.

Highland Park State—Clarence H. Booth, Edsel B. Ford and George L. Bahl have been added to the board and Henry Ford has retired. The board has been increased from nine to fifteen.

United States Mortgage Bond Company, Ltd.—Wm. H. Gregory, of Gregory, Mayer & Thom; N. P. Hull, Lansing, and J. B. Sperry, Port Huron, are now members of the board. Frank McMillan, who moved to California, has retired.

Current Investment Offerings

Contributions to this list are accepted from investment banking firms of recognized standing. The purpose is to present in consolidated form to our readers a review of investment offerings of interest. Where more than one price for same security is received from two or more dealers, the lowest price will be used. Lists should be in not later than Wednesday noon.

Watling, Lerchen & Company—Detroit City Gas Company General Mortgage 5's, due July 1, 1932, at price yielding 7.50 per cent; Detroit Edison Company 8 per cent Convertible Debentures, due January 10, 1933, at price yielding 8 per cent; Detroit, Monroe & Toledo Short Line Railway First 5's, due January 1, 1933, price 86, yielding 7.50 per cent; Detroit & Port Huron Shore Line First Mortgage 5's, due January 1, 1950, price 70, yielding 7.50 per cent; Steel & Tube Company of America General Mortgage 7's, due January 1, 1935, price 93.25, yielding 8.40 per cent; Sinclair Consolidated Oil Corporation 7¼ per cent Convertible Notes, due May 15, 1926, price the week 98.75 per cent; Cooper Underwear Company First Mortgage 7½ per cent bonds, due serially, price yielding 7.75 per cent.

Fenton, Davis & Boyle—Detroit Edison Convertible 8 per cent bonds due in 1931, par; National Leather Company 8 per cent bonds due in 1925, par; Province of Ontario 6 per cent due in 1943, price 97.50, yielding 6.20 per cent; Government of Newfoundland 6½ per cent bonds due in 1928, price 7.85 per cent basis; City of Menominee, Wis., school bonds 4½ per cent due in 1931, price 5.40 per cent basis.

Paine, Webber & Company—Consumers Power Company of Michigan Mortgage 7 per cent, due January 1, 1930, yield 7.50 per cent; Wisconsin Electric Power First Mortgage 7½ per cent, due October 15, 1945, yield 7.55 per cent; Virginia-Carolina Chemical Company Debentures 7 per cent, due November 1, 1923, yield 8 per cent; Canada, Manitoba, Canada, Gold 5 per cent, due October 1, 1923, yield 7.85 per cent; U. S. Naval Government 6 per cent, due October 1, 1945, yield 6 per cent; City of Aberdeen, S. C., Water & Sewer 6 per cent, due Serially, yield 6 per cent.

Joel Stockard & Company—Standard Oil California Notes, 7 per cent, due 1931, yield 6.90 per cent; Canadian Northern Mortgage Bonds, 7 per cent, due 1940, yield 6.95 per cent; Steel and Tube Company of America, 1st and ref. 7's, 1935, 7 per cent, due 1935, yield 8.40 per cent; St. Clair County, Michigan Roads, 5¼ per cent, due 1927-29, yield 5.75 per cent; State of Michigan, 5 per cent, due 1926, yield 5.15 per cent.

First National Company—Province of Ontario 6's, due October 1, 1943, yield 6.20 per cent; Cincinnati Gas & Electric Company 7's, due December 1, 1932, yield 8 per cent; Fisher Body Corporation 8's, due August 1, 1924-25, yield 8 per cent; National Leather Company 8's, due November 1, 1925, yield 8 per cent; General American Tank Car Corporation 7's, due May 1, 1927, yield 7 per cent; Lagett & Myers Tobacco Company 6's, due December 1, 1921, yield 8.06 per cent; Swift & Company 7's, due October 1, 1925, yield 8.10 per cent; Solvay & C'ie 6's, due October 1, 1927, yield 8.10 per cent; United Kingdom Great Britain & Ireland 5½'s, due November 1, 1922, yield 8.56 per cent; Bethlehem Steel Corporation 7's, due July 15, 1922, yield 8 per cent; Kingdom of Belgium 6's, due January 1, 1925, yield 9.03 per cent; Seattle, Lake Shore & Eastern 7's, due October 15, 1922, yield 10.08 per cent.

Bank Elections

Halfway State Bank, Hattaway—Andrew T. Donaldson, president; August Rein, vice-president; Howard C. Wade, vice-president; George Hummrich, cashier; Directors, Chas. Schroeder, Chas. Hummrich, Andrew T. Donaldson, Nicholas Arnek, August Rein, John H. Kirchner, John S. Haggerty, Howard C. Wade, James H. Means, Jim Bloom.

United States Mortgage Bond Company, Detroit—Directors, Wm. H. Gregory, John S. Haggerty, A. A. Moore, Daniel Sullivan, Wm. H. Steger, Edward N. Prendorf, Geo. H. Kirchner, Otto Koehler, Jr., Wm. Wylie, Carl Buell, Edward N. Hines, Dr. J. B. Kennedy, Wm. A. Eldridge, Jos. E. Watson, J. Edward Rice, Howard C. Wade, James H. Means, Charles Noble, James H. Ruel, J. B. Sperry.

UTILITIES COMMISSION ACTION

The Michigan Public Utilities Commission approved Tuesday a stock dividend of 4 per cent to be issued by the Battle Creek Gas Company. The Monroe Gas Light & Fuel Company was given permission to issue $150,000 of refunding bonds to take up a previous issue, and the Michigan United Railway Company was given permission to issue refunding bonds of $158,000 and $171,000.

CONTINENTAL BANK OFFICERS

At the meeting of the directors of the new Continental Bank, Detroit, Thursday noon, the following officers were elected for 1921: President, Walter G. Toepel; first vice-president, Henry J. Guthard; second vice-president, C. M. Burton; cashier, William J. Schechter; assistant cashier, Joseph H. Zinkhan. Owing to further delay in finishing the interior of the banking offices, the formal opening will not take place until Saturday, January 22.

Financial Record Open Market

Contributions to this list are received from dealers in unlisted securities. The idea is to bring together buyers and sellers of miscellaneous securities. Lists should reach our office not later than Wednesday noon.

Webb, Lee & Company will buy—Dix Theater, LaSalle Garden Theater, Palace Garden Theatre, Ferry Field Theater, Liberty Motors, Falls Motor, Coshuilla Land & Zinc.

Webb, Lee & Company will sell—Kelvinator Corporation, Bankers Land & Investment, Detroit Finance, Central States Finance, American By-Products, Kenwood Gardens Land Co., Koppin Realty Company.

Digitized by Google

Michigan Bank Elections

BAY CITY

First National—President, Wm. L. Clements; vice-presidents, A. E. Bousfield and Frederick T. Norris; vice-president and manager, Irving H. Baker; cashier, H. J. Martin; assistant cashiers, Ira Bricker and A. C. Harrison; trust officer, J. C. Shaw. The directors are: Wm. L. Clements, A. E. Bousfield, Gustaves Iline, C. R. Wells, G. A. Prescott, E. S. Clark, W. E. Carter, H. F. Smith, C. F. Hutchins, I. H. Baker, F. T. Norris, S. P. Cranage, D. L. Galbraith, F. W. Bradley, L. E. Oppenheim, O. E. Sovereign, R. B. Eddy and G. D. Jackson. The only change from the officers last year was the election of F. T. Norris as vice-president to succeed the late H. B. Smith.

Bay County Savings—President, Wm. L. Clements; vice-presidents, A. E. Bousfield, F. T. Norris and I. H. Baker; treasurer, W. E. Carter; assistant treasurer, G. A. Heimreich and W. S. Dicken. The directors for this bank are the same as for the First National Bank.

Farmers State Savings—President, Frederick Mohr; vice-presidents, Samuel Meister and C. G. Olmstead; cashier, W. R. Fotheringham; assistant cashiers, D. J. Cody and R. S. Bamford. The directors are Fred Mohr, Samuel Meister, C. G. Olmstead, B. J. Henderson, J. P. Ittner, M. L. Jacobson, J. E. Kinnane, W. P. Kavanaugh, John McLaurg, John Meyer, P. C. Pardee, J. R. Petty, August Quinnell, C. A. Traphagen, W. S. Fotheringham.

People's Commercial and Savings—President, James E. Davidson; vice-president and cashier, James R. Watrous; vice-presidents, Guy H. Moulthrop and J. R. Tanner; assistant cashiers, C. H. Cook, G. H. Watrous and Randall E. Graves. Directors, W. H. Boutell, E. B. Chatfield, C. H. Cook, J. E. Davison, James Davidson, F. C. Finkenstadt, George H. Jennings, C. G. Kilgore, Guy H. Moulthrop, C. E. Pierce, W. H. Sharp, J. R. Tanner, G. A. Tompkinson, J. R. Watrous, J. C. Wsadock, L. J. Wsadock and C. C. Whitney. Guy H. Moulthrop succeeds the late C. R. Hawley as vice-president.

Bay City—President, Geo. H. Young; vice-presidents, James Duffy and John Ross; cashier, David Miller; assistant cashiers, J. L. P. Sherrer, J. C. Kinney and J. F. Asman. Directors, F. E. Tyler, John C. Ross, Carroll Windiate, David Miller, J. K. Duffy, T. L. Handy, G. H. Young, H. A. Valiez, N. R. Wentworth and E. Wilson Cressey.

CHARLOTTE

Eaton County Savings—Directors, George H. Spencer, Albert Murray, E. D. Barber, M. Vomberg, W. B. Fulton, H. T. McGrath, C. E. Fisher, Ned B. Alsover. Officers: Geo. H. Spencer, president; Albert Murray, vice-president; Ned B. Alsover, cashier; C. E. Fisher, assistant cashier; E. Shotwell, auditor; C. O. Romney, teller.

First National—Directors, J. M. C. Smith, R. S. Preston, George L. Bennett, F. H. Pollard, Winson Geddes, C. S. Brown, D. F. Munger, C. A. Fulton. Officers: J. M. C. Smith, president; F. H. Pollard, vice-president; C. S. Brown, vice-president; R. S. Preston, cashier; W. J. Hauenstein, assistant cashier.

U. S. MORTGAGE BOND ELECTION

The United States Mortgage Bond Company, Detroit, has elected John S. Haggerty vice-president and George H. Kirschner treasurer. Howard C. Wade continues as president and James H. Means as vice-chairman. This company lends money on first mortgages in Detroit and sells bonds issued against the mortgages. Starting with a capital of $50,000 in 1915, the company has increased it to $500,000 paid in and has resources now of $3,600,000. During the life of the company it has lent about $4,000,000, of which $2,300,000 is now outstanding. Dividends of 16 per cent were paid during 1920 and the outlook for 1921 is considered very promising by the officers. A complete list of directors is given elsewhere in this issue.

SECURITY TRUST PROMOTIONS

Acknowledgment of faithful service is reflected in several official advancements announced by the Security Trust Company, Detroit.

Walter B. Hayes, formerly office counsel, is now trust officer; Robert L. Nixon has been advanced from assistant secretary to treasurer, while C. Thomas Darnton, Harry R. Gleason and Fred L. Adams have been appointed assistant secretaries.

H. B. Grimm has been appointed manager of the business extension and publicity departments.

Frank P. Book, of the Book Estate, has been elected a member of the board of directors.

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK
WOOLWORTH BUILDING, NEW YORK

COURTESY
SERVICE
SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids
National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. E. Durham, Representative.

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT

Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

While the Iron is Hot--

While a man is still strong and able to direct; that is the time to make Wills. Delayed action so often has the value of no action at all.
There is no reason for delay in making a will. Old age is not necessary. Every family needs that protection. Take the TIME for it! Call our Trust Department on the matter. We have administered thousands of Trusts under Wills. We will be glad to make suggestions.

Ask for our new book, "WHAT YOU SHOULD KNOW" about Wills and the Conservation of Estates.

THE MICHIGAN TRUST COMPANY

Grand Rapids, Michigan

MATTHEW FINN
High Grade Municipal and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

[The Federal Reserve Board at Washington receives weekly reports of principal changes in assets and liabilities of the member banks in leading cities. These, in connection with the Federal Reserve bank reports, can be taken as an index to the general banking situation.]

OF 820 MEMBER BANKS reporting December 31, an increase of $284,000,000 in demand deposits, $53,000,000 in time deposits and a decrease of $32,000,000 in United States deposits is shown, together with an increase of reserve balances at the Federal Reserve Banks of $23,000,000, compared with the reports for December 24. Since December 3 there has been an increase in holdings of United States bonds and notes of more than $40,000,000, while holdings of U. S. Certificates of Indebtedness dropped off $39,000,000.

The loan burden which the Federal Reserve Banks have been carrying for the member banks appears to be easing somewhat. Accommodations of the reporting banks show a reduction for the week from $2,176,000,000 to $2,103,000,000 and represent a falling-off in the percentage of such accommodations to the total loans of the reporting banks from 13 per cent to 12.6 per cent. This tendency is further evidenced by a total reduction in member banks' bills carried by the Federal Reserve banks of $111,785,000 compared with a week ago. In fact the changes as shown by the reports of the member banks and the combined reports of the Federal Reserve Banks are in the direction indicative of larger reserves and a more liquid condition.

Total reserve notes in circulation have also started down again, the decrease for the week being $78,071,000, while the total reserves of all member banks, including deferred and uncollected items, increased $83,166,000. The reserve ratio is increased from 45.4 per cent to 46.4 per cent. After paying the accrued 6 per cent dividend, the banks paid the Government $60,725,000 of their surplus earnings, as provided by the Federal Reserve Act, as a franchise tax, and $37,291,000 was carried to surplus account, leaving those items at $202,036,000, or a fraction more than 100 per cent of the total subscribed capital of the banks.

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	January 7, 1921	Dec. 30, 1920	January 9, 1921
Total gold reserves	$2,080,932,000	$2,059,823,000	$2,041,371,000
Legal tender currency, etc.	196,566,000	139,836,000	30,723,000
Total reserves	2,276,848,000	2,249,163,000	2,102,099,000
Bills discounted—Sec'd by Gov't war obligations.	1,104,585,000	1,141,982,000	1,662,086,000
All other	1,002,814,000	1,079,096,000	727,672,000
Bills bought in open market	284,769,000	255,702,000	574,722,000
Total bills on hand	2,342,109,000	2,974,398,000	2,854,477,000
U. S. Government bonds	26,109,000	23,889,000	26,332,000
U. S. Victory notes	18,000	18,000	364,000
U. S. Certificates of indebtedness	261,785,000	261,289,000	209,406,000
Total earning assets	2,130,014,000	3,259,027,000	2,933,982,000
Bank premises	17,959,000	13,456,000	10,410,000
Uncollected items, other deductions gr. deposits	744,141,000	727,227,000	1,101,149,000
5% Redemption fund against F. R. Bank notes	19,389,000	12,767,000	19,284,000
All other resources	4,293,000	8,293,000	6,241,000
Total resources	3,135,719,000	4,269,517,000	4,194,127,000
LIABILITIES			
Capital paid in	99,808,000	99,770,000	87,481,000
Surplus	202,036,000	164,745,000	132,199,000
Government deposits	25,598,000	27,699,000	27,793,000
Due to members—Reserve account	1,795,334,000	1,746,979,000	1,350,218,000
Deferred availability items	582,588,000	522,838,000	780,890,000
Other deposits, including foreign gov't credits	26,156,000	22,161,000	96,426,000
Total gross deposits	2,373,349,000	2,321,417,000	$2,235,052,000
F. R. notes in actual circulation	3,370,010,000	3,344,081,000	2,914,562,000
F. R. Bank notes in circulation—net liability	219,552,000	216,930,000	253,099,000
All other liabilities	141,013,000	121,939,000	18,087,000
Total liabilities	6,135,719,000	6,269,517,000	6,134,127,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	46.4%	45.4%	45.4%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	52.1%	50.5%	51.5%

BANK DEBITS

Aggregate debits to individual account, as reported for banks in 154 of the country's leading clearing house centers for the week ended January 5, were 10,535 millions, compared with 5,507 millions for the previous week, both weeks having five business days. Larger totals are reported for all the leading centers, for the increase for New York city alone being 171 millions, more than 1,000 millions, die chiefly to the large volume of end-of-year payments of dividends, interest and bonuses.

As compared with the corresponding week a year earlier, debits for the week under review were 180 millions larger, the increase for New York city banks alone being about

DEBITS TO INDIVIDUAL ACCOUNT AT CLEARING HOUSE BANKS
SUMMARY BY FEDERAL RESERVE DISTRICTS

Federal Reserve District	Number of centers included	WEEK ENDING Jan. 5, 1921	Dec. 29, 1920	Jan. 7, 1920
		(In thousands of dollars)		
No. 1 Boston	19	825,091	291,415	595,474
2 New York	7	5,894,890	4,850,958	6,716,971
3 Philadelphia	19	482,101	424,492	480,961
4 Cleveland	19	528,451	957,690	444,948
5 Richmond	3	209,719	151,549	213,410
6 Atlanta	15	282,272	190,365	214,270
7 Chicago	23	1,152,805	950,420	1,187,325
8 St. Louis	5	267,755	134,958	208,340
9 Minneapolis	12	170,329	198,911	173,558
10 Kansas City	16	319,186	242,264	320,735
11 Dallas	12	178,965	147,277	186,800
12 San Francisco	19	577,789	473,976	538,419
Total	184	10,535,906	8,507,560	10,556,901

Digitized by Google

General Financial News

MEXICAN CRUDE RUBBER

The Mexican Crude Rubber Company has notified all stockholders to deliver all of their stock certificates to the Detroit Trust Company on January 15 or as soon as possible thereafter, indorsed to the Mexican Crude Rubber Company. In exchange the stockholders will receive the new certificates of stock and the British bonds which were authorized distributed by stockholders December 21, 1920.

The action December 21 provided for a reduction of capital stock from $1,500,000 to $750,000 and for distribution of £375,000 par value of British government 4 per cent funding loan bonds of July 1919. Mention was made in our issue of December 11.

NEW PONTIAC BROKERAGE HOUSE

Hughes-Burke & Company have opened offices in the Boston Store building, Pontiac, and are prepared, according to the firm, to give Pontiac stock investors as complete a service as can be obtained in any city of the country.

UNITED LIGHT AND RAILWAYS

The United Light & Railways Company, Grand Rapids, has announced that its gross earnings for the twelve months ended November 30 showed an increase of $1,732,378 over the preceding year. The operating expenses increased $1,306,524; the net earnings, $425,853, and the balance $362,783. The net surplus earnings increased $264,843 and were equivalent to 12.9 per cent on the common stock.

DOWD MANAGES EHRMAN BRANCH

Martin Dowd, well known as a public accountant in Grand Rapids, is manager of the offices just opened in that city in the Fourth National Bank building by A. W. Ehrman & Company, Detroit, advisory accountants.

INVESTMENT CONCERN ELECTS

Directors of the Michigan Mortgage Investment Company, Lansing, were re-elected at a meeting last week, as follows: Glen R. Munshaw, William R. Town and Bert J. Baker, Lansing; William R. Burns, F. F. Tillotson and E. H. Bingham, Detroit; Frank B. Coleman, Grand Rapids, and H. J. Smith, Jackson. The company is engaged in a general financing business. The volume during December was greater than the preceding two months. President Munshaw said there had been a decided improvement in business the last few weeks.

CONTINENTAL MOTORS MEETING

The annual meeting of the Continental Motors Corporation, Detroit and Muskegon, will be held January 10 in Richmond, Va., for the election of directors and authorization to authorize the retirement of 6,289 shares of preferred stock.

JAY JOINS SELIGMAN

John C. Jay, Jr., has been admitted as a partner in the firm of J. & W. Seligman & Company, New York. The new member is regarded as one of the foremost organizers in the country, says the Wall Street Journal. Mr. Jay was for many years connected with the Pennsylvania Steel Company, of which he was vice-president at the time of his retirement from the concern. About seven years ago he came to the Maxwell Motor Company, Detroit, to reorganize it. Later he became associated with George W. Goethals & Company and still is a member of this firm. For some time he was chairman of the board of the Republic Motor Truck Company, Alma, Mich., and in 1919 undertook the reorganization of the Pierce-Arrow Motor Car Company, Buffalo, becoming its president and later the chairman of the board of directors.

At Small Expense You Can Have a Financial Secretary

who will relieve you of the petty worries connected with the handling of funds, securities and property—a reliable, responsible and experienced secretary who is never ill, never on vacation and whose life is permanent. The Security Trust Company will do the many things an ordinary individual secretary would do—and many more. Then during absence on pleasure or business or during sickness, you would have peace of mind regarding your financial matters.

Shall we send an officer to talk this over with you?

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS
CAPITAL AND SURPLUS $1,000,000.00
DETROIT

The Power to Earn

Earning power eventually determines worth—whether corporate or individual.

During 1921 the earning power of many companies will be problematical.

Re-construction, re-financing, and liquidation of inventories purchased at 1920 peak prices seriously impair prospective earnings of rails, utilities and industrials.

But the earning power of our First Mortgage Bonds secured by Detroit improved incoming producing property will remain constant and unvaried—

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

SAFE INVESTMENT BONDS
FOR SAVINGS
JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.
CHERRY 3000

A Bank with a Reputation, 70 Years of Service
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
43-47 Fort St. West. Penobscot Building. 14 Branches

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JANUARY 12TH

LISTED STOCKS	Bid	Asked	Par	High-Low 1921 to date	Sales	High-Low Since 1920	Cash	Annual Indicated Dividend When Stk.	Last Dividend Payable	When Paid	Cash	Stock	Total This Yr. Cash	Stk.	Capitals'n
American Chicle, pfd.	83	88	100				8%		Quarterly	Jan. 3, 1921	1¾ %		1¾%		$3,000,000
Am. Ll. & Trac. Co., com.	35	36	100	32 - 93	204	55 - 5%	4%		Quarterly	Nov. 1, 1920	1%	1% %			$12,371,300
Do. pfd.			100				9%		Quarterly	Nov. 1, 1920	1½ %				$14,239,800
Auto Body Co.	4	5	10			12½ - 5½			Semi-Ann	Jan. 26, 1917	33%				$1,074,000
Do. pfd.	7½	2½	10			10¾ - 10¾	9%		Semi-Ann	Aug. 1, 1920	8%				$627,800
Bower Roller Bearing Co.	18		10			29¾ - 19	Varies		As Decl'd	July 1, 1920	10%				$2,000,000
Charcoal Iron Co. of America, com.	2¼	2½	10	2¼ - 2	5	2¼ - 1¾				Apr. 1, 1919	2%				$8,833,300
Do. pfd.	3¾	3¾	10	2¾ - 3¾		5¾ - 3¾				July 1, 1913	8%				$5,017,850
Cities Service Co., com.			100		355	250 - 9%	*9%		Monthly	Jan. 1, 1921	⅝ %	1¼ %	⅝ %	1¼ %	$40,038,348
Do. pfd.			100		70	69 - 9%	9%		Monthly	Jan. 1, 1921	⅝ %		⅝ %		$73,488,884
Coahuila Land & Zinc Co.	16	20	5	6 - 6	25	6 - 6	Varies		As Decl'd	Nov. 15, 1917	25%				$400,000
Columbia Sugar		13¾	10	14½ - 13¾		20¼ - 11¾	12%		Quarterly	Jan. 2, 1921	3%		3%		$8,000,000
Commerce Motor Car Co.	7	12¾	10			13¾ - 9¼	12%		Quarterly	July 1, 1919	3%				$300,000
Com. Pwr. Hy. & Light Co., com.	14½	16½	100	19 - 19		14½ - 10¼			Quarterly	Nov. 1, 1918	1½				$13,586,800
Do., pfd.	26	38	100		23	23	16%		Quarterly	Nov. 2, 1920	1¼ %				$17,958,900
Continental Motor Co., com.	7	7½	10	7½ - 9¾	5	7½ - 2¾	2%		Quarterly	Dec. 1, 1920	1%				$14,289,350
Do., pfd., XD	93		99	100	100% - 92		7%		Quarterly	Oct. 19, 1920	1¾				$2,787,300
Detroit & Cleveland Navigation Co.	37		100		40	40	3%		Quarterly	Jan. 1, 1921	2¼ %		2¼ %		$4,819,400
Detroit Creamery Co.	23	24	10	23¾ - 26¾	38¾ - 16		8%		Quarterly	Dec. 24, 1920	3%				$21,000,000
Detroit Edison Co., XD	97¾	100	100	93 - 88¾	114 - 21¾		8%		Quarterly	Oct. 15, 1920	2%				$57,982,200
Detroit Iron & Malleable Works	87½	100	100		96	93 - 63	6%		Monthly	Jan. 1, 1921	½ %		½ %		$2,000,000
Detroit United	X93	90	100				6%		Quarterly	Dec. 1, 1920	2%				$13,000,000
Edmunds & Jones, com.	12	18	None		24	24	$1.00		Quarterly	Jan. 1, 1921	25c		50c		$40,000 shs.
Do., pfd.	75	85	100		79	78 - 7%	7%		Quarterly	Jan. 1, 1921	1½ %		1¾ %		$680,400
General Motors	12½	13¾	10	16 - 16¾	24	42 - 12¾	20%		Semi-Ann	Dec. 31, 1920	10c	1-40 sh.			20,898,398 shs.
Federal Truck		18½	10	18¾ - 18¾	82	18¾ - 18¾	12%		Monthly	Jan. 1, 1921	1%		1%		$3,000,000
Ford Motor Co. of Canada	238	241	100	269 - 220	460	310 - 210	Varies		As Decl'd	July 18, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.	12		10		11¾ - 13		Varies		As Decl'd	Oct. 1, 1920	5%				$1,093,750
Do., pfd.	78	79	1.00	.75 - .58	1.25 - .56		19%		Quarterly	Oct. 1, 1920	4%				$8,407,000
Gladys-Belle, com., XD	72	78	1.00	.75 - .58	1.45 - .81		16%		Quarterly	Oct. 1, 1920	4%				$4,000,000
Do., pfd.			100	.40 - .2½	1.45 - .81				Quarterly	Oct. 1, 1920	4%				$70,000 shs.
Godchaux Sugar, com.	13	21	None		69¾ - 33⅓										$40,000,000
Do., pfd.	88	78	100				7%		Quarterly	Jan. 1, 1921	1¾ %		1¾ %		$800,000
Hanna Furnace, com.	28	28	10												$1,385,000
Do., pfd.	89	96	100												$750,000
Hall Lamp Co.	14½		10		22½ - 16		Varies		As Decl'd	Dec. 24, 1920	6%				$730,000
Hayes Mfg. Co., com.	3¾	3¾	10	3¾ - 3¾	3½ - 2¾		Varies		As Decl'd	Feb. 1, 1920	1½ %				$1,500,000
Holland-St. Louis Sugar Co.	8		10		10 - 8		2%		Quarterly	Jan. 2, 1921	2%				$2,500,000
Iron River Mining Co.	29	49	25		42 - 42		20c		Semi-Ann	July 1, 1913	10c				$2,500,000
S. S. Kresge, com.	113		100	99¾ - 86¾	121 - 40		7%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	95	99	100				7%		Quarterly	Jan. 2, 1921	1¾ %		1¾ %		$2,000,000
Lindeman Steel, com.		15	None		24¾ - 15¼				Quarterly	Jan. 2, 1921	1¼ %		1¼ %		$1,093,000
Lincoln Motors, Class A	29¾	21¾	50	21¾ - 17¾	50¾ - 18¾		$5.00		Quarterly	July 20, 1920	$1.25				$3,000,000
Mexican Crude Rubber Co.			10		13¾ - 3¾										$750,000
Michigan Drop Forge, com.	39		None		42 - 32¾		$3.00		Monthly	Jan. 1, 1914	3%				$1,385,000
Do., pfd.			100		90	90 - 7%	7%		Monthly	Jan. 1, 1921	10c		25c		$12,500 shs.
Michigan Stamping Co., com.	17		10	17¾ - 17¾	20	18¾ - 17¾	8%		Quarterly	Jan. 1, 1921	1¾ %				$230,000
Michigan Sugar Co., com.	3¾	3¾	10	9 - 7¾	13¾ - 7¾		12%		Monthly	Jan. 1, 1921	3%		⅝ %		$1,900,000
Do., pfd.	7		10	8 - 8	9¾ - 3¾		3%		Quarterly	Dec. 15, 1920	1¾ %				$7,471,180
Miles-Detroit Theater Co.	13	19½	10		21 - 19¾		*16%		Quarterly	Jan. 10, 1921	4%				$2,703,300
Motor Products	41	30	None		34¾ - 27¾				Quarterly	Oct. 1, 1917	$1.00				$250,000
Motor Wheel	10¼	10¾	10	10¾ - 3¾	18¾ - 6¾		*8%		Quarterly	Nov. 20, 1920	2%				$100,000,000
Murray Mfg.	13		10		33 - 33		12%		Monthly	Dec. 13, 1920	1%				$4,599,340
National Grocer Co.	26	101	100		107 - 26		8%		Quarterly	Jan. 2, 1921	2%				$732,490
Do., pfd.	88	98	100		107 - 90		6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	1.00	1.02	1.00	1.23-1.10	2.00-1.05		*10%		Semi-Ann	Jan. 2, 1921	4½ %		4½ %		$1,000,000
Packard Motor Co., com.	10¾	10¾	10	11 - 8¾	28¾ - 8¾		10%		Quarterly	Oct. 31, 1920	2½ %				$11,385,100
Do., pfd.	72¾	73¼	100	79 - 70¾	89 - 70		8%		Quarterly	Dec. 15, 1920	1¾ %				$18,000,000
Paige-Detroit Motor Car Co.	19¾		10	17¾ - 19¾	45¾ - 12		*12%		Monthly	Dec. 15, 1920	1%				$3,000,000
Parke, Davis & Co.	93¾	95	25	87 - 88¾	117¾ - 95		*16%		Quarterly	Jan. 3, 1921	3%		3%		$11,888,850
Penberthy Injector, pfd.			100				7%		Quarterly	Jan. 3, 1921	2%		2%		$500,000
Reo Motor Co.	20¾	21	10	21¾ - 17¾	39¾ - 16¾		10%		Quarterly	Jan. 1, 1921	2½ %		2½ %		$8,887,850
Scotten-Dillon Co.		23	10		30	30	8%		Quarterly	Jan. 2, 1921	2%		2%		$1,500,000
Timken Axle, com. XD.	30¾	31¼	10	21¼ - 26¾	36¾ - 28		12%		Bi-Month	Nov. 15, 1920	2%				$3,000,000
Do., pfd.			100		93¾ - 93		7%			Dec. 1, 1920	1¾ %				$5,000,000
True-Con. Steel Co., com., XD.		28	10		33¾ - 23¼		16%		Quarterly	Oct. 15, 1920	4%				$1,430,250
Do., pfd.		94	10		98 - 94		7%		Quarterly	Dec. 1, 1920	1¾ %				$1,882,200
U. S. Radiator, com.	15		100		19¾ - 10		8%								$2,500,000
Do., pfd.	33½		100		99¾ - 30		7%			Jan. 26, 1920	17%				$2,300,000
Waring Hat Co., com.		88	None												
Do., pfd.	92	100	100				8%		Quarterly	Jan. 1, 1921	2%		3%		
Western Knitting Mills	17	18	None	10¾ - 8¾	20¾ - 14¾		$2.00		Quarterly	Nov. 15, 1920	50c		$1.40	5%	$560 shs.
White Star Line		42	50		50½ - 50½	7%			Augs&Nov	Aug. 1, 1920	3½ %				$750,000
Wolverine Portland Cement Co.	2½	4	10		5¾ - 2¾				Dec. 13, 1917		1%				$1,000,000

*Old $99-$70; new 82¾-27. 17% in 1911, 7% in1920, only dividends since organized. *Extra dividend. †Scrip. ‡Increase to $600,000 authorized. §Book value, $1,019,997. ‖J. & J. ¶Book value, $2,213,327. Godchaux. Book value, $2,922,793.00. Western Knitting Mills. ‖Book value. $3,094,450. Motor Products. †Old. ‡Now than other exchanges.

Foreign Exchange

Country	Par	Nov. 10 1919	Jan. 5 1920	Jan. 12 1921
Canada	1.0000	.85338	.85	.8712
London	4.8665	4.14	3.8279	3.7373
Switzerland	.1930	.1738	.1573	.1538
Paris	.1930	.1105	.0533	.0912
Belgium	.1930	.1179	.0625	.0846
Holland	.40186	.3779	.3168	.38
Italy	.1930	.08737	.05466	.03495
Greece	.1930	.18	.0763	.0745
Spain	.1930	.1940	.1825	.1585
Vienna	.20263	.0195	.0023	.00225
Berlin	.23821	.0280	.01345	.0448
Denmark	.26799	.2090	.1585	.1723
Norway	.2682	.2100	.1583	.1710
Sweden	.2680	.1830	.2045	.2145

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Jan. 12, 1921	Jan. 5, 1921	D ec. 27, 1920	July 1, 1920	July 1, 1920	July 1, 1919	July 1, 1919	July 2, 1917
U. S. Liberty 3½s	82.24	82.50	90.00	91.08	88.29	93.76	88.56	98.82
U. S. Liberty 1st 4s	87.30	85.50	85.82	85.80	82.00	94.90	82.90	94.12
U. S. Liberty 2nd 4s	87.00	85.80	84.19	85.00	81.58	93.34	82.64	94.10
U. S. Liberty 1st 4¼s	87.82	86.35	85.50	85.18	80.46	93.54	82.80	....
U. S. Liberty 2nd 4¼s	88.95	88.80	84.34	85.00	83.20	94.09	85.70	....
U. S. Liberty 3rd 4¼s	90.42	89.04	87.20	85.22	91.85	94.16	94.44	....
U. S. Liberty 4th 4¼s	87.38	88.46	84.89	95.58	88.75	100.10	....	....
Victory Notes, 4¾s	99.98	88.48	94.80	88.50	84.00	95.08	85.32	98.32

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement Book Val.	Capital	Deposits	Dividends Annual Rate	How Paid	Detroit Stock Exchange Range 1921 High	Low	Range 1925 High	Low	Last Sale	Jan. 12, 1921 Bid	Ask
American State	150	$1,000,000	$12,945,245	16%	J-A-J-O 1st	217	215	226	209	217	213	225
Detroit Savings*	257	1,500,000	22,232,290	15%	5 Jan-Jul 1st 2 Ex Jan	256	228	229	229	259	253	....
Dime Savings	263	1,200,000	23,676,852	14%	1 Monthly 1 Jan-Jul	....	....	229	255	256	257	260
First and Old Detroit National	194	2,005,000	69,669,532	*12%	J-A-J-O 1st	....	....	275	233	233	270	275
Central Savings Bank	143	1,000,000	17,515,186									
First State	130	1,000,000	12,733,501	10%	J-A-J-O 1st	....	....	....	....	....	157	166
Highland Park State	138	1,000,000	14,387,548	10%	J-A-J-O 1st	....	....	233	235	235	235	246
Merchants National	127	2,000,000	3,799,827	8%	J-A-J-O 1st	....	....	183	142	145	145	....
National Bank of Commerce	221	1,500,500	32,274,487	16%	J-A-J-O 1st	220	245	210	190	210	205	215
Peninsular State	168	2,500,000	41,522,787	15%	J-A-J-O 1st	....	....	220	215	215	220	....
Peoples State	382	5,000,000	100,783,335	13%	J-A-J-O 1st	360	350	335	303	320	360	....
United Savings	157	500,000	4,832,334	12%	Monthly	303	308	315	309	303	300	310
Wayne County Home	259	1,000,000	74,073,377	16%	Monthly	....	....	347	305	347	342	521
American Loan and Trust	134	500,000	.....	6%	J-A-J-O 1st	....	....	155	122	155	....	....
Bankers Trust	117	500,000	.....	4%	J-A-J-O 1st	....	....	....	....	....	....	....
Guaranty Trust	174	500,000	.....	6%	J-A-J-O 1st	....	....	146	143	....	....	150
Detroit Trust	417	1,000,000	.....	14%	J-A-J-O 1st	....	....	....	....	....	345	....
Security Trust	322	500,000	.....	12%	J-A-J-O 1st	....	....	....	....	....	260	....
Union Trust	190	1,000,000	.....	3%	J-A-J-O	....	....	187	155	195	175	....
Commonwealth-Federal	124	750,000	10,328,127		None	....	....	130	....	....	105	122
Bank of Detroit	130	1,000,000	18,459,135	10%	J-A-J-O 1st	....	....	....	....	200	152	200
Michigan State	116	250,000	2,158,974			....	....	....	....	....	....	....
American State, Dearborn	125	100,000	351,163		None	....	....	....	....	....	....	....
American State, Highland Park	153	200,000	.....	5%	J-A-J-O 1st	....	....	....	....	....	....	....
Peninsular State, Highland Park	220	100,000	.....	10%	J & J	....	....	122	122	122	112	122
Ironsprings State Bank	113	50,000	552,343									
Industrial Morris Plan	115	500,000	.....									

* Under one ownership—stock combined.

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Columbia Motors	5¼	5⅝	14	4	5⅝
Hoover Steel Ball	13	14¼	13	13	14½
Great Lakes Eng.	105	120	*188	*155	117
Liberty Motor	50	120	85	50	50
Noble Oil, com.	72	73	1.50	58	73
Invader Oil	1.55	1.75	1.88	1.70	1.71
Mich. Cop. & Brass 15	..	..	26	12½	16
Un. Mtg. 100% com.	10½	..	..	..	..
Un. Mtg. 50% com.	10½	..	..	..	..
Federal Discount	8	9½	..	..	..
Det. Mort., com.	12½	15	..	..	..
Det. Mort., pfd.	15½	5⅝	6¼	5½	6¼
Det. Cop. & Brass	15	25	..	..	..
Wilson Truck	18	6	..	..	..
McCord Mfg. com.	11	12	..	..	..
McCord Mfg. pfd.	20	30	..	..	..
Duplex Truck	2	3	..	..	..

* Old basis. †Nominal.

MISCELLANEOUS MOTOR STOCKS	Bid	Ask
Briscoe Motor	11	1⅛
Chalmers Motor	1	2
Curtis Aeroplane	10	20
Goodrich, com.	43	43⅛
Harroun	1½	2
Lee Tire	20	20⅛
Nash	500	525
Pierce Truck	25⅝	28⅝
Republic Truck	20¼	20⅝
Saxon	4⅛	4⅜
Stromberg Carb.	28⅝	33
White Motors	33⅛	33⅝

AS TO INVESTMENT ADVERTISING

Arrangements to broaden activities to protect the public against investment in promotion schemes which misuse advertising to defraud through the sale of stock, to conserve money in legitimate business and home-building channels and to maintain public confidence in the advertisement of legitimate investment securities were discussed by directors of the Detroit Better Business Bureau at the regular meeting in the Board of Commerce, this week.

The Better Business Bureau is affiliated with the Detroit Adcraft Club and operates in connection with the national vigilance committee of the Associated Advertising Clubs of the World.

At the conference, the first to be held since the election of directors at the annual meeting of members January 3, the following officers were re-elected: President, H. P. Breitenbach, advertising and sales counsel; vice-president, Fred G. Dewey, attorney; treasurer, Jacob Nathan, secretary Detroit Stock Exchange; executive secretary, Alfred J. Pitts.

E. C. HINMAN DIES

E. C. Hinman, one of Battle Creek's best known citizens, died Tuesday after a long illness. He was head of the American Steam Pump Company and the Central National Bank. Mr. Hinman spent most of his life in Battle Creek and was a graduate of the University of Michigan. He was a leader in Republican circles of Michigan, having been a member of the state central committee. He also served on the city council of Battle Creek and was a member of the board of visitors to the Naval Academy, at Annapolis. He was a member of the board of directors of the Commonwealth-Federal Savings Bank, Detroit.

Grand Rapids Stocks

The closing quotations on Public Utilities for Tuesday, January 11, 1921, are reported by the Corrigan Company as follows:

	Bid	Ask
Cities Service, com.	242	244
Cities Service, preferred	64½	64⅝
Cities Service, Bankers	80	80¼
Cities Service, Gas and E.	120	123
Cities Service, Debenture C.	88	89¼
Cities Service, Debenture D.	86	87
Commonwealth Power & Light, com.	11½	12⅛
Do preferred	36	38
American Public Utilities, com.	2	3
Do preferred	17	22
United Light & Railways, com.	22	24
Do preferred	58	60
American Light & Traction, com.	31	32
Do preferred	70	71

Active Bonds and Notes

Security—Maturity	Bid	Ask
Am. T. & T. 5's, Oct. 1, 1922	93¼	93⅝
Anaconda 8's, Jan. 1, 1923	83¼	87½
Anglo-Am. Oil 7½'s, Apr. 1, 1925	100	100⅝
Beth. Steel 7's, July 1, 1931	91½	91⅝
Bet. Govt. S. F. 7½'s, June 1, 1945	98¼	98¾
Cuba Rd 7's, Jan. 1, 1936	97⅝	98
British 5½'s, Nov. 1, 1922	98¼	98⅝
British 5½'s, Oct. 1, 1937	93¼	93⅝
Canadian 5½'s, Aug. 1, 1925	90⅝	91
C. C. C. & St. L. 3's, July 1, 1928	90	92
Hocking Valley 4½'s, May 1, 1924	91¼	92
Ill. Cent. 5½'s, Jan. 1, 1934	90	91
Jap. Govt. 4½'s, 1931	84¾	85
Jap. Govt. 1st 4½'s, Feb. 15, 1925	73⅜	77¼
N. Y. Central 6's, Sept. 1, 1930	101¼	102
Norway 8's, 1940	99½	100
Penna. lly. 7's, Apr. 1, 1930	104¾	105
St. Paul 4½'s, Jan. 1, 2014	82	83
Solvay 8's, 1927	100¾	101
Swedish Govt. 6's, June 15, 1939	82½	85
Swiss Govt. 8's July 1, 1940	102¾	103
U. S. Rubber 7½'s, Aug. 1, 1930	93	94¼
Virginian Ry. 6's, May 1, 1962	83	85
Western Elec. 7's, Apr. 1, 1922	95	95¾

Detroit Bank Clearings

Week of Jan. 12, 1921	$6,173,447.74
Week of Jan. 5, 1921	$107,382,564.65
Week of Dec. 25, 1920	$ 77,426,441.37
Week of Dec. 21, 1920	$153,526,303.00
Week of Dec. 15, 1920	$167,514,153.33
Week of Dec. 8, 1920	$108,553,305.85
Week of Dec. 1, 1920	$ 51,142,141.00
Week of Jan. 13, 1920	120,367,005.31

STOCK EXCHANGE ELECTION

The annual meeting of the Detroit Stock Exchange was held Tuesday. William A. Neer, P. K. Pelton and L. G. Gorton were elected for the board of governors for three years; for two years, M. W. Whittlesey, John F. O'Hara and D. A. Povah; for one year, Richard Brand, W. E. Reilly and W. G. Lerchen. William A. Neer was re-elected president; John F. O'Hara, vice-president; L. G. Gorton, treasurer, and Jacob Nathan, secretary. The membership reports a very good year, both in growth of business and in development, which includes adoption of a new constitution, inauguration of a clearing house and a greatly increased membership. Actual sales for the year 1920 were 2,416,885 shares, compared with 1,999,713 for 1919. John P. Glendon is the latest applicant for membership.

NEW BANK AT STRATHMOOR

Application to organize a state bank at Strathmoor has been approved by the commissioner of the banking department. The organizers are Howard C. Wade, James H. Means and their associates who are interested in the Rouge State Bank, Ecorse State Bank and Halfway State Bank.

Purchasing Agent or Assistant

Young executive experienced in buying general office supplies and appliances, also specializing in purchasing iron and steel and mill supplies for high grade manufacturing concern, wishes to connect with a progressive manufacturer or company. Member of N. A. P. A. Services available after Feb. 1st, 1921. Moderate salary to start. Box Y, Michigan Manufacturer & Financial Record, 611 Free Press Bldg., Detroit, Mich.

Digitized by Google

Banks and Bankers

BANKERS' CLUB ANNUAL DINNER

Dr. Marion Le Roy Burton, president of the University of Michigan, was the principal speaker at the twenty-third annual dinner of the Bankers' Club of Detroit, in Hotel Statler, January 14.

VOLKER ON MARINE CITY BOARD

John Volker, Marine City, has been made a director of the Marine Savings Bank. The bank recently paid out bonus checks to all its employes in accordance with its custom, and the 110 stockholders were given their checks. The year just ended was one of the best in the history of the bank.

PERSONNEL COMPLETED

The new national bank of Iron Mountain completed its organization January 4. The name is Iron Mountain National Bank. The officers are as follows: President, Cleo Mueller; first vice-president, Charles E. Parent; second vice-president, Claude H. Milliman. The directors include these with Z. P. Rousselle, John O. Blixt, Felix Valenti, John J. Flanigan, Olaf Rian and Dr. H. Belheimer. The new bank expects to open for business February 15. The Flanigan property has been bought for $34,500. Next spring a flue banking house and business block will be built.

MASTERS GOES TO MUNISING

Chester D. Masters, who has been cashier of the First State Bank, Petoskey, for some years past, has been elected cashier of the First National Bank of Munising. Masters has had broad experience and will give a good account of himself in the new connection.

SAVINGS DEPOSITS GAIN

Savings deposits in Grand Rapids banks for 1920 showed a gain for the year of $4,836,092. Between the bank calls of September 8 and December 28-29, the gain was $876,071. The aggregate at the end of the year was $30,143,987, a new high mark. Total deposits increased $1,076,716 for the year, and, compared with deposits two years ago are $9,200,000 larger.

NEW BANK IN STANTON

The new Peoples State Bank Stanton opened January 8 reports a satisfactory opening, resources amounting to $103,000 having been accumulated. This bank is an addition to others owned and controlled by Grant Slocum, Ealy and John R. Hudson.

FEDERAL RESERVE APPOINTMENTS

All officers and directors of the Detroit branch of the Federal Reserve Bank have been reappointed to serve for 1921. The board of directors consists of John Ballantyne, C. H. Hodges, Emory W. Clark, Julius H. Haass and Robert B. Locke. Mr. Locke was manager and chairman of the board. George T. Jarvis, who have been in employ of the Detroit branch since it opened, has been made assistant auditor. H. H. Higgins, who has been assisting J. G. Baskin, assistant Federal Reserve agent, for the greater part of last year, has been appointed an acting assistant Federal Reserve agent and will be domiciled with the Detroit branch.

WESTLAKE WITH ELSTON CO.

Frederick E. Westlake, formerly with Lee, Higginson & Company, Chicago, has joined the Elston & Company organization, 403 Real Estate Exchange, Detroit, and will have charge of the Michigan business. The Elston Company has offices in Milwaukee, Chicago and Minneapolis.

American Loan & Trust Co. Has Unique Savings Plan

A unique and one of the most complete plans so far devised by a financial institution to promote thrift among all classes of people is that offered by the American Loan and Trust Company, Detroit. This program, which is termed the Protective Savings Plan, embodies not only the saving of a definite sum, small or large, each month over a period of years, but also gives the saver life insurance for the entire amount he starts out to save in addition to the current rate of interest on his savings. A guarantee of a sound investment, at completion of the saving, in first mortgage real estate bonds, also is given. This plan covers three safe securities—savings account, life insurance and first mortgage bonds on Detroit improved real estate.

A customer may save $10 or any multiple of $10 a month over a period of 60 months. As soon as he has made the first month's deposit, the company takes out insurance for him for the amount he has started to save. Ten dollars a month would mean $600 insurance protection; $20 a month, $1,200 insurance, and so on. These monthly deposits draw interest at the rate of 3 per cent per annum, the same as ordinary savings account deposits, and the customer gets back every dollar paid in. There are no insurance premiums to be paid by the depositor. He simply makes his deposits each month with the company and these deposits are placed to his credit in his savings account.

The unique feature of this plan is that in case the depositor dies at any time before the end of the 60 months—whether it be one month after the plan has started, or several years—his wife, children or other beneficiaries receive as insurance the $600, $1,200 or other amount, and also the actual amount that the depositor has paid in, plus 3 per cent per annum, less certain costs which are very small.

Now, in case the depositor completes all the payments for the 60 months, he receives the full amount—$600 if $10 monthly deposits have been made, $1,200 if $20 monthly deposits, this total sum being paid in the shape of tax free first mortgage real estate bonds on Detroit improved property. Also, he gets accrued interest, amounting to $95.56 in cash. Thus if the Protective Savings Plan is carried out to its conclusion, the customer has a convenient means of saving something regularly, at the same time carrying insurance without extra cost, and finally without any effort or bother in making investigations as to the merits of securities, etc., his funds are invested for him, he saves, insures and invests all by this one plan.

There are many other attractive features connected with this plan, which are explained in detail in the booklet just issued by the company.

The company further points out that the tax free first mortgage real estate bonds, which constitute payment of the total sum at the completion of the contract, bear 5 per cent interest and are salable before maturity for cash at par, less 1 per cent discount.

There is still another valuable feature of the plan, in the opinion of many, and that is that the contract can be operated jointly by two persons. The advantage of this is that one person might be uninsurable, but by taking out a contract jointly with another who can be insured, the full benefits of the plan can be enjoyed. Thus a man and his wife or a man and u child could save and be insured—in fact any two persons could enter into a protective savings plan contract insuring the life of either, provided the age of the insured is over 10 years.

Michigan Bond Items

The Hanchett Bond Company, Chicago, with branch offices in Detroit and St. Louis, is offering four issues of municipal bonds yielding 8 per cent. It is doubiful whether this generation will see a recurrance of such bargains unless tax exemption features of municipal bonds are removed.

The city improvement bond issue recently authorized by the city of Detroit has been reduced from $15,000,000 to $5,000,000 because of the present money market. The sale of $1,000,000 of street railway bonds has been authorized.

By the narrow margin of one vote, Ferndale school electors have indorsed the proposed $50,000 bond issue to complete and equip the new Lincoln high school.

The Corrigan Company, Grand Rapids, recently participated in a syndicate offering $5,000,000 Consolidated Gas, Electric Light & Power Company (Baltimore, Md.) first refunding mortgage sinking fund 7½ per cent gold bonds.

It is expected that the voters of Belding will be asked in the spring to vote a bond issue, the money to be used for paving purposes.

The unsubscribed balance of the Detroit Edison $5,532,600 of 10-year 8 per cent convertible debenture gold bonds offered by a syndicate January 10, was oversubscribed by January 11 and the subscription books closed. They were offered by Spencer, Trask & Company, Coffin & Burr, Inc., New York city; Security Trust Company and the First National Company, Detroit. The bonds are due January 10, 1931, at par and accrued interest to yield 8 per cent.

Public Utilities

Jackson—Buyers of industrial power have been notified by the Consumers Power Company that the Jackson plant is in a position to provide additional power to manufacturing plants when needed. Extensive improvements have been made in facilities.

Lansing—The heat service rates have been reduced by the city electric light and water commissioners. The new rates are $1.25 a thousand cubic feet for the first 200,000 pounds used, and $1.15 per thousand for all in excess, while the former rates, raised last July, were $1.55 and $1.40.

Pellston—The Cheboygan Electric Light & Power Company dam on Maple River, near Pellston, this spring will be entirely rebuilt, according to present plans, which call for a two-foot raise of the dam, the installation of latest style water wheels and electric generating apparatus, and to be automatically and electrically controlled from a sub-station at Pellston. The present plant will be discarded.

Flint—Plans for future operations in Flint by the Michigan State Telephone Company contemplate service in 1935 to a community of 285,000 inhabitants, Supt. E. M. Gladden, Detroit, told members of the Kiwanis Club at their weekly luncheon at the Durant Hotel, last week. The actual population of the city, Mr. Gladden said, would be estimated at 168,000, with 67,000 additional in outlying districts who would expect city telephone service. This, the company estimates, will call for 40,000 telephones, or four times the present number

Digitized by Google

Who's Who In Michigan Finance

Joseph M. Conway, Deputy Commissioner, State Banking Department

Joseph M. Conway was born in April, 1890, on a farm in Isabella county, near Mount Pleasant, where he spent his boyhood and then attended the public schools. Thereafter he was a student in Ferris Institute, Big Rapids, graduating in 1907. From this date until 1913 Mr. Conway was engaged for a time in the hardware business and also obtained some banking experience, during which latter occupation he made the acquaintance of the then commissioner of banking, E. J. Doyle. Doyle was very much impressed with the thoroughness of Conway's work and when a vacancy occurred in the Lansing office of the state banking department he appointed Conway chief clerk. The duties of this job gave Conway a splendid opportunity to acquaint himself with the banking laws of Michigan and with the rules and examination methods of the department, and it was not long before his efforts in this direction were rewarded with a commission as a bank examiner. During the next few years there was a great deal of painstaking examination work to be done, mergers, consolidations and changes, and the work required the services of a patient, careful bank examiner. It was in this direction that Conway won his spurs and it began to be a custom in Lansing whenever a tough job came along, to send Conway. There have been occasions where information was desired concerning the past condition of different banks which he had examined, and it has been a source of satisfaction to the department to dig up from the old files of examination records, clear, accurate and complete details from his reports.



JOSEPH M. CONWAY

After the Federal Reserve Bank of Chicago began to accumulate a large number of state banks in Michigan as members, Governor McDougal began to look around for an examiner who was possessed of an accurate knowledge of the Michigan state banks, and who by reason of proper experience and bearing would make him a desirable representative as a Federal Reserve examiner. From the long list of high-grade men which the Michigan department has graduated from time to time, Conway was selected, and, beginning December 31, 1918, he covered Michigan and the other states of the Seventh district making examinations and reports for the Federal Reserve Bank of Chicago.

Along about February, 1920, Albert E. Manning, who had been the deputy state commissioner for many years, decided to organize his Michigan Finance Corporation and thus change his occupation from selling the other fellow how to loan the people's money to that of loaning money himself. And at this time Commissioner Merrick requested Conway to return to the seat of his former endeavors as Deputy Commissioner of Banking.

SECOND WOOL POOL PROPOSED

Representatives of 18,000 wool growers in 50 Michigan counties have decided to form a second pool under the supervision of the Michigan State Farm Bureau, and also to hold the 3,500,000 pounds of wool in the first pool for one year for better prices.

DIME SAVINGS BANK
FORT AND GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison
Sherman & Clare
Dix & Artillery

To Further Your Business

in this section of the United States is the basic purpose of the Dime Savings Bank from the moment that you have established relations with this institution. Our own business grows because we give FIRST CONSIDERATION to our customers—financial institutions, business houses, individuals.

Capital and Surplus $3,600,000.00

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
Firestone Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

The Editor's Mail

RESTRICTING IMMIGRATION

To the Editor:

I cannot agree with your views upon the matter of the restriction of immigration. Whether times be good or bad, it is obvious that the amount of goods which each individual American may have at his disposal depends upon the number of people among whom the total resources of the country must be divided. That we should permit anyone who so desires to come into the United States and share with us the benefits of this country is a short-sighted and foolish policy.

It is true that by means of immigration we shall, perhaps, be able to cut down our forests, mine our ores and in general use up the raw materials of our country much more rapidly than if we attended to this matter with our own force alone, and it is true that in so doing we will enrich a few members of the community. The ensuing generations will have to pay for this, and pay dearly.

Personally, I am a strong advocate of the entire and permanent exclusion of all immigration. I believe that the policy of "America for the Americans" is the best for us. Any immigration is undesirable. The continuation of immigration into this country will simply mean that we will gradually approach the time of over-population which is already present in many of the states of Europe, with the resulting poverty, misery and general weakness of the state. It means the lowering of the standard of living for every American and the lowering of the standard of American manhood. We cannot dilute the blood of our ancestors, who, because of the great difficulty and danger in immigration in the past, were only the most adventurous and strongest of their respective peoples, with the blood of Polish Jews, Sicilians and various kinds of Slavs, who are making up the bulk of our immigration at present, without a resultant decadence in the race which we are now proud to call Americans. We have spent billions of dollars in the importation of pure-bred horses and cattle in order that our horses and cattle might be of the finest strain obtainable, and yet we permit the coming in of the poorest of the scrub stock of Europe's manhood.

Fortunately for America the great minds of this country are wide awake to the serious menace of immigration. Steps are being taken to correct this dangerous evil. We see no reason why you should continue to advocate an out-of-date and erroneous doctrine, especially after the experience which we have had with the half-baked, unassimilated aliens in this country during the war period.

ROBERT L. FERGUSON.
(General Manager, Detroit Refrigerating Company).
Detroit,
January 5, 1921.

THE JAPANESE "MENACE"

To the Editor:

The writer having just returned from California, finds what seems to him a general misunderstanding here in Michigan regarding the so-called Japanese menace on the Pacific coast, and believes that the readers of your publication might be interested in getting the facts from first hand observation.

Before the World War, California papers were full of this Japanese menace. They told us seriously that Japan was shipping troops into Mexico and massing them close to our border line; that Japanese submarines were seen near our coast. The atmosphere became so charged with fear that some of the well-to-do, those who occupy the beauty spots on the ocean front, actually moved into the interior. Many Japanese were arrested as spies, and we were told they had maps, photographs and drawings of our forts and ports. Then Congress declared war on Germany and the Japanese troops along our border line must have faded away; the Japanese submarines disappeared and the Japanese were let out of jail. Then we appealed to these same despised Japanese to help us raise food to win the war and place democracy on the world map. They responded with a will. They thought here was their chance to show us Americans that they too could be Americans to the core.

After we placed democracy in Europe, what happened? In the last election California passed an amendment which not only disfranchises the Japanese but prevents their owning or leasing land or owning stock in any company that owns land. All that is left for them is to be our servants. I sometimes wonder who among us foreign born or of foreign descent are so important that we have the right to say that the Japanese shall not have the same privileges under the Stars and Stripes that we enjoy. Surely if there is such a thing as priority rights, it would belong to the Indian. If Thomas Jefferson could come back to life and get our present idea of Americanism and democracy, would he drop dead again?

What is really troubling California? We could ask the same question of all other states. In California motion picture houses spring up like mushrooms. Movies, movies everywhere, and yet crowds are lined up for blocks waiting to get in. It is the same with football, baseball and prize fights, and then there must be the jazz music while we eat our soup. The lectures where there is food for thought usually go unattended. We point with pride to the numerous million-dollar-a-year movie stars, but the teachers who are supposed to be the foundation of this republic have an awful time making both ends meet. I sometimes wonder if Nero is again playing his old fiddle.

Is it really a Japanese menace that is ailing us or are we who call ourselves Americans becoming a menace to ourselves? Had these Japanese been frugal French peasants instead, California would have hated them just the same. It is not a racial but an economic problem that confronts California and the rest of our country.

Here is the trouble as I see it. California land boosters have boomed a fictitious value on the land. That land which the Japanese use for truck gardening is held at from $1,000 to $3,000 an acre. The Japanese are very frugal. Their whole families will work 16 hours a day, every day in the year. They have to do this to eke out an existence. Americans cannot compete in long hours and low wages with the Japanese in tilling this high priced soil, so they get peeved, and they think it is a racial and do not see it is an economic problem. They do not see the land profiteer. In California there are still millions of acres of idle fertile land in its natural state but held out of use by land profiteers. While Californians were attending the movies, football, baseball and prize fights and while the fat cats headed south were doing the shimmy, sharpers stole their lands. Now these sharpers realize they cannot get Americans to work this high priced land, so there has been a quiet movement on foot to import four or five million coolies. Land profiteers would rather flood our whole country with cheap coolie labor than sell their land at a price that enables Americans to buy and till the soil.

How can we remedy this situation? By using our brain power. Our present system of taxation is all in favor of the slacker and suppressing industry and thrift. We are working hind-end-to. We must face about and take all taxes off things desirable and place them on the undesirable. Idle city lots, idle lands and idle mines are undesirable. Suppose we take all taxes off our stores, stocks, factories, homes and contents and instead tax the vacant lots just the same as the used lots, according to their location value. That would drive vacant lots on the market. Then the young men who are making goo-goo eyes at their best girls could buy lots. That would mean new homes, new furniture and new life. Then take all taxes off the farmers' crops, stocks, buildings and contents and instead tax the idle lands and idle mines the same as the mines or lands that are in use. That would kick the props from under the land profiteer and throw idle

ESTABLISHED 1906

Bookkeeping
Appraisals
and
Cost Systems

Audits

Income
Tax
Reports

THE
WALTER S. GURD CO.
Public Accountants
708-9 Hammond Bldg. Detroit, Mich.
Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F. C. A.

Digitized by Google

land and mines on the market. It would give man the same privilege as the birds of the air, who build their nests in any place not in use. Then the Japanese will not want to work 16 hours a day and the American can then also afford to till his own soil. As soon as we are ready to attend to the duties of our American citizenship with the same alertness that we attend the movies, football, baseball games and prize fights, just so soon will our troubles disappear. It is not the Japanese who are bothering us; our trouble lies with ourselves.

GERRIT J. JOHNSON.

Grand Rapids, Mich., December 24, 1920.

CONCERNING STATE TAXES

To the Editor:

Your editorials have been a source of considerable enjoyment to me in the past, as I have always discovered a distinct vein of thought which led to the uncovering and exposing of shams of all kinds.

In your issue of November 28, "Look Out for the State Taxes," you have certainly lost your punch.

You are perfectly aware that there have been for many years a band of devoted men and women who have stumped up and down the state decisiming against graft and corruption and all human folly.

They have thousands of times made the distinct promise that if given control and laws passed as they dictated, crime would be decreased, police become practically unnecessary and taxes be greatly reduced.

This element has been in absolute control for the last four years, with the result that crimes of a serious nature have increased, we cannot get enough police judges and courts and taxes have increased right along.

I should like very much to see the day arrive when these reformers are going to be asked the question: When are you going to commence to make good?

A. L. PUTNAM.

Birmingham, Mich., R. F. D. 4.

New Publications

"THRIFT AFTER MOTHER GOOSE"

The Continental & Commercial Banks, Chicago, have published a booklet on savings entitled, "Thrift After Mother Goose." This work is something entirely new in savings psychology. The book is a collection of twelve Mother Goose rhymes and drawings printed in four colors, with the original verses changed only so as to apply to the whole general idea of thrift. Thus, the Old Woman Who Lived in a Shoe says of her children, "But hunger and want are things I don't care, so I'll rear all these children and teach them to save." And Jill says to Jack, "I'll allow, I've money in the savings bank, I'll never fall down now." This freshness both in text and art work is such that the hackneyed subject of thrift is presented in more than readable light.

In three days the Continental & Commercial Banks gave out more than 17,000 copies of this book to some 15,000 people who called in person at the institution. The requests have been so heavy that the supply of copies has been exhausted.

NEW HOIST CATALOGUE

The Wright Manufacturing Company, Lisbon, Ohio, manufacturer of high-speed hoists, screws and differential blocks, and steel trolleys, has just issued an attractive new catalogue descriptive of its line. It contains much data of use to those interested in hoists. A portion of the catalogue is devoted to a discussion of the various types of hoists and the field of usefulness of each. Copies will be furnished on request.



Digitized by Google

Michigan Sweetens It

(Continued from Page 8)

taining about 30 per cent water.

As the juice became thicker by evaporation, the percentage of alkalinity increased; therefore, it has to be subjected to another settling process before it is ready to boil into sugar. This process reduces the alkalinity to a minimum and precipitates the impurities, which, in the form of lime salts, are now removed in another filtering operation. The thick, clear juice obtained from the filter presses is now sent to the supply tank, from which it is drawn for boiling in the vacuum pans.

Boiling the Syrup

In the early history of the industry, sugar was boiled in open pans over a direct flame or by heating with steam coils. Sugar crystals produced by boiling in such a pan acquire a brown color, owing to the decomposition of the sugar by high temperature. The fuel consumption is also much greater in the open pan process than in the more modern system. For these reasons the open pan was abandoned and a large tank used in which the pressure could be diminished by means of an engine and a condenser. These tanks are about fifteen feet high by twelve feet in diameter and each contains a series of copper steam coils for boiling the syrup. A vacuum is created in the tank which makes it possible to boil the syrup at 150 degrees F.

The first operation in the process of boiling the syrup is to draw juice into the pan, or tank, until it is about one-third full. It is then boiled until fine crystals, or sugar-grains, begin to appear. This has to be watched closely and a test taken every few minutes. When the sugar begins to "grain," an additional amount of juice is added and the boiling proceeds, the new juice adding to the size of the grains. After the grains form from the first lot of juice, additional juice, instead of forming new grains, increases the size of those already formed. The business of sugar boiling, however, is how much juice to draw into the tank and the correct size of the grain on which to "build," can be learned only by actual experience under the direction of an expert sugar man.

Juice is now added in the correct quantities and at the proper intervals so that by the time the tank is full the crystals will be of the correct size. The amount of juice added each time should be small enough so that the excess of water will be evaporated in the least possible time. If too much is added there is danger that the mass will be rendered so thin as to dissolve the crystals already formed. When the mass in the pan becomes so condensed that a proof placed on a glass plate will not flow away, the boiling is completed, the operation taking about four hours. The product is now a heavy, sugary syrup called filmass (German) or massecuite (French), and contains about 93 per cent solids and 7 per cent water. The boiling being completed, the massecuite is dumped into a reservoir called a "mixer," which is a huge trough through which a rotor extends lengthwise. To this shaft are attached a number of paddles which keep the massecuite stirring as the shaft turns, thus preventing the possibility of its hardening before it is needed.

Now for the Sugar

The next operation is the actual production of the sugar. If all the previous operations have been correctly handled and the massecuite has been properly boiled down, the separation of the sugar crystals from the syrup will present no difficulties. This separation takes place in what is known as a "centrifugal" machine. A centrifugal in this case is a thin brass cylinder about 40 inches in diameter and 22 inches high, finely perforated and lined with a very fine brass screen through which the moisture may pass while the sugar crystals are retained in the cylinder. When ready to operate, the massecuite is allowed to pour into the cylinder through an opening above the machine. The cylinder is filled about one-third full, then the supply is shut off and the machine is set in motion.

The cylinder, which stands upright, is driven by a vertical shaft which operates with a water motor and spins at the rate of approximately 1,800 revolutions a minute. The centrifugal force developed by the spinning wall of the cylinder and forces the syrup out through the fine holes in the screen, while the sugar crystals remain packed against the wall. When the centrifugal is stopped, it contains a lot of clean white sugar in place of the dark brown mass which was poured into it about four minutes before.

The syrup which is spun out through the wall of the cylinder is called "green syrup." This is caught by the iron shell which encloses the cylinder, and collects at the bottom, where it flows through a spout into the green syrup tank. A fine spray of water is played over the surface of the sugar before the machine is stopped, to remove the last trace of syrup from the sugar crystals, the syrup spout being shifted to a wash syrup trough before the spraying commences so that the wash syrup may be stored in a separate tank. This wash syrup is afterward used for boiling white sugar mixed with thick juice. The "green syrup" eventually is returned to another vacuum pan, where it is made into brown sugar. Brown sugar is boiled down in a manner similar to the treatment of white sugar syrup, and passes through the same centrifugal process.

The white sugar is discharged through an opening in the bottom of the centrifugal machine, where it falls into a conveyor trough and is carried into the granulator, which is a drum about seven feet in diameter and approximately thirty feet long, slightly inclined so that the sugar will work toward the outlet end, and

A BLISS ADVERTISING INNOVATION

So rapidly have new inventions, discoveries and manufacturing methods crowded upon industry since the intensive industrial demands of war widened men's vision that it has been impossible properly to digest and effectively apply them. The E. W. Bliss Company, Brooklyn, N. Y., and Hastings, Mich., die and machinery manufacturer, has adopted a unique method of bringing to the surface the best thought which is today in the pressed steel industry. The method is simple. The company will place its advertising pages in the trade papers of the country at the disposal of influential manufacturers of pressed steel in order that they may express their views of the past and present and the possibilities of the future in the industry. This offers an excellent opportunity to show how the many discoveries and inventions in the pressed metal industry will benefit manufacturers who as yet have not fully grasped the economical methods and possible production improvements within easy reach.

CHICAGO PNEUMATIC APPOINTMENTS

The Chicago Pneumatic Tool Company, New York, Chicago and Detroit, announces the appointment of R. F. Eissler as assistant to the vice-president, with headquarters in the company's new office building, 6 East 44th street, New York. W. C. Straub, formerly district sales manager of the New Orleans branch, has been appointed district manager of the Pittsburgh branch, succeeding Mr. Eisaler, and Ross Wyeth, formerly attached to the Pittsburgh branch, succeeds Mr. Straub as district manager at New Orleans.

containing a great many little shelves. The granulator is slowly revolved by means of a wheel gear, picking up the sugar on these shelves and carrying it toward the top. As each shelf nears the top in its circular travel, the sugar falls off, with the result that the air is constantly full of falling sugar. A warm air blast is directed through the granulator and before the sugar has completed its journey through the machine it is thoroughly dried and granulated.

From the granulator the sugar pours into a large bin which supplies the packing room. Up to the last year or so, sugar was always packed in barrels, but the streak of economy which hit the rest of the country has also hit the sugar manufacturer, and this year they are packing it in bags. Automatic machinery makes it possible to fill a 100-pound bag, weigh it and sew it across the end in a minute and a half.

The sulphur used in the sulphuring process is burned at the mill, about 400 pounds of sulphur being used daily. Approximately a carload of lime rock is used daily to furnish lime for the carbonation processes and also to make the carbon dioxide gas which is used in the same connection.

After the juice is diffused from the cossettes, they are reduced to a mass of soft pulp which is dried and sold for cattle feed. This dried pulp is worth about $50 a ton.

The Industry in Michigan

The first sugar factory in Michigan was built at Bay City in the fall of 1898. This was erected by a corporation known as the Michigan Sugar Company, but was not the same company as that which is organized under that name at the present time. Later the Bay City Sugar Company was organized and built factories at other points in the state. The original Michigan Sugar Company later moved its factory and equipment West and a new company was formed which included the Bay City Sugar Company, incorporating under the name of the Michigan Sugar Company. This company is now the largest in the state, with factories at Alma, Bay City, Caro, Crosswell, Saginaw and Sebewaing. The Caro factory is the largest in the state, producing 325,000 pounds of sugar every twenty-four hours. Eight other companies have also been formed, with factories located at Bay City, Mount Pleasant, Owosso, Holland, St. Louis, West Bay City, Mount Clemens, Marine City, Menominee and Hilisfield, making a total of seventeen factories in the state.

The industry has grown to such proportions that the sugar companies pay to the farmers an average of more than $10,000,000 annually for their crop of beets. They also pay to the railroads of the state more than $2,000,000 in freight charges. For the operation of these plants, about 250,000 tons of coal is required yearly, most of which is mined in the state. One hundred thousand tons of limestone is also used, all of which is quarried in Michigan.

The seventeen factories turn out 300,000,000 pounds of sugar annually, requiring 480,000 barrels made in Michigan from Michigan material. Fully 50,000 farmers are engaged in raising the beets which these factories consume. The "season" for the sugar factories is only as long as is required to consume the year's crop of beets, which is about 100 days on the average, or three and a half months. During this time the factories run twenty-four hours a day, employing altogether more than 8,000 men.

Most of the output of the Michigan factories is marketed in Michigan, Ohio, Indiana and part of Illinois, although last year some of it went to France as part of the supplies sent by the American Food Administration.

Digitized by Google

Rail Freight Increases And the Cost of Living

(Continued from Page 10)

Government, to be supported by taxation on even a heavier scale than heretofore.

Third, new spirit has been given to the railroad managers and working forces. The managers feel the ground firmer under their feet. They no longer regard as hopeless a return to the old time operating efficiency. The employes, seeing a real earning basis for their generous wages, are less restive and more inclined to heed the pleas of the officers for co-operation in the restoration of efficiency.

These factors, together with the increased facilities which revived purchasing power and credit will enable us to procure, will—not at once, but in time—permit a resumption of the free and unrestricted movement of traffic the country over, and ultimately, I hope, a complete revival of the old high standards of American railroad service.

Continued help and co-operation on the part of shippers and receivers of freight is just as important as efforts by the railroad working forces themselves.

The United States Chamber of Commerce recently summarized in striking figures what the patrons of the railroads could accomplish in the way of further increasing the transportation capacity of the country. Without going into details, I will merely say that this summary showed that heavier loads per car, together with prompter loading and unloading of cars—all within the limits of reasonable practicability—would add the equivalent of 535,000 freight cars to the nation's available supply.

That number of cars, bought by the railroads at the prevailing prices, would cost more than $1,600,000,000. We would certainly have to pay at least 6 per cent for the money, and the high interest charge would have to be borne by the public in the form of increased rates.

In asking for additional efforts on the part of our patrons, I hope I will not be accused of having forgotten so soon what shippers and consignees did so willingly and effectively during the war, and continued to do after the war traffic had entirely ceased. I merely wish to emphasize the fact that these are the days in which co-operation all around is not merely one of the things that make life pleasant—it is the sternest kind of an economic necessity to the well being and safety of this country of ours.

The kind of co-operation I mean, so far as the railroads are concerned, embraces their managers, their working forces and their patrons. If we all pull together and make the best of what we have, I am sure we shall be able to utilize the present railroad facilities as to meet successfully the country's needs until those facilities can be enlarged and improved. For myself, I have every hope and confidence that these results will be achieved.

WATER-SEWER SURVEY DEMANDED

State Sanitary Engineer W. D. Rich has notified the municipal authorities of Traverse City that unless a complete survey, with plans and specifications, of the city water distribution and sewer system is filed with the state board of health by January 21, the state will begin proceedings against the city officials.

FOOTE & JENKS REPORT GOOD YEAR

Salesmen of the Foote & Jenks organization, perfume and extract manufacturer, gathered in Jackson recently for a conference in connection with the close of the year's business. The reports show the concern to have made its best record for business in 1920, and the concensus of opinion among the salesmen was that the year 1921 would show even larger results.



Thorobred Beauty

Speed and style, charm and the joy of living: picture to yourself a car that combines these delights with an abundance of power and endurance, and then let us show you your heart's desire. It's the latest and smartest Winton Six sport model—a beauty and a thorobred. Simply telephone.

GEORGE H. ZUVER COMPANY
4465 Cass Avenue Telephone Glendale 4605

WINTON SIX

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

ALMA FIRE LOSSES NEGLIGIBLE

Joseph F. Sattor, chief of the Alma fire department, claims the smallest loss for his department of any department in the country in a city as large as Alma for the first six months of the fiscal year. The department was called to 19 fires, the loss being $160. The asserted valuation of the property was $150,000, making a fire loss of about one-tenth of 1 per cent.

Digitized by Google

Without Consulting the Prospective Corpse

(Continued from Page 6)

the shows, the motor car business will open with a crack. No question about it."

"I do not believe that the Detroit territory has ever been adequately supplied with motor cars, and until the point of saturation has been reached, there will be no reason for pessimism. In times like these, good management and a revision of sales methods are called for. After being in a buyers' market so long, it is only natural that a reaction should throw the business off balance temporarily. But the situation has improved within the last week or so and will continue to improve. Real salesmanship is called for and the order takers of the past either must learn how to sell or get out of the business."

The above view of the situation was offered by C. H. Potts, of the Potts Motor Sales Company, Haynes dealer. It is the view shared by the automotive retail trade as a whole. From now on the motor car selling business will experience competition never known before. The best men, the best organizations and the best cars will survive.

There is no use trying to emphasize the hole in the doughnut when men talk as they do along automobile row. H. H. Stuart, manager of the Detroit Auto Dealers' Association, treats the rumors with the contempt deserved when he says:

"There have been a lot of stories floating about. There always are in times like these, but most of them have lived their short lives and passed out. A few weak sisters got panicky and they somehow enjoy the misery they get from hearing and repeating wild rumors. Times have not been as rosy as we would like to have them, but 1920 was expected, but it came quicker than expected. Some were prepared, others were not.

"We can say for the automobile business in Detroit that it is too well established and there is too much money in and around Detroit to cause well-schooled business men to get scared over a temporary depression. I don't suppose the retail business could go on forever with the situation as it has been, but the men who built right in the first place, and thoroughly understand the motor car business, are not losing sleep worrying about the future.

"With a renewal of industrial and business activity in other parts of the country, evidence of which is developing daily, watch Detroit come back to its new normal. Those who haven't yet abandoned the idea that a pre-war normal is coming, are only delaying business. We must adjust our mental vision to a new range and our expectations to new levels to which past criterions will bear only the relationship of contrast."

As a sort of antidote for the poison of melancholy, these figures from the Motor World should be effective. Twenty years ago there had been manufactured in this country the enormous quantity of 3,700 motor cars. In 1920 the production of American cars and trucks was 2,230,000, although the industry had set a mark of 2,500,000. Out of the vast number of cars built, those unsold represent just one month's production. This being true, then there are available for the market only a month's supply of cars, and most of the motor plants are closed or working on short schedule.

The current unsupplied demand is estimated at 2,500,000 cars. It has been said that when there are 12,000,000 motor cars in use (approximately one car to every nine persons) in this country, then it will be time enough to consider curtailment. The average life of a car is placed at 50,000 miles, or five years' service. We might be surprised if we knew how few cars are allowed to live that long.

What the next five years probably will see will be the elimination of some cars from the field and consolidation of other companies, with an attendant concentration in production, a higher grade of salesmanship and a more general use of the greatest vehicle the world ever has known.

New Publications

C-H SPACE HEATERS

Among the new publications on space heaters, being distributed by the Cutler-Hammer Manufacturing Company, Milwaukee and New York, are a 4-page, 8½x11 leaflet and an 8-page envelope-size folder. Both of these publications are illustrated with views of C-H Space Heaters installed in airplane hangars, crane cabs, valve houses, etc., and give lists of uses to which these heaters have been put. The heaters are described, and tables aid the customer in choosing the approximate number required for any particular installation. C-H Space Heaters are standardized flat heaters of 500-watt ratings and may be connected to direct or alternating current light or power circuits in the same manner as adding electric lamps. The 8½x11 leaflet is known as Publication 880 and the envelope folder as Publication 874.

"YOUR INCOME TAX"

James Barr & Company, certified public accountants, Detroit, New York and Syracuse, have issued a booklet entitled: "Your Income Tax," in which this rather complicated subject is analyzed and explained in the plainest possible language, devoid of technicalities and with the hope that it will be of use to the "perplexed business man." Examples of computing the income tax; error in method of computing depreciation; how partnerships are taxed; corporations; computation under sections 301 and 302, and a number of charts or tables are some of the enlightening features taken up in the booklet, which may be obtained by writing to the company's offices in the Penobscot building, Detroit.

AGRICULTURAL STAPLES AND THE TARIFF

The United States Tariff Commission has just issued a report entitled "Agricultural Staples and the Tariff," which treats in detail of production, channels of trade, character of foreign competition, [illegible] of customs tariffs in six of the [illegible] an staples—wheat, oats, flax[illegible] and potatoes.

The r[illegible]ch in the receipts of foreign foodstuffs has attracted widespread comment and has been the cause of tariff agitation by farmers and allied interests. The subject has been injected into the current political situation, and this report is therefore particularly timely.

Especial attention is given to a study of conditions in Canada. In the introductory chapter the Tariff Commission's report compares agricultural conditions and development in the two countries and discusses briefly the general character of their agricultural trade. The body of the report consists of a series of studies dealing with the several products in question. Each of these studies is prefaced by a summary and a statement of conclusions.

Copies of this report may be obtained from the Superintendent of Documents, Government Printing Office, Washington, at 35 cents each.

TITLE COMPANY TAKEN OVER

The Taylor Title Company, the oldest and for some time past, the only abstract office in Kalamazoo, went out of existence on New Year's day, and has been succeeded by the Title Bond & Mortgage Company, an organization made up mainly of Kalamazoo men. The change was occasioned by the election of John L. Hollander, president of the company, to the probate judgeship. Albert Todd is president of the Title Bond & Mortgage Company.

FURNITURE MAKERS TO ADVERTISE

At the semi-annual meeting of the Retail Furniture Association of the United States, in Chicago, this week, a plan for a national advertising campaign to promote the sale of furniture was presented.

It is proposed to create a fund of $250,000, half of which would be subscribed by manufacturers and half by retailers, by placing a tax on one-tenth of 1 per cent on total sales.

The plan was worked out by the joint committee of the National Council of Furniture Associations and of the retailers' Association, and follows meetings held in Grand Rapids last year.

LANSING C. OF C. MEETING

The annual meeting of the Lansing Chamber of Commerce will be held January 18. A program is being arranged.

Trailer Interchangeability Feature of the New Trucks

New truck models for 1921 to be put out by a number of manufacturers embody changes which will adapt the trucks for drawing trailers, says an announcement from the Trailer Manufacturers' Association of America. These changes include additional speed changes—four, five, or six—heavier rear axle construction, coupling devices for trailers and increased braking surfaces.

"This is a recognition by the manufacturers of the growing public demand for trucks that can pull trailers satisfactorily and give the maximum service," says the statement. "It is highly desirable, while making these changes, that the truck manufacturers adopt standardized trailer hitches as regular equipment, so that any make of trailer can be used with any make of truck. The Society of Automotive Engineers last year approved the recommendations of a joint committee of its truck standards division and the Trailer Manufacturers' Association for standardized trailer hitches. Large corporations operating fleets of more than one make or truck often find, after buying a number of trailers, that the trailers cannot be used with all of the trucks without making expensive changes in some of the couplings.

"Interchangeability of trucks and trailers is of growing importance to motor express operators, as indicated by the following case: An operator over a route of more than 100 miles has been figuring on buying trailers to be used like box cars behind his trucks. In case the goods in the trailer were consigned to points 75 to 125 miles beyond the end of his own route, he planned to turn such trailers over to operators of connecting or adjoining routes to be hauled by their trucks the remaining distance. It was found, however, that the coupler bars on the trailers would hitch on to only about one-third of the pintle hooks on the trucks operated by any of the companies. There is no doubt that if the situation is remedied there will be a considerable development along the foregoing lines, trailers being transferred from one motor express line to another, just as freight cars are switched from one railroad to another for long hauls."

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354



ELECTROTYPES
ARE THE
WORKING
PLATES

The steel worker, laboring in the glare and heat of the great furnaces, is a factor of vital importance in the production program of a great industry. Electrotypes—the *working plates* of the Printing industry—are vital to the superior reproduction of your selling message.

Michigan Electrotype & Stereotype Co.
Fort Street at Second
Main 1972

MICHIGAN

ELECTROTYPES STEREOTYPES

DETROIT

THE MOTCH AND MERRYWEATHER MACHINERY CO

METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163
CAD. 6164

PRODUCTION FOUNDRIES COMPANY

We have successfully specialized to
SAVE YOUR DOLLARS
by our modern intensive
production methods
applied by an expert
organization in our
40 TON
GRAY IRON FOUNDRY
OF ANN ARBOR, MICHIGAN

On Michigan Central Main Line for Carload Lots
BRANCH SALES OFFICE
315 Park Building, Detroit Telephone Main 8336

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

New Corporations

FOR WEEK ENDED JANUARY 8, 1921

Farmington Improvement Co., Farmington; real estate. Fred M. Warner, Edgar S. Pierce, Howard M. Warner, Farmington 100,000

Myrtle Young & Son, Inc., Charlevoix; general real estate and insurance agency; Horace S. Harsha, Irene E. Young, Earl A. Young 5,000

Home Woolen Mills, Eaton Rapids; manufacture and sale of yarn, cloth, etc.; Burritt Hamilton, Emily F. Stocker, Anna W. Hauchey, Battle Creek 1,000

J. L. Randall Cut Glass Co., Howell; manufacture and sale of cut glass products; J. L. Randall, H. R. Bonnell, Lansing; A. Riley Crittenden, Howell 7,500

Copian-Sternberg Co., Muskegon; deal in clothing, millinery, coats, furs, furnishings, etc.; James Copian, 217 Gratiot Ave., Detroit; Benjamin Sternberg, Harris E. Galpin, Muskegon 25,000

Farmers' Co-operative Blacksmith Shop Co., Calumet; agricultural, dairy, mercantile business; Mike Namus, Calumet; Peter Uusitalo, Osceola; Jacob Kaikkonen, Calumet 10,000

Michigan Malted Milk Co., Jackson; deal in food products of all kinds; George B. Prince, Edgar S. Blackman, M. Allington, Jackson 100,000

Fargo Engineering Co., Jackson; general engineering and construction business; William C. Fargo, Hollis G. Englund, Horace S. Hunt, Jackson .. 50,000

Morris & Co. (P.), New Jersey; Chicago, Ill.; L. Andrian, 18 Ottawa St., Grand Rapids, agent 100,000

Mill-Wetherall, Inc., Detroit; deal in bonds, stocks, securities, etc.; Robert B. Mill, 5469 Mayburry Ave., Charles F. Wetherall, Marguerite Wetherall, Detroit 1,000

Manistee Sporting & Fishing Club, Manistee; own and maintain a lodge for hunting and fishing; W. H. Green, Charles E. Kock, Harlan MacMullen, Manistee 2,500

Hedke's Orange-Ade Co., Detroit; manufacture and sale at wholesale and retail of Hedke's orange-ade and other soft drinks, extracts, general soft drink business; Sam Hedke, 851 Woodward Ave., Hugh S. Nesbitt, Peter D. Tibbitts, Detroit 200,000

Kennedy, Morris, Ames Co., Grand Rapids; general insurance agencies; Henry J. Kennedy, Grand Rapids; William T. Morris, Wyoming Park, William M. Ames, Grand Rapids 5,000

Baker-Hupert Co., Port Huron, manufacture and sale of beverages, candies and confectioneries, wholesale and retail; Joseph C. Hupert, Albert Baker, Birdilla Hupert, Sylvia Baker, Port Huron 10,000

Columbian Storage and Transfer Co., Grand Rapids; warehouse and storage business; Mary Barard and John Zevalkink, Grand Rapids 150,000

Page Plumbing & Heating Co., River Rouge; general plumbing, heating and steam-fitting; Wayne County; Edward A. Page, Wm. L. Weismann, Arthur J. Gorman, River Rouge 15,000

Marysville News Co., Marysville; conduct and circulate or otherwise deal in newspapers and other publications; Norman T. Farr, Howard S. Hempstead, William H. Pierce, Marysville 10,000

Insurance Shelton & Graham, Inc., Detroit; sales upon commission of goods, wares and merchandise; Howard H. Shelton, 436 Drexel Ave.; Matthew P. Graham, Herman W. Graham, Detroit

Marshall Corset Co., Marshall, Calhoun County; manufacture and sale of corsets, brassieres, bust supporters, etc.; Louis Modery, Brooklyn, N. Y.; Thaddeus Fleck, Woodhaven, N. Y.; Frederick W. Becker, New York 5,000

Wayside Service Corporation, Detroit; manufacture and sell electrolytes for plate storage batteries; Frank L. Sorensen, 30 Canfield E., E. Binke Shand, Allan Shand, Detroit 50,000

Frederick C. Mathews Co., Detroit; general printing, lithographing, engraving and binding business; Frederick C. and Louise J. Mathews, 1447 Lenawee Ave.; Byron G. Nicholson, Detroit 1,000

Pure Oil Co. (F.), Dover, Del.; 1429 Ford Bldg., Detroit 125,000

Swigart Land Co. (F.), Chicago, Ill.; Charles J. Hauchey, Wellston, Mich. 2,000

Herkimer Hotel Co., Grand Rapids; deal in hotels and hotel property and 350,000

Digitized by Google

apartments; William S. Rowe, Elmer L. Kinsey, Fred N. Rowe, Grand Rapids 300,000

Detroit Wholesale Warehouses, Inc., Detroit and vicinity; warehouse and storage business; Reuben F. Butler, Vinsetta Park, Royal Oak; Samuel D. Cohen, 109 Virginia Park, John McDonald, Detroit 5,000

Detroit Jitney Service, Inc., Detroit; jitney transportation system; Orville E. Putnam, 2995 Hazelwood Ave., Kenneth L. McQuaig, Charles J. Morton, Glenn M. Coulter, Detroit. 2,000

Foreign Investment Corporation, Detroit; mercantile business; I. W. Jayes, 1416 Chicago Blvd., Charles B. Ladendorf, Detroit; William F. Thiemt, Royal Oak 10,000

Cadillac Mailing Co., Inc., Detroit, direct mail advertising in all of its various phases and branches; F. R. Buice, 1031 Wayne Ave., William S. Gubble, George McSwiney, Detroit. 9,000

Detroit Consolidated Sales Co., Detroit; act as sales agent for manufacturers of automotive equipment; Enoch H. Herman, Charles H. Hinckley and F. Nebrick, 435 Woodward Ave., Detroit 10,000

Bankers' Exchange, Detroit; dealing on commission in stocks, bonds and other securities of banks, etc.; S. McGeachy, Dearborn, Mich.; W. J. Meisenheimer, 874 Seneca Ave.; A. Schultz, Detroit 10,000

Essex Housing and Construction Co., Detroit, real estate; Ernest G. Gray, 1651 Parkview Ave., Royale A. Wright, Harold F. Coyle, Detroit.... 10,000

Stanwood Electric Light & Power Co., Stanwood; purchase electric current and distribute and sell the same at retail for light, heat and power purposes; Marvin D. Crane, Winfred E. Zank, Howard M. Whitbeck, Stanwood 10,000

CHANGES OF NAME

Herald Co. (name changed to L. E. Merchant Co.), St. Joseph 8,000

Fay-Kwitzen Foundry Co. (name changed to Fay Foundry Co.), St. Joseph 12,000

Eastern & Western Pure Food Chain Stores (name changed to Columbia Wholesale Grocery Co.), Detroit..... 6,500

INCREASES

Oxford Savings Bank, Oxford, from $25,000 to 50,000

Wayne County Bond & Mortgage Co. (F.) (Del.), Detroit, from $1,000,000 to 5,000,000

Saline Mercantile Co., Saline, from $30,000 to 60,000

A. J. Kiratin Co., Escanaba, from $50,000 to 100,000

Hayden Supply Co., Grand Rapids, from $25,000 to 50,000

Larned, Carter & Co., Detroit, from $36,000 to 524,000

Jackson Metal Products Co., Jackson, from $50,000 to 100,000

State Journal Co., Lansing, from $150,000 to 300,000

Jefferson Park Realty Co., Detroit, from $25,000 to 65,000

Benton Harbor Canning Co., Benton Harbor, from $50,000 to 200,000

G. R. Kinney Co., Inc. (F.) (N. Y.), New York City, Grand Rapids, from 4,500,000 to 9,000 pfd., and 40,000shs. common, no par value.

Burton Abstract & Title Co., Detroit, from $100,000 to 700,000

Embury-Martin Lumber Co., Cheboygan, from $150,000 to 200,000

Grand Rapids Blow Pipe & Dust Arrester Co., Grand Rapids, from $24,000 to 75,000

Hamilton Carharrr Cotton Mills, Detroit, from $1,000,000 to..... 2,000,000

William Pike Co., Detroit, from $5,000 to 50,000

Investment Mortgage Co., Detroit, from $10,000 to 100,000

DECREASES

Mexican Crude Rubber Co., Detroit, from $1,500,000 to 750,000

Haggerty Land Co., Springwells, from $300,000 to 130,000

NOTICES OF CHANGES OF ATTITUDE

Central City Real Estate Co., Jackson. 15,000

Standard Machinery & Supply Co., Port Huron 25,000

Lamboogy Label & Wrapper, Kalamazoo 1,000

MoAdamite-Aluminum Co., Detroit 1,000

Northwood Park Land Co., Detroit.... 25,000

Kennedy Holstein Farm Co., Adrian.... 10,000

General Machinery Co., Bay City..... 50,000

Universal Paper Hanger Co., Detroit.. 25,000

Steam and Electrical Machinery Co., Bay City 10,000

Denk-Thompson Co., Highland Park.. 75,000

Clark Electric Meter Co., Detroit..... 10,000

James and Edwin B. Nall Co., Detroit 20,000

Perfection Metal Spinning Co., Detroit 4,000

Traverse City Electrical Supply Co., Traverse City 25,000

Hessey Drug Co., Grand Rapids..... 15,000

I. Reinherts & Son, Petoskey..... 1,000

Sleeford Power Lawn Mower Co., Lansing 20,000

Colquitt Realty Co., Detroit 5,000

Peck Creamery Co., Peck 6,500

Frederick C. Mu.newa Co., Detroit.... 50,000

Ishmark Timber Co., Marquette 100,000

Silberstein & Yolles, Detroit 10,000

NOTICES OF DISSOLUTION

Kline Furniture Co., Detroit 50,000

Harry S. Weiss Co., Detroit 1,000

NOTICES OF WITHDRAWAL

Muskegon Engine Co. (F.) (Del.), Muskegon, Mich. 250,000

Exide Battery Depots, Inc. (F.) (N. J.), Camden, N. J., Detroit 20,000

CHERRY 3096 CADILLAC 5877

W. C. DU COMB, JR.

E AN ELIVER

FROM STOCK

SKF BALL BEARING SHAFTING HANGERS & PILLOW BLOCKS, LOOSE PULLEYS & CLUTCH PULLEYS.



SPECIAL BEARING APPLICATIONS DESIGNED AND MANUFACTURED FOR SUGAR PLANTS

IN SUGAR PLANTS THE USE OF SKF BALL BEARING MEANS CAMPAIGNS ABSOLUTELY FREE FROM BEARING TROUBLES

137-141 Woodbridge St. East, Detroit, Mich

STEERE ENGINEERING CO.

Machine Shops Structural Steel and Plate Shops

Detroit, - Mich.

COAL C. C. COREY COKE

13084 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

RED CROWN Gasoline is made especially for automobiles. It will deliver all the power your engine is capable of developing. It starts quickly, it accelerates smoothly, it will run your car at the least cost per mile, and it is easily procurable everywhere you go.

Standard Oil Company (Indiana) Chicago, Ill.

Foreign Traders Meet in May

Samuel Mather, Honorary Chairman of Committee, Making Arrangements for Cleveland Convention

REALIZING probably more keenly than ever before the imperative necessity of permanent foreign trade as a stabilizer of American production, the country's exporters doubtless will attend in exceptional numbers the eighth annual convention of the National Foreign Trade Council, scheduled for Cleveland, next May.

The National Foreign Trade Council is the country's foremost and most influential factor in furthering and fostering foreign trade extension. Primarily its efforts are directed toward obtaining more definite and aggressive co-ordination of the varied overseas commercial activities and to re-enforce them with the decisive co-operation of the various governmental agencies. Incidentally, it is non-partisan and non-political.

The annual conventions are much in the nature of an annual review of the Council's activities in investigating and advising on all phases and movements of national importance that make for an increased volume in the nation's export business. They are really concentrated training schools in foreign trade relations and conditions, wherein the attendance is treated to the experiences and best advice of the men who stand highest in the export field.

Under the stimulus of a war-made foreign demand, American exports increased from less than two and one-half billions in 1913, to more than eight billions in 1920. The remarkable period of activity which attended this condition fully awoke the American manufacturer to the tremendous possibilities of a well developed and permanent foreign trade. But out of it all grew no really definite and lasting foreign connections for the great majority of those who profited chiefly from munition making. It is this class of manufacturer who should be most keenly interested in the problems that will come up for discussion before the next National Foreign Trade Council convention.

The Cleveland convention committee of 50 is officered as follows: Samuel Mather, Pickands, Mather & Company, honorary chairman; E. R. Fancher, governor of the Federal Reserve Bank, Myron T. Herrick, president the Society for Savings, Henry Howard, the Grasselli Chemical Company, William P. Palmer, president the American Steel & Wire Company, and Ambrose Swasey, president of the Warner & Swasey Company, honorary vice-chairmen, and H. P. Seymour, Columbian Hardware Company, Executive Chairman.

Members of the National Foreign Trade Council in the Middle West are: R. M. Calkins, vice-president, Chicago, Milwaukee & St. Paul Railway; Cyrus H. McCormick, International Harvester Company; Frank O. Wetmore, president, First National Bank, and Thomas E. Wilson, president, Wilson & Company, Chicago; Samuel Mather, Pickands, Mather & Company, and Henry Howard, Grasselli Chemical Company, Cleveland; Charles A. Hinsch, president, Fifth-Third National Bank, and William Cooper Procter, the Procter & Gamble Company, Cincinnati; John Crosby, Washburn-Crosby Company, Minneapolis; F. G. Crowell, Hall-Baker Grain Company, Kansas City; J. Walter Drake, chairman of the Board, Hupp Motor Car Corporation, Detroit; J. Rogers Flannery, president, Vanadium Steel Company, Pittsburgh; H. G. Herget, president, Pekin Cooperage Company, Pekin, Ill.; Louis W. Hill, chairman of the board, Great Northern Railway; St. Paul; Edward N. Hurley, Wheaton, Ill., and John N. Willys, president, Willys-Overland Company, Toledo.

CRUCIBLE STEEL BRANCH MOVES

The purchase of the property of Young Brothers, 1437-1459 Franklin street, Detroit, will enable the local branch of the Crucible Steel Crucible, 1326 Woodbridge street east, to have twice its present warehouse space necessary in the proper handling of a greatly increased business. The removal from the old to new quarters will be accomplished by February 1, after which all business will be conducted from the new address. **The company,** located at Dunkirk, N. Y., manufactures high speed tool steel.

FLINT JUNIORS HELP THE NEEDY

Members of the Junior Chamber of Commerce, Flint, provided Christmas dinners for more than 100 deserving families in Flint, Christmas day. The campaign brought together 90 boys who provided baskets containing the following: Roast, potatoes, beans, butter, sugar, coffee, fruit, milk, bread, vegetables, desert, nuts, candy, also the following articles: Two pair of boy's trousers, five dresses, three pairs of rubbers, 11 pairs of shoes, 13 pairs of stockings, nine pairs of gloves, two sleds, 12 dolls, 32 books and 78 other kinds of toys. The boys delivered the baskets.

FURNITURE SHOW ATTENDANCE

According to the records of the Grand Rapids January Furniture Show committee, there were 605 buyers at the show during the first week, a normal attendance.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



THE UNIV. OF MICH. LIBRARY

Detroit, January 22, 1921

INVENTORY PROGRAM FOR BUSINESS

(Financial Section Page 22)

Vol. 27. No. 4 *Price Fifteen Cents*

ESTABLISHED NINETEEN HUNDRED



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Resources Over $125,000,000

IN EVERY DEPARTMENT OF THIS INSTITUTION—SAVINGS, COMMERCIAL AND FOREIGN—THE SOLE EFFORT IS TO PROVIDE A SERVICE ONE HUNDRED PER CENT EFFICIENT IN COURTESY, IN BREADTH AND IN COMPLETENESS.

YOU SHOULD BE INTERESTED IN AVAILING YOURSELF OF A SERVICE OF THIS CHARACTER.

OFFICERS

JAMES T. KEENA, Chairman of the Board

JOHN W. STALEY, President
P. A. SCHULTE, Vice-President
JOHN R. BODDE, Vice-President
H. P. BORGMAN, Vice-President
R. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES H. AYERS, Vice-President
AUSTIN E. WING, Assistant to the President
RODERICK P. FRASER, Manager Foreign Department

A. H. MOODY, Cashier
D. N. SWEENY, Assistant Cashier
D. E. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
O. W. BRADLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO. D. HEAPHY, Assistant Cashier
C. I. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor

DIRECTORS

RUSSELL A. ALGER
GEORGE H. BARBOUR
W. T. BARBOUR
JOHN R. BODDE
H. P. BORGMAN
H. M. CAMPBELL
C. A. DU CHARME
FRANK J. HECKER
FRED W. HODGES
J. C. HUTCHINS
JAMES T. KEENA
H. B. LEDYARD
ROBERT S. MASON
FRED T. MORAN
FRED T. MURPHY
M. J. MURPHY
W. HOWIE MUIR
TRUMAN H. NEWBERRY
HUGO SCHERER
P. A. SCHULTE
ANGUS SMITH
R. W. SMYLIE
JOHN W. STALEY
HOMER WARREN

(180)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Established 1907

CONTENTS

January 22, 1921

	Page
An Inventory Program for Business ..... By William M. Lybrand, president of the National Association of Cost Accountants.	5
The Truck Over-Sales Problem. Directors of national cartage organization, in Detroit, discuss situation caused by excess enthusiasm about the business.	6
Using the St. Lawrence by 1923. British syndicate proposes to put freight ferries on the river, with trans-shipment at Newfoundland. By F. W. Hersey.	7
Doing Away with the "Doodads"	8
Michigan Develops a Chinese Art Modern methods applied to an ancient business give state fourth rank in paper manufacture. By Howard Campbell.	9
Some Signs of the Motor Up-Trend ..... By Marc Braun.	11
Masons' Union Cuts Wage Scale	13
News of the Motor Industry	14-15
Transportation Matters	16
The Week's Building	18
Road Construction in 1921	19
Editorial	20
Financial Section ..... Edited by Phil S. Hanna.	22-29
Michigan Bank Elections	30-31
New Corporations	38

Vol. 27 Detroit, Mich. No. 4

Published Every Saturday by the Manufacturer Publishing Company
Suite 611 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google



Write for this free book. It contains information that will save your business money

Do You Want to Know About Industrial Diamonds?

A vast amount of valuable information has been gleaned in the twelve years time during which the Wheel Trueing Tool Company has marketed the finest diamonds and diamond tools and rendered the utmost in industrial diamond service.

To get this information to you in the most interesting way a catalog has been prepared which not only tells you something about the diamond industry and the kind of diamonds your business requires, but contains information concerning the proper buying and use of diamonds which is invaluable to you.

Write for this excellently illustrated catalog and ask us for information regarding our free cost keeping system. It will be well worth your while to have this information on hand.

BORTZ DIAMONDS CARBON

WHEEL TRUEING TOOL CO.

IMPORTERS OF BORTZ & CARBON DIAMONDS
MANUFACTURERS OF
DIAMOND TOOLS FOR EVERY MECHANICAL PURPOSE
2130 PENOBSCOT BUILDING
DETROIT

EASTERN OFFICE
527 Fifth Avenue
New York City
WESTERN OFFICE
120 Wisconsin St., Milwaukee, Wis.
CLEVELAND OFFICE
Engineers Building
CANADIAN BRANCHES
Windsor, Ont., St. Catharines, Ont.
Cable Address
"Wheeltruco" Detroit

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

An Inventory Program for Business

How is Accumulation of Goods to Be Remedied? What Price Policy is to Govern the Valuation?

TWO of the difficulties, if I may single them out, which are now confronting business men are: First, inventories in excess of present requirements; second, difficulty of determining the market value of those inventories for the purpose of closing the books and ascertaining taxable income.

As to the first circumstance, namely, the accumulation of inventories in excess of present requirements, it hardly seems necessary or, indeed, fitting for me as a layman to comment to any extent. Cost accountants know much better than I why there are excessive inventories in plants or in stores, if such is the fact. It is due, however, to a variety of circumstances principally arising out of conditions created by the war. In many lines of business an artificial demand was created by the order, purchase and resale of commodities such as sugar, coffee and the like. Then again, the apparently enormous and unlimited demand for commodities and materials of all kinds existing up to a comparatively short time ago probably led prospective purchasers of those commodities to place orders in excess of their reasonable requirements because they expected to be able to secure only a part of what they had ordered. Doubtless the crowded conditions of the factories and the congestion on the railways made it necessary to place orders far in advance and to accept whatever could be delivered, undoubtedly with the effect of ultimately increasing the inventory.

Buyers' Strike the Chief Factor

Most of all, I suppose, the cause of the excessive inventories is the exceedingly sudden and severe reduction in the demand for merchandise on the part of consumers. Manufacturing is a continuous process. Into the mill flows the material which, by the application of labor and expense, is converted into product which goes out of the factory and to the ultimate consumer or user. If you dam any part of this stream, of course it will back up immediately, and that is just what has been done. I know of no remedy except just what you would apply in the case of the stream that has become checked, namely, that you would try to control tributaries entering into that stream above the dam. In this case the tributaries are labor, material and expense. The only way to prevent the volume from becoming larger is to control or reduce these elements. That, as you know, is what is being done. It is a severe remedy, but necessary.

The next problem, and obviously the larger one, is to improve the basic condition of the country so that the purchasing consumption or use of merchandise or products may be increased or brought back to normal. You undoubtedly read the opinion of financiers, business men, exporters, statesmen and others, and you realize that it is not simply a matter which involves this country, but that it is one of world-wide complexity. To a considerable extent it may be a state of mind, and probably is. We know the burden of Mr. Harding's exhortations to get back to normal. We all subscribe to this, no matter what our political faith may be. That is what we shall have to do in order to solve the problem; a normal manner of living, a normal manner of working or, let us say, a better than normal in the way of increased efficiency and attention to work, a normal manner of purchasing, a normal manner of manufacturing, a normal manner of buying; and when all these kinks due to abnormal conditions have been worked out, we shall find business flowing along at an accelerated pace, the problems of excessive inventories remaining only as a bad dream.

Then there is the other exceedingly serious problem of inventory valuations, that is, at what price should the materials and product be valued in order that they may be stated low enough so as to avoid any loss when they are liquidated; and on the other hand, high enough so that the Government may receive its just payment of taxes, if any such taxes are bound to be due.

I like to consider this matter as an accounting problem and not a tax problem. Taxes are supposed to be paid only on income and profits, and in the last analysis you cannot state income and profits correctly unless you apply sound accounting principles and practices.

It is obvious that if a manufacturer sells all that he has made, or, in other words, cleans up entirely, he knows exactly what he has made or lost, assuming that his outstanding accounts are all collectable.

It is equally obvious that such conditions seldom or ever exist. A manufacturer cannot clean up entirely; he is engaged in a continuous process. A dealer cannot sell out entirely; he must constantly replenish his stock. Therefore there is always something left over which has to be valued before he can ascertain what profit or loss has accrued on that part of the product which has been sold.

If there is sufficient volume of sales orders on hand, or if business conditions indicate that such orders are likely to be received, then no difficulty is encountered in pricing the inventory.

If there are any such orders on hand or in sight, and if there is every indication that when they are received they must be taken at a lower figure, and if it is evident that the materials on hand could now be replaced at lower cost, then of course the inventory must not be priced in the same manner as when conditions are normal, otherwise the manufacturer or dealer is simply deluding himself as to the amount of profit he will ultimately realize from his transactions of the year.

What would be done as far as the statement is concerned under such circumstances? Would not the inventory be written down to what it is actually worth? Is there any correct accounting procedure which would permit of anything else being done? Would the accountant be justified in certifying the statement to the management, the stockholders, owners or the bankers if such a procedure had not been followed?

Correct Accounting Necessary

What I have said regarding this method of stating profits is elementary. I state it now only for the purpose of emphasizing the point that the valuation of inventories should be done in accordance with correct accounting procedure.

There have been numerous regulations and explanations, and advice has been given here, there and everywhere as to what may or may not be done, but these tend only to confuse the issue. In the last analysis I do not believe that anything which conflicts with sound accounting practice will stand.

Cost or market, whichever is lower, is a sound accounting practice. I realize that it is easy to make this general statement, but very difficult in many instances to determine what the real market value may be. If it happens that sales have been made in considerable volume and that orders can be placed sufficient to meet the normal requirements, then it would seem that a market value in that particular case has been established. In many lines, however, there has been no real market. There is a nominal bid and offered price, but virtually nobody bids; consequently no one sells. Ordinarily in valuing collaterals in a bank examination we would use the bid price as representing most nearly the real value. Just now, however, bid and offered prices, in many instances, do not indicate a real market,

By WILLIAM M. LYBRAND
President, National Association of Cost Accountants

[Extract from an address delivered Wednesday, January 12, at a meeting of the Detroit Chapter, National Association of Cost Accountants. Mr. Lybrand is a member of the firm of Lybrand, Ross Bros. & Montgomery, New York and Detroit.]

Digitized by Google

although it would seem that they at least represent the extremes.

If the market is so uncertain as that, I do not see what can be done except to get the best and fullest information possible based on bids, offers, pre-war prices, such sales as have been made, probable demand, quantity available and any other factors that enter into the determination of market value. If there is a very wide spread between the bid and offered price, and you feel that one is too low, the other too high to represent a normal figure at which normal quantities could be bought or sold, then you will simply have to use your best judgment as to the price you place on such material, merchandise or parts of that character as you may have.

If a reduction in selling price has been determined upon, then it would seem that the price on finished product would be justified which would at least let the owners of that product out whole—that is, without a loss—and that work in process entering into the product ought to be valued in the same manner. Expedients adopted for the purpose of attempting to establish a market value are to be avoided. A straightforward statement based on the best judgment of the taxpayer and one which he is prepared to stand behind and justify is the kind of a statement to present.

I want to give a memorandum which condenses in simple form some of the rules for valuing inventories.

1. Raw materials are to be valued at cost or market, whichever is lower. This is the general rule accepted for accounting and taxation purposes. The modifying factors are the physical conditions of the materials, their value in use and the present condition of the market for the particular materials.

2. If materials are damaged, but if it is possible to put them in a condition where they could be used, the value is cost or market price of the quantity after it is repaired after putting them in a condition for use, less the cost of restoring them to this condition.

3. Where, through changes in design, manufacturing processes or other reasons, materials may not be used for standard production, a free market does not exist and value is to be determined by a continuous run of selling prices, or the standard practice followed in the particular industry for pricing such items, such as the custom followed in the automobile industry in pricing replacement parts for old models.

4. Where there is not a free market, it would obviously not be possible to establish a market price in the usual way, and in such event an inventory value may be established hy a bona fide continuous course of selling below cost.

5. In cases where there is no market and no continuous course of selling below cost, the best opinion of the market experts in the particular material may be used as a basis to fix values.

6. The cost of materials in process of manufacture is made up of three items: Labor, materials and burden.

7. The labor in work in process should be valued at the market or cost price of labor, whichever is lower. If at the time the work was performed, labor cost more than it does at the time of taking the inventory, the last and lowest cost should be used.

8. Materials included in work in process should be valued in the same way and the same methods as that used for raw materials in stores.

9. Burden includes a variety of items such as indirect labor, lubricating oils, fuel, repairs to machinery, etc.

10. The proportionate quantity of burden items including in work in process at inventory times should be valued at the market price if it is less than cost. As a practical matter it might be difficult to do this, but in many instances it probably would result in considerable reduction in inventory values and consequently in taxable income.

11. Only the normal rate of burden should be used in valuing at reproduction cost. Unabsorbed burden is of course a charge to profit and loss.

12. Materials thrown back on the hands of the manufacturer as a result of cancellation of contracts should receive careful scrutiny. The value of this would depend on the conditions in the particular case. In some instances it might be worth the full reproduction cost when conditions return to normal, while in other cases, due to various causes, it might have only salvage value.

Brakes Go on Truck Over-Sales

Directors of National Cartage Organization Discuss Situation Caused by Over-Enthusiasm in the Business

RIDING to wealth on the seat of a motor truck is one of the numerous "Arabian Nights Entertainments" of modern business enterprise. That is, it was "Ponzi" when the economic boomerang scored a hullseye. Motor trucks were sold by a simple twist of a fountain pen and bought with still shorter abandon. Everybody who ever read or heard of "Ishmael Up From the Depths" and some who had not went after Rockefeller's title with a motor truck, under the seat of which was a large basket to hold the day's winnings.

There were salesmen who gave free with every truck sold a contract for a haulage job, but after the contract had expired the new truck magnate was supposed to hunt his own jobs. Motor trucks were thick as fleas." Even a waitress in a Detroit restaurant invested her tips in a motor truck and hired a friend to operate it on a commission.

It was dangerous to hesitate before a building or excavation job because nine chances out of 10, a dapper gentleman would step up to you, tap you on the shoulder and suggest that you buy a motor truck and get rich. More than one truck was sold in this way, if reports are to be believed. Who can blame the salesman if he was honest in his belief that motor vehicles should be sold like bound volumes of the "Lives of Great Men?" Nor can we blame the men who bought because they succumbed to the lure of the "Mississippi Bubble" in motordom.

Just remember that the motor truck has accomplished great things. It has saved lives, defeated time, helped with a war and saved beleagured cities. The motor truck is greater than the railroad train was half a century ago, but like the railroad was years ago, it has been over-played. Sitting on one side of the game is the truck manufacturer and his adjunct, the selling organization. On the other side is the present and future buyer. The motor truck industry, from plant to salesroom, will solve its own problems, but how about the buyer?

Present conditions of the cartage business indicate he needs a pilot, and the National Team and Motor Truck Owners' Association is organized and duly licensed to do his piloting.

Former presidents and a number of directors of this association met in Detroit for a week for a general conference on the cartage situation and to make plans for the guidance of the business through the approaching era of revivified business and industry. It was the statement made by the conference to the effect that the over-equipping and the overloading of the business with ruinous competition was largely to blame for the present depression and numerous failures in the business, that prompted the opening paragraphs of this review of the deliberations.

The national association is many years older than the truck industry. It flourished when good old Dobbin was the only type of power used in the cartage business and when all truck owners wore leather aprons and carried books. Since the motor truck has entered the business, the Association has been broadened to include motor power as well as horse-power.

It is alive to the new problems in the cartage business, and proposes, through educational programs and co-operation, to endeavor to stabilize this enterprise by casting its influence in every practical way, that of equipment to cost accounting and legislation.

Eighteen Cities Represented

Eighteen of the largest cities in the country are represented in the national association by branch organizations of cartage men, similar in character to the Detroit Transportation Association. Detroit leads all these and every other city in motor equipment, the Association's report shows. Detroit is declared to be 95 per cent motor-equipped, while the nearest competing city is not more than 60 per cent so equipped. After comparing notes, the conference decided that in Detroit and elsewhere both over-equipment and improper equipment had seriously affected the business, and that the present general depression in business merely brought these conditions into prominence.

It was the opinion of the conference members that the Association should immediately advise more careful buying and urge discharge of equipment wherever possible, rather than the purchase of additional trucks, motor or horse-drawn, where temporary business booms tempted cartage men to enlarge their facilities. F. J. Abel, Buffalo, president of the Association, expressed it in this manner:

"There has been over-buying, not only in motor but in horse-drawn equipment. A lot of business failing to one man has moved him to over-buy, while perhaps a fellow cartage man, who did not have an excess of business, could have helped him out. For the time being, the profits for the man with the rush of business would have been reduced, but in the end he would have been better off, for in a time like the present he would have been saved the consequences of an excess of unemployed equipment. It is unwise buying that has thrown trucks back upon the dealers and floored the production departments. That result has been just as disastrous to the manufacturers and dealers as it has been to the cartage men."

W. J. McDevitt, Cincinnati, treasurer of the Association, declared that the popularity of the horse for cartage work was being revived rapidly, and the conference agreed that his statement was true. Unwise buying again.

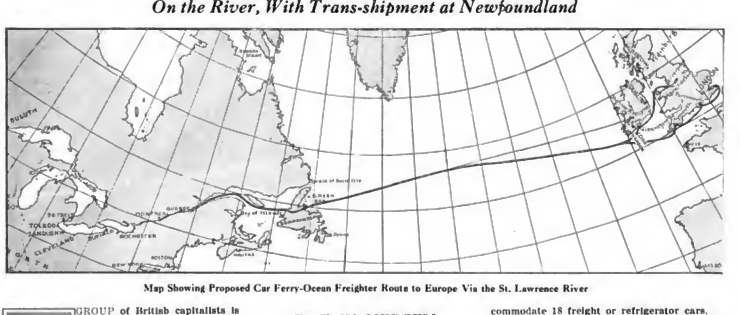
"The difference between selling a truck and equipping a cartage man's business is success," Mr. McDevitt said. "It is easy to sell a truck to a man who does not know the business he is entering, or who has heretofore used

(*Continued on Page 36*)

Digitized by Google

Detroit to Europe Via the St. Lawrence by 1923

British Syndicate Proposes Using Freight Ferries On the River, With Trans-shipment at Newfoundland



Map Showing Proposed Car Ferry-Ocean Freighter Route to Europe Via the St. Lawrence River

A GROUP of British capitalists is proposing to provide by May, 1923, facilities whereby the export output of manufacturing plants in the Great Lakes states—as well as those throughout the whole Middle West—may be transported from Detroit to Liverpool in 15 days by way of the St. Lawrence river and Newfoundland, with only one trans-shipment for perishables and two for bulk freight of a more durable character, and to be duty-free in and out of Newfoundland. The proposition is being laid before the manufacturers and exporters of this and surrounding states by the Great Lakes-Newfoundland Trans-Atlantic Route Development Company, 206 Owen building, Detroit, American representative of the Newfoundland Railway & Train Ferry Syndicate, Ltd., of which H. C. Thomson, Salisbury House, London, England, is managing director.

Before going into detail it should be emphasized here that this proposed route is not a substitute for the Great Lakes-St. Lawrence deep waterway to the ocean, nor a proposition intended to detract attention from the project which would enable ocean-going ships to navigate the waters of the St. Lawrence and dock in or near Detroit. There is no substitute for such direct water communication with the markets of the world.

It appears that what the St. Lawrence-Newfoundland route really amounts to is a plan to make Newfoundland a world port and a desirable location for plants of American manufacturers who crave the privilege of manufacturing and exporting products to Europe without paying duties.

If the promoters are successful with their program, the project will be an important economic asset, a potent factor in putting Michigan products into Europe on a fairly equitable basis. The Detroit representatives of the British interests, identity of which is withheld, are C. D. Hoban, M. F. Owens, M. J. Owens and T. D. Nevin, respectively, president, vice-president, treasurer and secretary of the Great Lakes-Newfoundland Trans-Atlantic Route Development Company. The British end of the project is represented by a banking house in New York, the identity of which also is withheld.

By F. W. HERSEY

Naturally, the first inference is that there will be stock to be sold. Mr. Hoban says that his company has been formed and assigned to accomplish but one purpose—the development of freight business for the new route; in other words, it has the characteristics of a freight agency. Mr. Hoban says his company is not selling and will not sell stock, that being a part of the proposition handled in New York and London.

The plan of operation provides for the establishment of a direct route from Detroit to Liverpool and Manchester, England, and Cork, Ireland, the route to follow the St. Lawrence river to Newfoundland, across the island of Newfoundland by rail, with re-shipment to ocean vessels for the ports named. The running time is 15 days, apportioned as follows: Detroit to Newfoundland, 5½ days; time for crossing the island, loading and re-loading, 2½ days; Newfoundland to Liverpool, Manchester or Cork, seven days. The route would be open seven months of the year.

The Boats to Be Provided

The transportation facilities to be provided would consist of six combination bulk freight-car ferries for river travel from Detroit, the western terminal, to Newfoundland, one or two standard gauge railways crossing Newfoundland, and four 8,000-ton ocean ships. The car ferries would be 2,500 tons each, 265 feet long, 45 feet beam and 14 feet draft, small enough by a considerable margin to pass through the St. Lawrence canals. They would be powered with Diesel engines, thus reducing fuel space and making them clean ships for preferred freight. The hold capacity would be 1,800 tons of bulk freight and the deck capacity would accommodate 18 freight or refrigerator cars.

The St. Lawrence empties into the Gulf of St. Lawrence, in which the position of the island of Newfoundland has caused it to be called "The Gate Keeper." The Bay of Islands on the western coast of the island has been selected as the harbor for the car ferries. From this point to Green Bay, on the east side, selected as the port for the ocean ships, the overland distance is 92 miles as surveyed for the railroad, which would cross the neck of the Newfoundland peninsula. There is at present a railroad on the island, a narrow-gauge line following the circuitous route, and of no value whatever to the British project.

Consequently the promoting company would build its own railroad of the standard gauge type from the Bay of Islands to Green Bay, with the necessary freight yards and warehouses at each terminal. At both terminals docks would have to be constructed, with facilities for the transfer of freight and refrigerator cars from the ferries to the railroad. It is estimated that the running time between Bay of Islands and Green Bay would approximate four hours. Now the question naturally arises, why not send the car ferries through the straits of Belle Isle and avoid the land trip as well as the re-loading necessary for bulk freight?

The reason given is the frequency of heavy fogs, which would defeat the main object desired by establishing this route—that of saving time. The problem of fogs in this locality was investigated thoroughly by the company in cooperation with the United States Department of Agriculture, and it was found that an attempt to send the car ferries into Green Bay by way of the straits would occasion frequent delays, which would greatly increase the 15-day schedule believed to be easily adhered to with the rail connection.

The project of making Newfoundland a world port and seeking freight patronage along the St. Lawrence river was conceived, the writer is told, 14 years ago, but it was not until 11 years ago that the British interests began making definite plans for its development. The

Digitized by Google

Newfoundland Railway & Train Ferry Syndicate, Ltd., obtained charters for two railways across Newfoundland. One was to cross the isthmus of Avalon from Rantem, on Trinity Bay, to Little's Southern Harbor, Placentia Bay. The other was to traverse the island from Humbermouth, Bay of Islands, to Southwest Arm, Green Bay, with a branch line to White Bay.

The war put a stop to plans, and it was necessary to obtain a renewal of the charters, with the provision that they should take effect immediately the company began the construction work. Mr. Owens says it was then the purpose of the company to develop the fish business, the belief being that there was a great market for deep sea fish in the States, once direct and rapid transportation could be obtained.

When the larger project took form, the ferry syndicate went to the Newfoundland legislature and obtained authority to proceed with the railway project and also got an exemption for 20 years from all port, pilotage and harbor dues, and from duties on freight, express and baggage forever.

Without these exemptions there would have been a doubt as to the profitableness of the plan. Mr. Owens points out that to be successful the transportation company must be in a position to compete with railroads at present and the ocean shipping of the future when the Great Lakes-St. Lawrence route is opened. Competition necessarily involves rates as low or lower than can be offered by present rail and ship combinations, and service quicker and less expensive than possible under present conditions. Exemption of dues and tariffs removes an obstacle to advantageous rate making.

Another advantage mentioned is the elimination of interlocking interests operating independently so far as service is concerned. The British group, or Anglo-American group, which-ever it may be, that would operate this boat line would own all the equipment and be wholly responsible for the character of its service. Where you have a railroad company on one hand and a shipping company on the other, with brokers in between, the frequent lack of service co-operation between the trimsverate does not operate to the welfare of the shipper.

In the case of this company, should it become all that is promised, the failure of the railway to perform well would make the ship lines useless; the failure of the ships would make the railway a costly experiment. Whether or not the English promoters have other interests to be developed, of which the ship and rail lines are but incidental, the fact remains that freight patronage from Michigan will be forthcoming only when the rates and the service are sup. rior in advantage to those offered by existing facilities.

Mr. Holman told the writer that he first became interested in the project while in Europe drumming up business for butter, cheese and eggs, particularly eggs. As a shipper of shell eggs he believed England offered a prime market, especially as Danish and Irish eggs were

(*Continued on Page* 32)

Doing Away With the "Doodads"

Two Speakers Before Society of Automotive Engineers Bespeak Conservatism in the Design of Motor Cars

WE HAVE HAD experimentation, ostentation and exploitation in the motor car industry. After he has whipped his motor into shape, worked out the chassis design and built up the body structure, the designing engineer in his various capacities has gone almost "the limit" in fastidiousness and comfort by adding to a standard car every known "doodad," device and luxury discovered by the inventive mind.

Now comes the reaction to conservatism. There is to be frugality in body models and comparative parsimony in equipment—that is, a forecast of such a policy comes to us from the deliberations of the Society of Automotive Engineers during the week of the National Automobile Show in New York.

Two authorities, one representing the automotive industry, and the other falling from the ranks of select buyers, expressed views on body design and simplicity in construction.

George J. Mercer, consulting body engineer of the Saxon Motor Car Corporation, Detroit, discussed body design before the body engineering session of the Society, while R. E. M. Cowie, vice-president of the American Railway Express Company, speaking at the society's annual dinner, departed from his general subject of aeronautics long enough to express a few ideas about simplicity in motor car construction and equipment in its relation to economical production.

"The number of different models that will prevail during the coming season is less than in past years," said Mr. Mercer. "For example, a few seasons ago one manufacturer listed 14 body styles that were in regular production. The greatest number of models listed by one manufacturer during the last year was eight; the majority listed four, and this latter number probably will be the number of different models made by most manufacturers in the coming period.

"The body types which will prevail during the coming year will be confined to the five-passenger touring car, two-passenger runabout, five-passenger sedan and four-passenger coupe, with seven-passenger touring cars and seven-passenger sedans in limited numbers.

"The sporting type touring body usually is of four-passenger design. It is intended to appeal to the younger element, who want low, racy lines that indicate speed. This sporting model is an offshoot from the standard touring car design, but manufacturers usually both give them distinctive names and list them as individual models. However, the greater olume of business is still with the larger or five-passenger body.

"There have always been runabout users who wanted a small body with seat room for more than normal passenger capacity. The runabout logically has a two-passenger body, and when so made there is a certain definiteness in its design. The desire for more seat room brought out combination models in the past that have been short-lived, but those who require seat room for three or four passengers are best served by a close-coupled miniature type four-door touring body. The runabout will hold its place as a necessary model, but it has been decreasing in numbers during the last two years. The five-passenger body seems to have been a necessary addition for both the larger and smaller body types. The runabout as made by the different manufacturers today is more uniform than formerly and has fewer freakish characteristics. When equipped with the all-season top, it is a sensible car for doctors and professional men.

"The five-passenger sedan with four doors has undergone many changes within the year. This has been the substitution of the straight for the slanting front, which simplifies manufacture and is more practical for small cars. The four-door sedan as we have it today comes nearer to meeting with general approval than any body design ever introduced. It has superseded all other forms of closed bodies for general use, except the coupe, which finds favor because it is a miniature of the four-door sedan.

"In body construction the soft roof is used extensively. This roof is formed of water proof material drawn over padded wooden strips, and has been one means of keeping costs down during a period of high prices.

"The favored coupe has a four-passenger body. It has a compactness that makes it suitable for both shopping and business, and as the fourth seat is of the disappearing type, a comfortable entrance is provided to any seat. In addition, accessible carrying space both inside and at the rear of the body is provided.

"The straight line with angular corners is giving way to moderately rounded surfaces, but the straight effect is stimulated.

"Other features that increase the common sense usefulness of the open body are inside and outside door handles; the use of rear top rest irons that are taken off when not required; a superior quality of springs in the seat cushions; lighter hoods and radiators that give the appearance of vigorous motive power, and by their comparison in height with the body side, help to make it look lower. There seems to be a general tendency to use cowl lamps, although the use of the sun visor has not been as general as it promised to be.

"The quarter window on closed models has been made of less conventional size and irregular in shape. We can expect those builders who have experienced success with it to continue to use it. All enclosed cars are made with a large rear window for observation, and in connection with it the mirror for the driver has real value.

"There is a need for a better method of signaling than the wave of the hand at the side. Touring cars are sometimes provided for this latter purpose with a slit in the curtain when the top is up. Sometimes it is necessary to leave one curtain off. The signals should be automatic, operated by the clutch or brake, and should show a light also.

"The variety in design of mudguards, radiator, hood, lamps, painting and trimming in harmony with the body design is fairly well understood. The mudguards on most cars today are suited for their purpose, and sensible. The front guard looks best when made longer. The rear guard is at its best when it follows the contour of the wheel well down and is just below the wheel center. Radiators should be high to permit a high hood and shrond. They look better when narrower at the top than at the bottom, and there is a growing tendency to have them nickel-plated.

"The hoods will continue for some time to have long, narrow louvres. The demand for as much visibility as possible, which includes at least the enameling of the hoods, mudguards and splashers, controls the painting combinations. The use of dark colors, without striping, prevails. The lamps also are enameled, being relieved with either a nickel rim or band. The greater durability of enamel as compared with painted surfaces is one of the urges toward all-metal bodies, but changes in design and initial high cost will

(*Continued on Page* 33)

Digitized by Google

Michigan Develops a Chinese Art

Modern Methods Applied to an Ancient Business Give State Fourth Rank in Paper Manufacture



IN THE PLANT OF THE KALAMAZOO VEGETABLE PARCHMENT COMPANY, KALAMAZOO

The photograph at the left shows the big "cooker" in which 14,000 pounds of old papers at one time are cooked with live steam for eight to ten hours, as part of the process of manufacturing paper. At the right are shown 14 beaters, which reduce the raw materials to a fine pulp. Each machine holds 1,000 pounds of pulp.

By HOWARD CAMPBELL

THROUGH a hundred years of storm and sunshine a tree has been developing from a seed to a sapling, then to a monarch of the forest, towering among its fellows. Generations of mankind come and go while the tree gathers strength and majesty. Then the lumberman seeks it out and within a few short days it has has become a thousand sheets of thin paper on which are recorded the events of the world—events which had their beginning, perhaps, while the lumberman's axe was yet busily severing the tree from its root.

A magic is this by which a great tree is transformed into a black and white sheet carrying to the public the news of the day, and a strange ending for a hundred years of quiet forest growth.

Paper making is one of the oldest of the industrial arts. Documents made of papyrus some 2000 years B. C. are still in existence. The earliest record in which papyrus can at present be found is said to be a document containing accounts from the reign of Assa, an Egyptian monarch who lived 3580-3536 B. C. The art of making paper from vegetable substance reduced to fiber is ascribed to the Chinese, who are said to have used cotton in the manufacture of paper in the second century B. C. The art of paper making was kept secret by the Chinese for several centuries, but some Chinese prisoners taken by the Moors and Arabs imparted sufficient information to their captors to enable the latter to introduce the art into Samarkand about the year 704. Paper mills were established in Bagdad in the year 795, and in the eleventh century the Moors introduced the manufacture of paper into Europe. In 1336 the first paper mill was erected in Germany, the art becoming established as an industry which soon spread over the world.

In America the first paper mill was established in 1690 at Germantown, near Philadelphia. Since that time the industry has grown rapidly and at present there are more than 1,400 paper mills in the United States and Canada.

The first paper mill in Michigan was a small shack containing a crude machine approximately 30 feet long and 38 inches wide, on which the paper was dried by passing it around a drum, ten feet in diameter and containing a wood fire. The mill was located near the Raisin river, about six miles above the present city of Monroe, and was operated by the River Raisin Paper Company—not, however, the company which now bears that name.

Paper making as an industry started in Michigan when a small mill was built near Ypsilanti in 1855, and has developed until today Michigan has 50 paper mills producing 6,152,000 pounds of paper every 24 hours, or approximately 922,000 tons a year. The state ranks fourth in the Union in paper output, New York being first, Massachusetts second and Pennsylvania third. Wisconsin is fifth and Ohio sixth. More than $150,000,000 is invested in the industry in the Wolverine state and the mills employ more than 11,000 men and women, whose annual salaries or wages total in excess of $18,000,000.

Michigan's paper ontput includes news print and book, writing, envelope, ledger, wrapping and tissue paper, parchment and the paper from which paper boxes and containers are made. The Bryant Paper Company, Kalamazoo, is said to have the largest book paper mill in the world. It produces 400,000 pounds of book paper daily. 100,000 pounds of which is coated. At Monroe is the River Raisin Paper Company, rated as the largest producer of box-board in America,



INTERIOR VIEWS OF THE KALAMAZOO PAPER COMPANY'S MILL, KALAMAZOO

At the left is shown a paper machine, to drive which 450 horsepower is required. At the left side of the right hand picture are cutting machines, which cut from 500 to 1,000 sheets at a time, and at the right are calenderin g machines, which iron the paper, giving it a smooth finish.

Digitized by Google



IN THE RIVER RAISIN PAPER COMPANY'S PLANT AT MONROE

The pasting machine at the left pastes four sheets together, producing 280,000 pounds of board in ten hours. At the right is shown the machine which slots and creases the box-board. Production, 6,000 boxes a day.

with an average of 600,000 pounds of box or fiber board a day.

News print is made very largely of spruce wood, although some balsam and hemlock are used. The first stage in the process of wood pulp production consists in felling the trees and removing the branches. The logs are then conveyed to the pulp mill, where they are sawed into two-foot lengths. They are then put into a machine called a "barker," which, by means of a revolving disc with a set of knives projecting from it, removes the bark. This wood is then put into the grinder, where the pieces are held by hydraulic pressure against the face of a grindstone. The stone usually is about 54 inches in diameter and 27 inches wide. The stone strikes the fibers of the wood at right angles, tearing the wood off in shreds. Water is kept running on the stone, serving to wash the fibers away as they are ground off, as well as to carry off the heat generated by the friction of the stone against the wood.

The ground wood comes from the grinder in the form of a mush and is thinned with water so that it will flow freely. It is now passed through coarse gratings to remove pieces of unground wood, after which it passes through screens, which remove the coarser grains. It then passes through a final screen containing slots approximately 1/100 of an inch wide, and then to the "stock chest," which is a huge tank containing a shafted-paddle arrangement. Here a certain amount (usually about 20 per cent) of sulphite stock is added and the whole thoroughly mixed. It is now pumped from the stock chests to the refining engines, where the fibers are separated. The body of this type of engine is cone shaped, having a small opening at one end and a large one at the other. A cast iron plug, or cone, fits into the shell of the machine, having a shaft through the center which fits into a bearing at each end. Both cones are fitted with steel knives set in on an angle and held in place by hardwood wedges. The cone is inserted in the shell and a plate is bolted on the large end. This plate has a bearing in the center for one end of the shaft. The pulp, or "stock," is pumped from the chests into the small end of the machines and as it passes the knives it is cut into small but quite even lengths, eventually collecting at the bottom of the large end of the machine and passing out through a pipe to another reserve tank, to be drawn as needed for the paper machine.

The pulp and water solution is now very thin, resembling a mixture of milk and water. From the reserve tank, or chest, it is pumped to the paper machine, where it is screened once more to be sure that no lumps or foreign matter get into the machine. It now passes into a box extending across the machine and having an opening at the bottom through which the pulp passes out on to the "screen" of the paper machine. This screen is similar to an endless belt, extending the full width of the machine and being from 30 to 50 feet long. As it travels around the two rolls which act as pulleys, it presents a flat surface from 15 to 20 feet long, the pulp covering this surface. The screen has a mesh of about 70 to the inch, which is fine enough to allow the water to run through while retaining the pulp, and as the pulp travels toward the machine, suction boxes under the screen draw out all of the remaining water which has not been absorbed by the fibers, leaving a layer of soft, moist pulp.

Making the Paper

The screen now carries it between two rolls which squeeze most of the water out, compressing it into a thin layer. The screen passes around the bottom roll and back in the opposite direction, while the paper leaves it and sticks to the bottom side of a felt belt called a "felt," which carries it along between several more sets of rolls, each of which presses more water out and rolls it thinner than the previous set. As it leaves the last set of rolls the belt leaves it to travel alone, the pulp having been compressed sufficiently to carry its own weight. It now passes over a series of large metal steam-heated rolls called "dryers," which dry the paper thoroughly, after which it runs through one or more "stacks of calendars." These are machines having a series of smooth rolls which "iron" the paper dry and smooth.

Wrapping paper, tissue paper, cardboard, tags, wall-board and paper boxes are also made from wood pulp, although the process is somewhat different. Paper for these purposes must have considerable strength; therefore it must be made from pulp having a long fiber, made by what is known as the "sulphite" process.

The Detroit Sulphite Pulp & Paper Company makes paper by this process, using spruce wood for the purpose, which it brings in its own boats from the northern part of Michigan and from Wisconsin and Canada. The logs arrive in eight-foot lengths and are cut into 24-inch pieces at the paper mill. After the bark is removed, instead of being ground, the chunks pass through a "chipper," which chips them into pieces about an inch and a quarter long. These chips now go to the "digester," which is a huge steel cylindrical tank. The digesters, of which there are seven in the Detroit mill, each hold about nine tons of chips. After the digester has been loaded with the required quantity of chips, it is filled with steam and sulphurous acid and allowed to cook approximately 24 hours. It is then dumped into a reserve tank. This cooking process reduces the chips to a soft white mass of pulp. From these tanks the pulp flows through a trough, or water conveyor, through a screen which catches the refuse and such pieces as have not been completely disintegrated. It now goes to the "beaters," where the fibers are separated and drawn out.

The beating process is one of the most important steps in the operation of paper making. A beater is a large vat containing a cylinder on a shaft which extends from the center to one side. This cylinder carries a great number of projecting blades and is suspended over a bed-plate provided with knives tapered in the opposite direction, so that as the cylinder revolves, the two sets of blades produce a cutting motion similar to that of a pair of scissors. By the beating and cutting action of the cylinder and the bed-plate, the fibers are separated and reduced in length, the fineness being regulated by varying the distance between the cylinder and the bed-plate. If the pulp is to be made into tissue paper, it is now sent to the bleaching tanks, where chlorine is added to bleach it. If it does not have to be bleached, it is pumped into the stuff-boxes, where water is added until the mixture is quite thin; passes from the stuff-boxes to the paper machine, where the process is similar to that already described. If tag paper is being made, it passes over a series of 29 steam rolls for drying, but if the pulp is being made into tissue, it is made in a machine where it is dried on one large roll. Wrapping paper is made on a machine which is described later.

The Detroit Sulphite Pulp & Paper Company uses eight tons of sulphur and the same amount of limestone a day for making acid.

The paper from which books are made, is made of about 50 per cent old papers and 50 per cent wood pulp and "filler" varying more or less according to the grade of paper desired. As the bales of old paper come into the mill, the paper is sorted and graded; after which it passes through a "duster," which is a machine containing a fan arrangement which cleans all

(Continued on Page 34)

Digitized by Google

Boost Your Lathe Production With

Barker Wrenchless Chucks



You don't have to waste time hunting around for wrenches—adjusting and readjusting chucks—THE BARKER WRENCHLESS CHUCK cuts out all that. It gives you instantly the utmost chuck efficiency service, saving you time and money and increasing output 30 to 180 per cent.

Eliminates the necessity of the installation of an expensive air chuck system.

One pull on the lever and the BARKER WRENCHLESS CHUCK holds the piece with a firm and safe grip, releasing instantly.

Adapted equally for Engine, Turret, or Semi-Automatic Lathes.

Made in sizes 6" to 16", two and three jaws.

We have them in stock.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

"EVERYTHING FOR THE SHOP"

149-165 E. Larned St. DETROIT Cadillac 7080

Some Signs of the Motor Up-Trend

Detroit Manufacturers, Returning From the East, Declare "Tangible Results" Already Have Been Felt

THE consensus of opinion among a great many officials of the automotive manufacturing concerns of Detroit who visited the New York automobile show which ended last Saturday, is that an early revival of the business is to be expected.

Revival is the word used by most of them. "There has been a slump," said one manufacturer. "Now, through the medium of the Show, the machinery which had come to a stop has been started again. It is by no means going fast yet, but it is picking up momentum steadily, and while it will not get its normal speed for many weeks yet, it is just as in the case of the fast ocean steamers, which start slowly, increase their speed gradually and really get going only after they are about three days out of port.

"Within another year we shall have new historical days in the industry—bigger days and better ones. Nothing is so absurd as to imagine that we have reached the zenith in the demand for automobiles. We haven't come to the middle point yet. Great as the number of both passenger cars and trucks is in some cities, the proportion to the population is still in most all states small. When the better conditions in the country again prevail—and that will be before another New Year's day—the demand for motor cars will be much greater than most manufacturers are figuring on."

By MARC BRAUN

Returned Packard Motor Car Company officials say more prospects were listed at the Packard exhibit this year than at most any previous Show. A real revival of inquiries from all over the country is reported at the plant in Detroit, and indicates that while the automobile show has been a factor, the revival is being noted in sections having no relation with the New York event. A good many inquiries have been received for trucks from big firms which are in the market now for large numbers of such vehicles. The Chicago show at the end of this month and early in February is likely to have a further decisive effect upon the picking-up of business.

From the Paige-Detroit Motor Car Company comes just as encouraging news. Orders were booked at the Show and a good list of live prospects lined up. The company is said to have placed a new order recently for engines with the Continental Motors Corporation, which seems a further indication that officials believe that conditions are soon to change—or, better said, are already changing for the better.

A decided improvement in general conditions is looked for by Maxwell-Chalmers executives. Just to show that this confidence is not mere hope, but that a betterment has already taken place, production of both Chalmers and Maxwell cars has been increased and from 300 to 400 men added to the working force.

The Continental Motors Corporation, which supplies engines to a large number of the automobile manufacturers, feels much better today than it did ten days ago, or before the New York show. Its officials, upon their return from the east, say that the best evidence as to how they feel may be had in their statements that quite a number of their customers have either increased their orders or placed new ones. That is the reason why both Detroit and Muskegon plants have been reopened.

"We are satisfied with the beginning in the revival in the business," said one of the officers of Continental. "We are getting back somewhat slowly, but we are getting back surely, and we shall be increasing production and increasing our force gradually. Just when that will be no one can tell now, for it may be months. But it is certain that a general betterment is on the way. It has started and I believe that the coming Chicago show, where so many dealers generally come and which is more generally a business show, will bring matters to a head."

From Toledo comes the news that the Willys-Overland Company has increased its force, and while the number is not very large, it is nevertheless encouraging. Some of the officials at the New York show said that plenty of business had been booked and that the outlook was good. As a further indication of improved Overland business, the word has been

(*Continued on Page 34*)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Need an Elevator?
Ask LEITELT

Modern Designs
Superior Construction

LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

Will Resume Parts Production

Detroit Machine Tool Co., in New Factory, Takes Up Work Given Up in 1918; Continues Its Regular Line



DETROIT MACHINE TOOL COMPANY'S NEW PLANT
The building is two stories high, concrete and steel construction throughout, and contains 37,200 square feet of floor space.

DIRECTORS of the Detroit Machine Tool Company, 6545 St. Antoine street, have increased the capitalization of the company from $150,000 to $300,000. The concern has just completed the erection of a larger factory, where it will specialize in the manufacture of ten automotive parts, for production of which it is especially well equipped, in addition to its regular line of machinery. This company manufactures the Detroit Semi-Automatic Drilling Machine and the Detroit Centerless Cylindrical Grinder, both of which are single purpose, high production machine tools.

The company was engaged in the manufacture of parts up until 1918, when the demand for Detroit Drillers and Grinders became so heavy that it was decided to give up the manufacture of parts temporarily and supply the demand for machinery. Exhaustive research and experimental work during the last year has resulted in the production of an improved centerless grinder, and the results achieved by this new machine have resulted in some very gratifying opinions being passed on the machine by machine engineers. The added floor space which will become available with occupation of the new building will facilitate production of these machines, as well as provide ample space for parts manufacture. Only ten parts will be manufactured, all of which call for centerless grinding operations, as well as occasional drilling operations. These are piston pins, valve roller pins, roller clutch pins, straight push rods, oil pump plungers, roller bearing rolls, differential gear pins, short gear shafts, headless king bolts and straight dowel pins.

Incidentally, the grinding department will be the means of training expert operators on this type of machine, and special attention will be given to the teaching of visiting foremen in the rudimentary principles of centerless grinding. The department will be run somewhat on the plan of the well-known Gisholt shop course for foremen and operators.

The parts manufacturing department will be in charge of H. J. Swanson, who also occupies the position of sales manager. Mr. Swanson has spent twelve years in the automotive and machinery industries, as toolmaker, designer and sales manager, and the new centerless grinder is the product of the ability of Mr. Swanson and E. Soholewski, chief engineer.

MACHINE COMPANY CHANGES HANDS

The Ann Arbor Machine Company, Ann Arbor, which in September passed into the hands of a receiver, and which during the latter part of November became the property of a number of Detroiters headed by A. Shipman, passed into control of H. M. Tallman & Sons, Shelbyville, Ill., January 3. S. C. Case, who has been with the concern as manager for the last 15 years, will remain. Just when normal operations will be resumed has not been stated by the new owners.

HALL LUMBER OFFICERS

The 54th annual meeting of the Hall Lumber Company, Lansing, was held last week and the following officers elected: President, B. Frank Hall; vice-president, Mrs. H. A. Hall; secretary-mnnager, Clare W. Bliss; treasurer, Donald S. Olds. The officers and Eugene Hammond comprise the board of directors. The regular annual cash dividend of 10 per cent was authorized. Mr. Bliss in a talk to the stockholders said he believed lumber prices had reached bottom and that 1921 would be a busy year.

AKERS JOINS REPUBLIC TRUCK

F. H. Akers, for the last seven years with the Reo Motor Car Company, Lansing, where he rose to the position of general sales manager, has become assistant general sales manager of the Republic Truck Sales Corporation, which takes care of the sales of the Republic Motor Truck Company, Alma. He will be assistant to A. J. Whipple, who recently joined the Republic organization as general sales manager. Ernest E. Seig, who has been assistant general manager for some time, will continue in that capacity.

Digitized by Google

Kazoo Masons' Union Cuts the Wage Scale

Expecting a reduction in costs of living, the Kalamazoo branch of the International Brick and Stone Mason's Union at a meeting last week unanimously adopted a resolution to cut the wage scale from $1.35 an hour to $1.25. The reduction is to take effect at once.

The action taken by the Kalamazoo masons, it is believed by the Kalamazoo Gazette, will start similar movements in other cities of the state, although no intimation has been received by the Kalamazoo union that wage reductions are about to take place elsewhere. Secretary Edward McKenna, of the union, said: "We understand that contractors who were paying the carpenters 90 cents an hour have dropped back to the scale of 85 cents. Whether there is to be any other reduction in the wage scales of building trades we do not know, but the bricklayers and stone masons unanimously believed that we could return to our former scale, and we did so."

The wage of $1.35 an hour has been in force since April 1, 1920, when the scale advanced from $1.25. The bricklayers and stone masons ratify their scale in January of each year.

NEW TOLEDO-DETROIT ROAD

Contracts shortly will be awarded for the construction of a 14-mile improved road paralleling the Dixie Highway from Monroe, and to cost $500,000. The highway will run from the northern limits of Monroe to Flat Rock at the Wayne county line, then follow an old plank road. It is to be 32 feet wide, 20 feet to be hard surface. State and federal aid will take care of 75 per cent of the cost. The road is needed to relieve the Dixie highway from the heavy traffic between Detroit and Toledo.

FURNITURE PLANTS RESUMING

Furniture plants in Grand Rapids have resumed operations to a limited extent, and expect to be running at normal capacity by March. The Hayes-Ionia Company has called back 500 men and by February 15 expects to have the full force at work. The Macey Company has 300 men at work and the Haskelite Manufacturing Company, which has been working 50 per cent of its employes four days a week, will resume the usual schedule February 1.

TAX AUTO BODY RE-BUILDERS

Firms engaged in the business of rebuilding tops or bodies for old or new chasses are declared to be manufacturers and subject to federal taxation, according to a new ruling of the Internal Revenue Bureau. Concerns which repair bodies and tops are not subject to the taxes.

VETERAN PENNSY OFFICIAL TO QUIT

C. L. Lockwood, division passenger agent for the Michigan division of the Pennsylvania System, with headquarters in Grand Rapids, has reached the retirement age, 70 years, and February 28 will retire on a pension from the system, which cares for veteran employes in this manner. Mr. Lockwood has served 48 consecutive years with the railroad, beginning as a telegraph operator, and has held the position of division passenger agent since January 1, 1884.

His successor will be appointed March 1.

FAY-KULTGEN NAME CHANGED

John D. Kultgen no longer being connected with the Fay-Kultgen Foundry Company, Benton Harbor, the business henceforth will be conducted under the name Fay Foundry Company, as originally organized. The change became effective on January 1, according to announcement just sent out by the company.



If it's hobs —

BROWN&SHARPE

Spur Gear-Worm Wheel-Special Purpose

HOBS

Speed up production, lower operating costs

Brown & Sharpe heat treatment, correct design and expert workmanship take the speculation out of hob buying.

BROWN&SHARPE MFG.CO.

Providence, R. I.

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS

INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

AUGUST N. JOHNSON MACHINE CO.
MANISTEE, MICHIGAN

MACHINE AND BOILER SHOPS

General Repairing

MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS

BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING

We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
1085-7-9 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 880 Fort St., E.
Main 8602 DETROIT

Factory, Warehouse and Railroad property exclusively. Personal service and personal knowledge of all available Railroad property in the city.

J. H. Cowley
509 Moffat Block. Main 2816.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—Work has been started on the construction of a $25,000 garage building for the Lansing Yellow Cab Company. The structure is to be completed about April 1. The garage will have its own heating and lighting system. The company at present has 24 cars.

Grand Rapids—During 1920 a total of 2,122 building permits were issued, aggregating in value $4,545,690, as compared with 1,577 permits issued during 1919, involving $3,686,377. Of the money spent, $495,300 was for new manufacturing plants and $231,000 for additions; $801,950 for residences and dwellings; $310,690 for additions; $93,600 for mercantile and business buildings, and $180,530 for additions; $2,177,986 for miscellaneous repairs; $58,264 for furnaces; $22,575 for barns and sheds; $173,895 for garages. There were requests for 20 building permits aggregating in value $69,300 during the first week of January. This compares with $35,000 expended for construction work during the first week in January, 1920.

Lansing—The Board of State Auditors will ask the Legislature for an appropriation of $50,000 to remodel the west wing of the state capital and prepare a suite of offices for the supreme court justices in the place where the state library now is located.

Jackson—During 1920 the total number of building permits issued was 779 as compared with 1,098 in 1919. The expenditure involved was $1,966,201, as compared with $2,163,289 in 1919. Of the money expended last year, $683,155 was for 145 dwellings and $788,320 for additions and repairs to 147 buildings. Eight factories were built at a cost of $51,900, while the estimated cost for repairs and alterations to 12 factories was $89,600.

Lansing—M. H. Cooper and Albert Ehinger have formed a co-partnership to be known as the Cooper-Ehinger Construction Company, with offices over the Longstreet Lumber Company's rooms, and a warehouse, which will be occupied April 1. The Cooper-Ehinger Company was organized to make a specialty of home and apartment house construction. The concern has already contracted for two homes in East Lansing, and is figuring on a 12-family apartment house to be built in Lansing.

Kalamazoo—The city commission has authorized City Manager Harry Freeman to enter into negotiations with the O. F. Miller Construction Company for the erection of a warehouse at the city yards. The cost of the building, excluding plumbing work, will be approximately $17,500.

Detroit—The Board of Education will ask the common council for a 99-year lease of the site of the present public library, on which the board would like to erect a 20-story administration building.

Continental Motors Shows Net Profit of $3,567,504.17

The annual report to stockholders of the Continental Motors Corporation, Detroit and Muskegon, for the fiscal year ended October 31, 1920, was issued this week. We present below a comparison of assets and liabilities for the last three years, together with the changes in surplus accounts for the same period. The excess of cost over market value of materials purchased for forward delivery is estimated at $250,000, but no loss is expected because the purchase contracts are covered by firm sales orders. To increase in fixed assets represents mainly a substantial increase in the Muskegon plant to take care of demand for truck motors.

The number of stockholders increased to 6,109 during the year, notwithstanding reduction of 6,050 shares of preferred by purchase and retirement through the sinking fund.

Total sales were 15½ per cent more than those for the previous fiscal year. Orders on hand October 31, 1920, totaled $53,584,220, or 64 per cent more than at October 31, 1919.

HAYNES HEADS DODGE BROTHERS

Directors of Dodge Brothers, Detroit, Tuesday elected Frederick J. Haynes, vice-president and general manager, to the presidency of the company, and Howard B. Bloomer, personal counsel of John F. and Horace E. Dodge for 20 years, chairman of the board of directors.

Mr. Haynes, the son of a lawyer, was born in Cooperstown, N. Y., and educated in the public schools of Syracuse, N. Y., and at Cornell University. He is a mechanical engineer by profession and has been with Dodge Brothers since 1912, prior to which he was identified with the Syracuse Cycle Company; Hunter Arms Company, Fulton, N. Y.; E. C. Stearns Company, Toronto; National Cycle & Automobile Company, Hamilton, Ont.; Lake Shore Engine Works, Marquette, and the H. H. Franklin Manufacturing Company, Syracuse, N. Y., in capacities from draftsman to general superintendent.

Twenty-two parts stations have been established in principal cities and eight more are in process.

Net profits were $3,567,504.17, or $141.779 more than for the year ended October 31, 1919. Like Packard and Reo, this company is in an enviable position to take care of a large volume of business without further expense for buildings, machinery and equipment.

ASSETS	Oct. 31, 1920	Oct. 31, 1919	Oct. 31, 1918
Land	1,124,900.47	793,369.91	694,912.44
Buildings	3,364,227.35	2,549,543.90	2,196,526.51
Machinery	6,287,089.13	4,396,951.85	2,597,256.71
Equipment	1,893,398.27	2,293,797.31	2,414,096.79
	12,669,107.01	10,403,662.70	8,589,518.45
Less Reserves	2,656,269.24	1,975,772.06	1,414,094.42
	10,033,917.77	8,427,890.64	7,395,723.43
Investments (At Cost)	89,669.13	28,587.27	32,099.49
Inventories	41,164,996.52	6,067,591.44	6,062,357.16
Notes and Accts. Receivable			
Less Reserves	1,062,223.51	1,122,995.47	1,440,596.72
Cash	842,864.97	871,784.44	172,117.59
Deferred Charges	264,137.68	86,264.37	45,562.09
U. S. Bonds, etc		1,866,020.64	242,220.76
Total Assets	36,457,501.99	18,782,699.64	15,725,269.80
LIABILITIES	Oct. 31, 1920	Oct. 31, 1919	Oct. 31, 1918
Preferred Stock Out	2,151,700.00	2,757,500.00	2,222,000.00
Common Stock Out	7,305,300.00	7,227,300.56	7,226,000.56
Notes Payable (includes $1,000,000 Serial Notes) and $37,500 purchase money obligations	7,037,900.00		850,000.00
Accounts Payable and Acceptances	2,125,417.71	2,164,814.07	1,429,994.88
Accrued Payroll, Taxes, Misc. Accounts	897,223.01	772,432.73	1,042,645.22
Provision for Federal Taxes	1,150,000.00	1,700,000.00	
Reserve for Contingencies	774,221.44		
Surplus	6,945,339.47	3,827,498.28	1,535,610.27
Dividends Payable		200,755.00	
Total Liabilities	36,457,501.99	18,782,699.64	15,725,269.93
SURPLUS ACCOUNT			
Surplus at beginning of year	3,827,498.28	1,535,610.27	1,900,579.91
Add Net Profits after Providing for Taxes	3,567,504.17	2,425,725.10	1,956,096.41
	7,395,202.45	4,961,335.37	3,856,676.32
Deduct Dividends and Premium on Pfd Stock Cancelled	1,949,862.98	1,152,632.09	1,401,066.05
Surplus Carried Forward	5,345,339.47	3,827,498.28	1,555,610.27

Digitized by Google

Michigan Road Building For 1921 Made Public

Besides completing the road and bridge building program dating from August 2, 1917, the State Highway Commission plans to construct between 150 and 200 miles of hard surface road in 1921. Highways contracted for, state trunk lines, federal aid roads and those under the Covert act, total 1,353.6 miles, of which 783 miles have been completed. Bridges of 30 feet span or more contracted for number 251, the number completed being 189. The costs of highways will total $21,647,455, apportioned as follows: Trunk lines, $10,870,019; federal aid, $6,541,999; Covert act, $4,235,435. Cost of bridges, $2,100,000. The Commission hopes to complete all roads and bridges contracted for in 1921. Road contracts by counties follow:

	Trunk Line	Federal Aid	Covert Act
Alcona	16.013	20.676	.....
Alger	12.258	.....	.....
Allegan	.057	20.639	.....
Alpena	6.727	5.525	.....
Antrim	.....	7.950	.....
Arenac	15.000	6.643	7.996
Baraga	.....	40.150	.....
Barry	.....	1.714	1.654
Bay	.....	.....	3.215
Benzie	3.491	.....	.....
Berrien	16.792	12.491	1.356
Branch	9.589	5.253	.....
Calhoun	.....	.....	2.102
Cass	.....	7.096	.759
Charlevoix	2.781	5.267	.....
Cheboygan	6.587	.....	.....
Chippewa	14.559	2.986	.....
Clare	3.460	.....	.....
Clinton	16.817	.....	12.240
Crawford	7.643	.....	.....
Delta	17.750	1.968	.....
Dickinson	6.850	.....	.....
Eaton	13.653	.....	2.057
Emmet	2.972	.....	.....
Genesee	6.481	.....	4.042
Gladwin	6.443	.....	.....
Gogebic	21.021	.....	.....
Grand Traverse	5.975	3.113	.....
Gratiot	.....	.....	.....
Hillsdale	19.898	.....	16.974
Houghton	14.426	.....	.....
Huron	6.961	.....	10.967
Ingham	2.232	3.960	6.477
Ionia	16.844	.....	16.451
Iosco	5.098	4.677	7.939
Iron	22.240	.....	.....
Isabella	2.597	.....	2.765
Jackson	14.995	6.566	2.115
Kalamazoo	9.322	9.501	5.681
Kalkaska	.....	.....	.....
Kent	4.911	.....	7.553
Keweenaw	4.223	4.223	.....
Lake	2.676	.....	.....
Lapeer	5.676	.....	2.497
Leelanau	9.324	.....	.....
Lenawee	12.878	9.179	43.053
Livingston	6.532	20.751	6.383
Luce	17.960	.....	.....
Mackinac	10.561	4.981	.....
Macomb	1.656	.....	2.472
Manistee	2.233	.....	.....
Marquette	28.784	.....	.....
Mason	3.378	.....	.....
Mecosta	10.570	.....	1.742
Menominee	12.256	.....	.....
Midland	9.869	.....	29.337
Missaukee	12.698	.....	.....
Monroe	4.410	.....	4.031
Montcalm	6.681	.....	3.423
Montmorency	2.277	.....	.....
Muskegon	5.127	25.340	1.000
Newaygo	15.092	.....	6.739
Oakland	6.095	10.347	4.371
Oge maw	8.522	.....	4.282
Oceana	.....	.....	2.224
Ontonagon	17.955	.....	.....
Osceola	8.142	15.306	.....
Oscoda	2.000	.....	.....
Otsego	17.606	.....	.....
Ottawa	9.940	.....	.....
Presque Isle	20.350	7.955	.....
Roscommon	6.823	.....	.....
Saginaw	4.591	.....	15.786
Sanilac	5.437	3.191	17.387
Schoolcraft	7.940	4.000	.....
Shiawassee	4.211	.....	7.642
St. Clair	27.443	16.594	4.173
St. Joseph	8.971	3.959	2.864
Tuscola	5.618	.....	2.569
Van Buren	5.139	6.817	.....
Washtenaw	.....	23.216	.....
Wayne	1.582	14.251	.....
Wexford	4.569	.....	.....

FOUR-DRIVE TRACTORS OFFICERS

Officers elected by the Four-Drive Tractor Company, Greenville, are as follows: President, George Lynch; vice-president, John G. Martz; secretary-treasurer, W. A. Stillwell. C. A. Watson has been retained as manager.

Solving the Price Problem



W. & S. 3¼" Capacity 2-A Finishing a Shaft.

Investigating Warner & Swasey turret lathe methods and tooling may suggest a solution of your price problem. The investigation may disclose to you a way of getting greater production at less cost.

Whether you have few or many turret lathes in your plant, now is the time to investigate whether or not you have been getting the most out of them. It may be a new tool or two will increase your production materially, or perhaps, by rearranging the tools you have.

Write us and we'll have one of our engineers to visit you if you like. No obligations, we just want you to be thoroughly acquainted with our service so you can call on us when you need us. When business picks up you *will* need us.

World's Largest Manufacturer of Turret Lathes

4½"x 44"-21" Swing to ⅝"x 4"-10" Swing

The Warner & Swasey Company

CLEVELAND, OHIO

***Detroit Office*—Ford Building**

***Chicago Office*—618-622 Washington Blvd.**

***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

Detroit United Lines
(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:58 a. m. and every two hours to 4:58 p. m. To Lansing, 6:58 p. m.

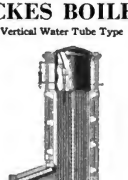
JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:18 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

WICKES BOILERS
Vertical Water Tube Type



Man Stands Erect Cleaning

Ask for Bulletin:
Reducing Costs in the Boiler Room

The Wickes Boiler Co.
SAGINAW, MICHIGAN
Michigan Sales Office:
1116 Penobscot Building, DETROIT, Mich.

CHERRY 6786

The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Detroit—The Thumb district is beginning the shipment of its hay crop. This movement and that of potatoes, small grain and flour has started from Pere Marquette Railway points, according to H. O. Halsted, superintendent of car service. There is likewise a greater general activity among the motor car companies and manufacturers of accessories reflected in the orders for cars which have been received by this department. Mr. Halsted, incidentally, points to the return of cars to the home lines which had been away ever since the "scrambling of the railroads" while under federal control. On December 1 there were only 3,500 Pere Marquette cars on the home lines, while on January 1 the number was 8,200. On December 1 there were 12,200 Pere Marquette cars on foreign lines, while on January 1 this number had receded to 9,200.

Grand Rapids—A 10 per cent reduction in freight rates on sand and gravel is the compromise offer of the railroads operating in Michigan, in the controversy over the 40 per cent increase granted by the Interstate Commerce Commission, according to Assistant Prosecuting Attorney Gelb, who represented the Kent county road commission in the matter. The railroad representatives have asked the state highway commission for another conference with the state and county road men. "The railroads are stalling us," said Managing Engineer O. F. Hess, "but we intend to carry our fight to the Michigan Public Utilities Commission, if we can't get what we want by other steps."

Port Huron—Completion of the channel in the St. Clair river, which was started last summer, is promised by May 20, 1921, the work having already been 77.5 per cent finished on January 1, according to a letter from Brigadier General H. Taylor, acting chief of engineers, written to Rep. Louis C. Cramton and forwarded to the Port Huron Chamber of Commerce.

Lansing—To care for the greater volume of freight business here, the four steam lines are preparing to increase their facilities. The Grand Trunk plans to add to its track storage to accommodate 500 cars. The Pere Marquette, New York Central and Michigan Central acquired land for additional trackage some time ago and have new yards south of the city. Further improvements are contemplated. Factory growth and production, and the increasing number of jobbing and wholesale houses will provide added tonnage.

Detroit—The Pere Marquette Railway has accepted delivery of 10 Pacific type passenger locomotives of the 12 which were ordered early last spring. The others will leave the shops of the American Locomotive Works at Dunkirk, N. Y., within a few days. The new locomotives represent a total outlay of $735,000, or approximately $61,250 each. They will be assigned to service on the Chicago, Detroit, Toledo and Saginaw districts.

Lansing—As forecast in these columns last week, Michigan railroad employe interests have introduced a "full crew" bill in the legislature. Senator Byron H. Hicks, Owosso, sponsors the measure, which affects only companies operating more than four trains in each 24 hours. Under the bill, freight trains of 50 or more cars must have crews of six men, which, in effect, adds one flagman to present crews. Where trains consist of less than 50 cars, the crew must be composed of five men. For passenger trains the crew strength is fixed at five men. The bill provides that a flagman shall not perform the duties of baggageman, express messenger or porter.

Minnsapolis—Reduction in the working week in the shops of the Minneapolis, St. Paul & Sault Ste. Marie Railroad is announced by Edmund Pennington, president of the company. Hereafter the shops will operate 5 days a week. The reduction affects 1,400 men.

Detroit—Federal Judges Tuttle, Killits and Denamore have taken under consideration the question of whether the state of Michigan has the right to prevent the railroads from putting into effect a 3.6-cent fare in intra-state traffic authorized by the Interstate Commerce Commission. Seven railroads brought suit to restrain the Michigan Public Utilities Commission from interfering with the federal tariff, and arguments have been completed and briefs filed.

Miss Kellor Bespeaks An Immigration Program

Miss Frances A. Kellor, New York, an international authority on the subjects of Americanization and immigration, was the guest of the Detroit Board of Commerce, Monday evening, at which time she discussed "Immigration and the Future."

Miss Kellor, who recently returned from Europe, stated that a new immigration problem had been raised by the war. Since the armistice had been signed emigration had far exceeded immigration. There had been a great exodus to the central European states, where the returning emigrant's American dollars make him a man of financial power among his stricken countrymen. She predicted that with the full restoration of trans-Atlantic service, thousands of the war sufferers would flock to this country, thereby reviving the great problem which the U. S. has for many years been forced to contend with. Miss Kellor declares that the United States has never gone at this matter in a scientific way and that it is now time to adopt a definite, comprehensive policy along sane lines.

At the close of her talk, it was voted to empower Frank Cody, chairman, to appoint a committee to draw up resolutions commending the United States Senate committee on immigration for its efforts in behalf of a scientific program.

Miss Kellor is the author of several books on Americanization and immigration and recently appeared before the Senate committee to aid in deciding the question now before Congress in regard to excluding the alien from this country for an indefinite period.

CENTRAL RIVER CONTROL DISCUSSED

Centralized control of the Detroit river front is desired in expectation of the development of the city as a world port when the Great Lakes-St. Lawrence route to the ocean is realized, and to that end business men of Ecorse, River Rouge, Wyandotte, Trenton and Detroit are working. A meeting of these representatives was held Friday and the subject discussed.

LANSING CO. BUYS WAREHOUSE

The Lansing Company, Lansing, a large user of lumber, has purchased a four-story warehouse in Chicago valued at $50,000. The company now owns warehouses and offices in Chicago, Kansas City, San Francisco, Minneapolis, New York city, Philadelphia and Poughkeepeie, N. Y.

Digitized by Google



COLD DRAWN "COLUMBIA SPECIAL" STEEL

FREE CUTTING SCREW STOCK

COLD ROLLED STRIP STEEL

COLD DRAWN 3½% NICKEL STEEL
(S. A. E. 2320 and 2330 Specifications)

COLD ROLLED AND COLD DRAWN STEELS

COLD DRAWN 40-50 CARBON AXLE STEEL

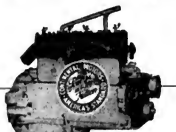
TURNED STEEL SHAFTING

COLD DRAWN 1½% NICKEL CHROME STEEL
(S. A. E. 3120 Specifications)

GENERAL OFFICES AND WAREHOUSE
1300 to 1330 West Fort St.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

SPRUNK
Engraving Co.
200 Marquette Bldg.
MAIN 1491
EXCEPTIONAL SERVICE IN ENGRAVINGS
- AND -
ART WORK

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

30% MOTOR TARIFF ASKED

The National Automobile Chamber of Commerce has reached an agreement on the tariff proposition. At a meeting of the organization in New York last week, the directors appointed J. Walter Drake, of the Hupp Motor Car Corporation, chairman of a committee to ask the ways and means committee of the House of Representatives to include in the next tariff bill a clause fixing automobile import duties at a flat 30 per cent. Some members of the Chamber had expressed themselves as being in favor of free trade. Another committee, of which George F. Bower is chairman, will go to Washington to oppose a reduction in the tariff on aluminum, of which the industry uses 130,000 tons annually. Frederick J. Haynes, president of Dodge Brothers, Detroit, was elected a member of the board of directors of the Chamber, taking the place of the late Horace E. Dodge.

SEWELL SALES 61½ LARGER

For the fiscal year ended December 31, 1920, sales of the Sewell Cushion Wheel Company, Detroit, manufacturer of resilient motor truck wheels, showed an increase of 61 per cent over sales of 1919.

STUDEBAKER'S 1920 OUTPUT

A statement just issued by the Studebaker Corporation, Detroit and South Bend, Ind., says that 1920 was the biggest production year the company ever had. The output was 52,000 cars, as against 38,530 in 1919. Also 52,000 to 28,000 were manufactured after July 1. The company's sales during the last quarter totaled 10,000 cars. The number of unsold cars on hand is 1,600—two weeks' supply.

PEEL WINS PROMOTION

Willys-Overland, Inc., Toledo, announces the promotion of Roy Peel, sales manager of the New York branch, to be manager of sales and service of the entire Overland organization. Mr. Peel has taken up his new duties.

FRANKLIN'S RECORD PRODUCTION

In a statement of business for 1920 the H. H. Franklin Manufacturing Company, Syracuse, N. Y., informs this publication that it shipped a total of 10,566 Franklin cars of an aggregate value of $35,000,000. The record shipping day was March 29, when 109 cars left the plant, while the best month was March, the total shipped being 1,542. The last month of the year was the largest December record in the history of the company, 1,041 cars being shipped, while orders received from dealers during the month totaled 1,063. The company considers the outlook satisfactory, and believes the resumption of business depends largely upon the individual efforts of dealers and salesmen.

CHANDLER-CLEVELAND OUTPUT

During 1920 the Chandler Motor Car Company, Cleveland, made 23,323 cars, which total is 5,356 in excess of its 1919 output. The Cleveland Automobile Company, more or less related to the Chandler, but building a lower priced car, completed 15,834 machines.

FORD ADDS TO TIMBER HOLDINGS

A special dispatch from Marinette, Wis., to the Detroit Journal says that Henry Ford has purchased 1,950 acres of timber land near L'Anse, Mich., from C. Kelsey and John E. and Herbert A. Brennan. The consideration is reported to have been in the neighborhood of $50,000. The tract is in Baraga county and comprises six sections adjoining other holdings of Mr. Ford. It will be developed for Mr. Ford by the Michigan Iron, Land & Timber Company, Iron Mountain.

A NEW HEADLIGHT BRIGHTENER

A device for intensifying the headlights on a Ford car, so that by stepping on a button, as brilliant a light may be obtained in high as in low gear, is now being manufactured at the plant of the Kirchen Machine Company, Lansing.

SIMPLEX WHEEL RE-ELECTS OFFICERS

Directors and officers of the Simplex Wire Wheel Company, Cadillac, have been re-elected as follows: President, J. P. Wilcox; vice-president, W. E. Curry; secretary-treasurer, J. C. Ford. The other directors are J. B. Wagner, W. A. Kyser, C. R. Smith, C. A. Saunders, George J. Sandel and C. F. Williams.

AUTO INSURANCE RATES CUT

As a result of Detroit's intensive safety campaign, motor car liability insurance companies have lowered insurance rates on passenger cars and trucks in the city and in some suburban localities. New rates mean a saving of from $8 to $8.50 on passenger cars and more on trucks, in suburban and rural districts a cut of $5 has been made.

PONTIAC PLANTS IN PRODUCTION

The Oakland Motor Car Company, Pontiac, is producing 75 cars a day on the present schedule and the General Motors Truck Company is working on one model, will have another in production in February and by March expects to be producing the five models manufactured by the company. The plant is being operated with 50 per cent of its regular force.

DODGE ORGANIZATION COMPLETED

Arthur T. Waterfall has been elected vice president and assistant general manager of Dodge Brothers; Harry W. Popeney, secretary; R. J. Fry, assistant secretary, and Charles W. Mathison, sales manager. Frederick J. Haynes recently was elected president and general manager. The directors are Mr. Haynes, Mr. Waterfall, Howard B. Bloomer and John Balantyne, president of the Merchants National Bank, Detroit.

CURRAN-DETROIT RADIATOR CHANGES

Dr. Edward T. Curran has relinquished the presidency of the Curran-Detroit Radiator Company and W. J. Murray has been elected in his stead. C. S. Reid has been elected vice president, and H. H. Rowe, treasurer and general manager. H. F. Lacey, former assistant secretary, has been elected secretary. J. A. Kring, sales manager, and H. I. Phillips, factory manager, have been elected to the board of directors. The outlook for business according to Mr. Rowe, is even better now than it was January 1 and the company is going ahead with plans to take care of its increased trade in the special Ford radiators.

FORD PROFITS AND LOSSES

A Ford dealer located outside Michigan has an advertisement quotes part of a letter from the Ford company in which it is stated that the company is losing money on its three most popular models. The following schedule of profits and losses are given: Touring car, loss, $30.52; roadster, loss, $44.36; sedan, loss $31.88; coupe, profit, $30.60; chassis, profit $1.79; truck, profit, $30; tractor, profit, $60.

Digitized by Google

Main Durant Factory Probably in Flint

Durant Motors, Inc., will locate one of its units probably the main plant, in Flint. W. C. Durant, head of the new concern has wired the Flint Journal as follows:

"You may say to the good people of the best little city in this country that one of the plants of Durant Motors will be located in Flint. Say to those who so thoughtfully remembered me that I am most appreciative of and quite overcome by their kind messages of friendship, confidence and affection."

As far as is known at this time, Durant Motors will have two and possibly three plants, one of which will be the main manufacturing center while the others are likely to be assembling plants. While the information does not come from Mr. Durant, a man close to him stated that the new car is expected to be made on a system similar to the one which has so well succeeded with the Ford Motor Company, namely by having all the parts made at one plant and assembled at branches.

This man, who is connected with the industry, said he had been informed that half a dozen of the best known banks in the country had advised Mr. Durant that he need not worry about being granted credit to the extend of many more millions than the capitalization of his company.

Within the week following the announcement of Durant's new venture more than 150 requests were received by him from business organizations throughout the country and from private persons, asking him to locate in their respective cities.

A. F. Hohensee, who was a director, vice-president and an executive committeeman of the General Motors Corporation, resigned to become associated with the new Durant company.

KELLEY TIRE CHANGES NAME

James Martin, president of the Martin Tire Corporation, New York, has acquired an interest in the Kelley Tire & Rubber Company, New Haven, Conn., and the name of the concern has been changed to the Martin Tire & Rubber Company.

CADILLAC RESUMES JANUARY 24

A return to activities in all its departments, beginning Monday, January 24, is announced by officials of the Cadillac Motor Car Company, of Detroit. Men are being added and will continue to be added in various departments, the increase to be greater in some than in others. For instance in the assembling department the activities will be greater at first than in the finishing department.

Cadillac officials upon their return from the New York show stated that they are pleased with the results and more so with the outlook for the future. They do not hesitate to predict an early revival in buying.

DETROIT LIFE GAINS

The annual report of the Detroit Life Insurance Company, which has just come to hand, exhibits interesting gains for the fiscal year just ended. Insurance in force December 31, 1920, was $22,004,300, an increase of $5,127,229 during the year. New business put on the books totaled $7,581,444, which is said to be the largest amount of new business done in Michigan by any Michigan company. It is an increase of 43 per cent over 1919. Total premium income in 1920 was $769,979, an increase of $204,348.

EVERYBODY HOPES TO OWN A MARMON

For Sale—The prettiest Marmon Coupe in Michigan; driven less than 12,000 miles; has a most excellent power plant and is fully equipped; everything in fine condition. Box W, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit.



"QUALITY"

Manufacturers of the Six-Spindle Automatic Screw Machine

IN THE purchase of Screw Products QUALITY is the all-important consideration. "Prompt delivery" and "lower price" count for little if QUALITY is uncertain.

"NEW BRITAIN" QUALITY is based upon a careful analysis of every shipment of material received; the employment of stock of correct physical characteristics for the use intended; and the accurate inspection to gauge of the finished work.

If yours are QUALITY requirements, we would be glad of an opportunity to figure on them. Send samples or blue-prints — or write or 'phone our Detroit representative to call.

The New Britain Machine Co., New Britain, Conn., U.S.A.

4612 Woodward Ave. DETROIT Phone Glendale 1354

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, JANUARY 22, 1921

Tax Free Bonds and the Housing Problem

THE STATE OF MICHIGAN, during its period of greatest industrial activity, had many difficulties. Perhaps not the greatest of these—all of which were incidental to rapid industrial growth—but one of the greatest was that concerning the housing of its industrial population. Great numbers of workers had been attracted from outside the state's borders to its industries. In some cases the populations of cities were doubled in a short time. The reactions were (1) increased rentals for the homes already available as the result of a demand far in excess of supply; (2) a demand for additional homes created by the requirements of the added population, and the bidding of the newcomers for the available spaces, and (3) the doubling-up of families in single homes and the conversion of space formerly held necessary for the housing of single families into quarters capable of being rented—we do not say capable of accommodating—many more persons than were theretofore allotted to them. A secondary reaction was an advance in the selling cost of homes, the new rental prices being made the basis of figures of income production from residence property which was held to justify the new capital costs placed upon them. Following this came the increased cost of new homes, growing out of various causes. These included the demand which impinged upon the normal supply of building materials, which became suddenly affected by abnormal requirements of them, the increased cost of labor employed in building growing out of its own increased rental costs and other operating causes which finally had their only logical result, namely the cessation of building. Among these other operating causes was the high price of money available for such investments. Money invested in real estate required a gross return of 12 per cent on an artificially inflated building cost. Any real estate operator in Michigan will bear out the statement that buyers of residence property based their rentals upon one per cent a month of the cost price of the properties. The cost prices, in their turn, were based upon the premiums which had to be paid for the money necessary to build. These premiums were of various kinds. Here were the charges laid by the money-lending banks upon the processes of getting mortgage loans. Sometimes these were bonuses paid to brokers who made the transaction. Sometimes they were fees for bank attorneys who passed on the titles. Again they took the form of insurance commissions upon excessive fire insurance protection, the money-lenders directly or indirectly participating in the commissions upon such insurances. Then there were fees and bonuses for second mortgages or discounts on contracts of sale, all equally charges against the final buyer of the property, and, in the last resolution, advances in the prices which must be paid for the occupancy of homes, whether in the form of rent or periodical payments applicable in one part to the payment of interest and taxes, and in other part to payments upon the principal sum due on the purchase.

As a next step in the process of firmly and permanently fixing these advanced costs upon the users of homes, the tax assessors put the residence properties of the tate upon the tax rolls at the enhanced prices, which included, as we have shown, the increases in building materials, building labor, commissions and bonuses on money negotiated in a close market, and all the other things which entered into the cost of making homes. Valuations once put on tax rolls rarely change, except in the direction of advance.

Now all these conditions were the economic result of a small supply of capital available for home building. That was readily conceded, because it is one economic fact that is as plain as the nose on one's face. Manufacturers all over this state, forced by the necessities of the condition, began to appropriate money—which was originally gathered together to be invested in industry—to house building plans and schemes. To the extent that this was done, industry suffered. Money raised for industrial capital ought to remain in industry. Money for real estate development ordinarily comes from other sources, non-competitive with industrial capital. At any rate, Mr. Durant had to carry out his splendid housing schemes at Pontiac and Flint. The Detroit employers of labor put a couple of millions at the disposal of a housing corporation. In Grand Rapids industrial capital was diverted to residence building. In as small a place as Howell an operation of the same kind was effected. The cities of the state generally had the same necessity set before their industrial leaders of taking capital out of industry and putting it into housing.

All this time the state, through its laws exempting municipal securities from taxation, was competing with the necessities of housing in this state. A body of capital estimated to be as great as $300,000,000 was invested in tax-free municipal bonds. This capital paid no tax. The housing capital was, once fixed, assessed at its full value, or very near it, and a levy of about $24 per $1,000 laid upon it. Moreover, to get this capital into real estate or industry the real estate or industrial investment was forced to offer, according to Chairman McFadden, of the House committee on banking and currency, a price better than 7.3 per cent net of all taxes and charges, if it asked money owned by a citizen with $100,000 annual income, and 14.9 per cent if it asked money from a citizen with a million-dollar income, before it could compete with the advantages offered by tax free bonds, in exemptions from taxes, state and federal.

Moreover, this exemption of capital invested in municipal securities on a tax free basis is reacting still further on the ownership of residence property in Michigan and making the carrying of such property unjustly burdensome. The total equalized value of this state is about $3,500,000,000. If $300,000,000 or more—which is about one-tenth of the taxable capital of the state—is exempt from taxation, that means that nine-tenths of the property of the state is carrying ten-tenths of the burden, or that nine-tenths of it is being mulcted out of about 11 per cent more of the tax burden than it should justly carry.

These are considerations for the people who have been carrying the burdens of housing, who are interested in the purchase, sale and improvement of real estate, and who are good enough bookkeepers to understand that a reduction of one per cent in interest which is paid for by a 2.1 per cent tax exemption is not economical or just. There is a session of the legislature on now at which their protest might be made effective.

Impressions of Dr. Burton

A REAL "HE MAN" is the new president of the University of Michigan. He knows the college professor's usual encyclopedia of big words; he has traveled and he is educated to the nth degree, but withal he is a plain, big-fisted, broad-shouldered, keen-eyed, agreeable individual. He is fully aware of the duty that the state of Michigan owes to its other dependents and institutions, and is decidedly well balanced as to the place that an institution of higher education should occupy in the modern scheme of living; yet his feet are on the ground. The atmosphere that an educator lives in has often been blamed for the warped conception that many professors have

Digitized by Google

of their own importance to society, but this man seems to have accumulated a splendid balance wheel all his own which gives one the impression that he has run on both sides of the road and has decided to steer the middle course. One look at the man breeds confidence and one sentence of his confirms the impression. He is an inspiration complete. His conception of what constitutes a "live man," as given to the Bankers' Club of Detroit, last week at its dinner, is one of the most heartening suggestions offered in these parts in some time. Every strata of society from blue blood to bolshevik may benefit by the preachments of Dr. Burton.

Preserve the Federal Reserve System

REPORTS from a Washington correspondent are that Congress is going to be asked to revamp the Federal Reserve System. A central bank is the new favorite in the eyes of the financial reformers, but what advantages this scheme might offer are not enumerated.

The twelve Federal Reserve Banks as now constituted are still in their infancy; yet they have performed during the last five years unlike babies but more like veterans, and there is nothing in financial history equal to their record of service and achievement. The System is so sound and has worked so well that South Africa and some important South American countries have taken it as a model for rebuilding their governmental financial machinery. On the debit side of the achievement ledger there are also a few entries, but not one defect exists which could not be remedied by Congress without tearing down twelve institutions which have earned their right to exist through service rendered, and without destroying twelve machines which have become accurately attuned to the local requirements, both large and small, of their respective districts. Thirty years were spent in planning and making and about six have been spent in actual performance; and the expense of planning and making is no niggardly item. But now the good and faithful servant is to be revamped and given a new one-piece suit—for what reason no one knows.

As the System is now operating, there is a central control in Washington, and simply that the body which exercises that control is called a "board" should not mislead anyone into thinking that it is any less efficient than it might be if it were designated a "bank." True enough it is that the twelve operating arms of the board are in distant cities and each arm is presided over by a governor and a board of directors, but it must be remembered that in each office there is an agent of the Federal Reserve Board of Washington who has ample authority to see that the orders of the supreme body are properly carried out. Unless the fundamentals of the System are to be changed, and that is unthinkable, the only thing gained by concentrating the headquarters of the whole system in Washington would be merely a physical change of the location of each subsidiary officer's desk. Not long thereafter the close touch that each officer has with his district would be lost and we might hear that the West was being discriminated against in favor of Wall Street.

How many people know that the Boston Federal Reserve Bank lent $97,000,000 to the banks in the South and West on September 3, and that on October 27 the Boston, Cleveland and Philadelphia banks were carrying $247,000,000 of loans (rediscounts) for the Richmond, St. Louis, Minneapolis, Kansas City and Dallas banks? The system of permitting one Federal Reserve Bank which has surplus funds to lend them to other Federal Reserve Banks which are in need of funds accomplishes the very thing which financial men have been working thirty years to obtain. It is one of the chief reasons why panics have been avoided since the System has been in operation; for it permits the flow of credit readily from districts which have a surplus to those which have a shortage. There is no telling what might have happened in November and December had the West been unable to call on the East for funds, and it is only by means of a system of separate units, controlled by a central authority, that this has been accomplished. A small bank in Kansas might have the finest kind of paper in its pouch, but it could not directly convince a bank in Massachusetts that the latter could and should accept the paper as a rediscount to tide over an emergency. Yet with the Kansas City federal bank acting for the small Kansas bank and the Boston federal bank acting for the Massachusetts bank, the operation is simple. A year ago the western federal banks were lending money to the eastern banks.

The inventive genius of the American mind is a wonderful thing, but there is a danger of investing too well unless we try out the new vehicles a long enough time to make sure that further invention is necessary. Every proposal toward making any change in the Federal Reserve System which will destroy the unit scheme and place the entire policies and credit control of the country under one head should be discouraged.

Short Measure Stuff

MR. HARDING TO WASHINGTON

I do not want a lot of jass
When I'm inaugurated;
Please cut out all the fireworks
And fuss that has been dated.

Hang all the flags out on that day
In just the same old manner,
And tell the bandmasters to play
The old Star Spangled Banner.

We haven't such a lot of dough
In the coffers of this nation,
That we can make inaugurals
A time for dissipation.

If on the Fourth of March we let
The bars down for each grafter,
How can we make them understand
What's coming shortly after?

So please don't get too blooming gay,
Don't make your plans too hearty,
It just won't do, and after all,
You know it is my party.

* * *

COAL MEN TO GET EAR OF CONGRESS

—Newspaper Headline.

Make it a boot instead.

* * *

Overseer Volva of Zion City says that there is a vat of whiskey in hell for the punishment of sinners who drank while on earth. That's some consolation at that. It might have been near beer.

* * *

GOO-EY!

A fellow climbed in a canoe
For a ride when he had quite a skoe.
Now the place where he's laid
Has plenty of shade,
And the sky is a beautiful bloe.

—Luke McLuke.

A fellow climbed in a coupe,
With a hurry to be on his we.
He stepped hard on the gas,
But he skidded, alas—
Friends visit his grave every day.

—Canton Daily News.

A fellow whose gas tank was leaking,
Lit a match to assist him in seeking.
He found it, I guess,
By the looks of the mucss,
From his resting place flowers are peaking.

* *

HEIGH, HEIGH

"There will be a dance given at Will Bomsecour's new home in Black River, Wednesday," gonfalons the Cheboygan Daily Tribune. "Good music. Fifty cents per couple. Lots of room for horses." Whereat the Bay City Times Tribune wants to know if the steeds will stage a shimmy.

* * *

We attended a dinner the other day for the benefit of the Hoover Fund where the overseas relief ration was served. We were served rice, dry bread and cocoa. Someone nearby remarked that at the prevailing exchange rates that ought to be equivalent to roast turkey and cranberry sauce in Europe.

* * *

What has become of the old fashioned skirt dance?

—A. F.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JANUARY 18TH

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk	Capitalization
American Chicle, pfd	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com	XD 79	80	100	92 - 69	204 - 55	4%	4%	Quarterly	Nov. 1, 1920	1%	1%			$4,271,900
Do. pfd	XD		100			6%		Quarterly	Nov. 1, 1920	1½				$14,296,100
Auto Body Co	4	5	10		12½ - 5½				Jan. 20, 1917		25%			$1,074,000
Do., pfd	7½	8½	10		10¼ - 10	6%		Semi-Ann	Aug. 1, 1920	3%				$527,100
Bower Roller Bearing Co	15		10		29¾ - 16	Varies		As Decl'd	July 1, 1920	10%				$600,000
Charcoal Iron Co of America, com	2¼	2½	10	2¾ - 2	8¼ - 1¾				Apr. 1, 1919	2%				$2,809,350
Do., pfd	18	23	10	23 - 20½	25¾ - 23½				July 1, 1919	2%				$5,217,250
Cities Service Co., com	XD 245	250	100		355 -250½	*6%		Monthly	Jan. 1, 1921	1½%	1½%	1½%	1½%	$10,039,245
Do., pfd	XD 65	65½	100		70 - 65	6%		Monthly	Jan. 1, 1921	1/2		1/2		$25,465,664
Coahuila Lead & Zinc Co	13	17	1	16 - 6	25 - 6	Varies		As Decl'd	Nov. 15, 1917	20				$800,000
Columbia Sugar	12½	13½	10	14½ - 13	20½ - 11½	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co	7	10½	10	7½ - 7½	18½ - 6¼	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pwr. Ry. & Light Co., com	12	14	100	16 - 16	65½ - 10½	8%		Quarterly	Nov. 2, 1920	2%				$18,266,300
Do., pfd	33½	35½	100		73 - 23	6%		Quarterly	Nov. 2, 1920	1½%				$17,954,001
Continental Motor Co., com	6¾	7	10	7¼ - 5¾	14¾ - 5¾	4%		Quarterly	Dec. 15, 1920	1%				$9,447,900
Do., pfd., XD	90	95	100		108½ - 93	7%		Quarterly	Jan. 15, 1921	1¾		1¾		$2,151,700
Detroit & Cleveland Navigation Co	72	74	50	72 - 71	106 - 63	8%		Quarterly	Jan. 1, 1921	2%		2%		$4,827,000
Detroit Creamery Co	23	24	10	24 - 22½	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$21,600,000
Detroit Edison Co., XD	96½	96¾	100	98 - 96½	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,655,200
Detroit Brass & Malleable Works	98	100	100		100 - 93	8%		Monthly	Jan. 1, 1921	8%				
Detroit Hotel		90	100			8%		Quarterly	Dec. 1, 1920	2%				$15,000,000
Edmunds & Jones, com	13	15	None	14 - 14	34 - 9¼	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 10,000 shs
Do., pfd	75	85	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾		$8%		$800,000
General Motors	XD 14¾	15	100	16 - 14¾	82 - 12½	25%		Quarterly	Jan. 1, 1921	25c				20,562,376 shs
Federal Truck	10½	11	10	10½ - 10½	82 - 10½	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co of Canada	236	238	100	260 -220	460 - 210	Varies		As Decl'd	Dec. 15, 1920	40				$7,000,000
General Alum. & Br. Mfg. Co., com	13	15	10		11½ - 11	Varies		As Decl'd	Oct. 1, 1920	4%	5%			$1,062,750
Gladys-Belle, com., XD	65	66	100	73 - 58	73 - 56	10%		Quarterly	Jan. 1, 1921	2½		4%		$6,400,000
Do., pfd	75	78	100	80 - 63	1.48 - 61	16%		Quarterly	Jan. 1, 1921	4		4%		$2,000,000
Godchaux Sugar, com	10	21	None		59½ - 39½									$10,000 shs
Do. pfd	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾		1¾		$1,500,000
Hanna Furnace, com	26		10											$1,000,000
Do., pfd	98	99	100											$750,000
Hall Lamp Co	14½	17½	10	15 - 15	32½ - 16	Varies		As Decl'd	Dec. 24, 1920	5%				$1,000,000
Hayes Mfg. Co., com	2¾	3½	10	3½ - 3¾	6¼ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1½				$1,500,000
Holland-St. Louis Sugar Co	8		10		19½ - 7¾	12%		Quarterly	Oct. 15, 1920	3				$2,000,000
Iron River Mining Co	25	40	20		40 - 25	20%		Semi-Ann	Jan. 1, 1921	10%				$2,500,000
S. S. Kresge, com	128	135	100	90½ - 90½	151 - 109	6%		Semi-Ann	Jan. 2, 1921	3%	3%			$10,000,000
Do., pfd	97	100	100			7%		Quarterly	Jan. 1, 1921	1¾	1¾			$2,000,000
Linderman Steel, com	12	15	10		24½ - 15½	6%		Quarterly	Jan. 2, 1921	1½	1½			$1,000,000
Lincoln Motors, Class A	18½	19½	10	21½ - 17¾	50¾ - 18½	$5.00		Quarterly	July 30, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co			10		13½ - 9½				Dec. 1, 1914	3%				$750,000
Michigan Drop Forge, com	XD	40	None		90 - 90	$1.00		Monthly	Jan. 1, 1921	25c	25c			$ 12,500 shs
Do., pfd			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾				$250,000
Michigan Stamping Co., com	XD 17½	18½	10	17½ - 17½	30 - 16½	8%		Monthly	Jan. 1, 1921	2%	4%			$1,000,000
Michigan Sugar Co., com	8½	9¼	10	9 - 7½	13½ - 7½	12%		Quarterly	Dec. 1, 1920	3				$7,471,100
Do., pfd	8		10	8 - 8	9½ - 8½	8%		Quarterly	Dec. 15, 1920	2%				$1,701,700
Miles-Detroit Theater Co	15½	16½	10		21 - 15½	*16%		Quarterly	Jan. 10, 1921	4				$350,000
Motor Products	40	43	None	43 - 43	60½ - 37½				Oct. 1, 1917	$1.00				$ 100,000 shs
Motor Wheel	10	10½	10	10½ - 9½	13½ - 8¾	*8%		Quarterly	Jan. 23, 1922	2%				$4,583,140
Murray Mfg	18		10		35 - 33	12%		Monthly	Dec. 15, 1920	1				$733,150
National Carbon Co	100		100		155 - 155	*8%		Quarterly	Jan. 1, 1921	2	2			$2,000,000
Do., pfd	88	95	100		155 - 90	8%		Semi-Ann	Jan. 2, 1921	4	3			$1,500,000
Chas. F. Noble Oil & Gas Co., pfd	118	125	100	1 03 - 1 03	2 00 - 1 05	*18%		Quarterly	Dec. 1, 1920	4½				$1,000,000
Packard Motor Co., com	10¼	10¾	10	11 - 9¾	28¾ - 9½	10%		Quarterly	Oct. 31, 1920	2½				$11,885,100
Do., pfd	76	77	100	79 - 70½	90¾ - 67	7%		Quarterly	Dec. 15, 1920	1¾				$15,225,400
Paige-Detroit Motor Car Co	16	18½	10	17½ - 13¾	43½ - 12	*12%		Monthly	Dec. 10, 1920	1				$2,000,000
Parke, Davis & Co	23	25	25	27 - 23	37½ - 22	12%		Quarterly	Jan. 1, 1921	3	2			$2,400,000
Pemberthy Injector, pfd			100						Jan. 1, 1921	2				$500,000
Reo Motor Co	20½	21¾	10	21¾ - 17½	29½ - 16¾	10%		Quarterly	Jan. 1, 1921	2½	2			$6,022,500
Scotten-Dillon Co		32	10		35 - 29	8%		Quarterly	Jan. 1, 1921	2				$1,500,000
Timken Axle, com., XD	31	31½	100	31½ - 26½	46¾ - 26	12%		Bi-Month	Dec. 15, 1921	2				$3,000,000
Do., pfd			100		93½ - 84	7%			Dec. 1, 1920	1¾				$5,000,000
Trus-Con Steel Co., com., XD		20	10		29½ - 29½	16%		Quarterly	Jan. 15, 1921	4		4		$1,450,750
Do., pfd			10		9¾ - 9¾	8%		Quarterly	Dec. 1, 1920	1¾				$1,812,200
U. S. Radiator, com	15	17½	100		31½ - 20									$4,000,000
Do., pfd	83½		100		93¾ - 80	7%			Jan. 1, 1921	1¾				$2,800,000
Waring Hat Co., com		25	None						Jan. 1, 1921	2%				
Do., pfd	92	100	100			8%		Quarterly	Jan. 1, 1921	2%				$1,000,000
Western Knitting Mills	10	10½	None	11 - 8½	30½ - 8½	$2.00		Quarterly	Nov. 25, 1920	50c				140,000 shs.
White Star Line		42	50		50½ - 50½			Aug. & Nov.	Aug. 23, 1920	2½				$750,000
Wolverine Portland Cement Co	2½	4	10	2½ - 2	5¾ - 2½				Dec. 15, 1917	1				$1,000,000

*Old 500-570; new 631-27. $7 in 1914, 7 in 1920, only dividends since organized. †Extra dividend. 28-sp Increase to $600,000 authorized. ‡Book value, $1,016,997. Ed & J. 4 Book value, $2,219,327, Godchaux Book value, $2,627,705.00. Western Knitting Mills Book value $3,084,450. Motor Products 7-04 ††Varies from other exchanges.

Foreign Exchange

Country	Par	Nov. 10 1919	Jan. 5 1921	Jan. 18 1921
Canada	1.0000	.95938	.85	.8775
London	4.8665	4.14	3.8275	3.7875
Switzerland	.1930	.1799	.1529	.1575
Paris	.1930	.1105	.0599	.06325
Belgium	.1930	.11756	.0625	.0665
Holland	.40196	.3775	.3162	.3319
Italy	.1930	.08787	.03165	.02545
Greece	.1930	.18	.0765	.0750
Spain	.1930	.1940	.1328	.1348
Vienna	.29563	.0105	.0023	.0020
Berlin	.23821	.0280	.01345	.01625
Denmark	.26799	.2080	.1395	.1828
Norway	.2682	.2100	.1595	.1775
Sweden	.2680	.1990	.2045	.2145

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Jan. 18, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1918	July 1, 1918
U. S. Liberty 3½s	92.40	92.50	90.00	91.05	99.20	99.75	99.56	99.62
U. S. Liberty 1st 4s	86.90	85.52	85.60	93.00	94.90	93.00	94.15	
U. S. Liberty 2nd 4s	82.30	86.20	84.10	85.00	91.58	93.84	92.04	94.10
U. S. Liberty 1st 4½s	87.88	86.35	85.50	85.18	92.46	95.14	98.50	....
U. S. Liberty 2nd 4½s	87.58	86.30	84.34	85.00	92.20	94.08	95.70	....
U. S. Liberty 3rd 4½s	90.52	90.04	87.20	86.22	91.65	94.10	94.44	....
U. S. Liberty 4th 4½s	87.70	86.46	84.96	85.56	99.75	100.10	....	....
Victory Bonds, 4½s	97.32	96.48	94.90	88.50	94.00	95.08	95.32	96.22

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement			Dividends			Detroit Stock Exchange					
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Last Sale	Jan 18, 1921 Bid	Jan 18, 1921 Ask
American State	150	$1,000,000	$15,989,348	10%	J-A-J-O 1st	217	215	226	200	217	220	225
Detroit Savings	257	1,500,000	23,862,200	12%	6 Jan-Jul 1st	258	258	250	250	250	250	300
					2 Ex Jan							
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly							
					1 Jan-Jul			250	258	258	257	260
First and Old Detroit National	194	5,000,000	66,880,082	*12%	J-A-J-O 1st			275	268	268	270	275
Central Savings Bank	142	1,000,000	17,613,136									
First State	160	1,000,000	12,789,601	10%	J-A-J-O 1st						187	195
Highland Park State	108	1,000,000	14,287,348	20%	J-A-J-O 1st			298	295	295		300
Merchants National	167	2,000,000	9,789,567	8%	J-A-J-O 1st			163	142	142	145	
National Bank of Commerce	231	1,500,000	22,274,467	10%	J-A-J-O 1st			210	190	210	205	215
Peninsular State	158	2,500,000	31,523,787	12%	J-A-J-O 1st			220	215	215	220	240
People's State	282	5,000,000	100,783,365	12%	J-A-J-O 1st	360	360	335	300	360	360	
United Savings	157	500,000	6,832,934	12%	Monthly	208	208	215	209	208	200	210
Wayne County Home	259	4,000,000	74,072,277	16%	Monthly			347	306	347	345	351
American Loan and Trust	134	300,000		6%	J-A-J-O 1st			155	155	155		
Bankers Trust	117	500,000		8%	J-A-J-O 1st							
Guaranty Trust	174	300,000		8%	J-A-J-O 1st			148	148		160	
Detroit Trust	417	1,000,000		14%	J-A-J-O 1st						245	
Security Trust	338	500,000		12%	J-A-J-O 1st						280	
Union Trust	190	1,000,000		8%	J-A-J-O 1st			197	195	195	175	190
Commonwealth-Federal	124	750,000	10,328,127					130			105	112
Bank of Detroit	160	1,000,000	18,466,135	10%	J-A-J-A 1st					200	192	200
Michigan State	110	250,000	2,190,588	6%							120	125
American State, Dearborn	123	100,000	321,163	6%	Jan-Jul							
American State, Highland Park	132	200,000	2,088,452	8%	J-A-J-O 1st	122	122	122	122	118	122	
Peninsular State, Highland Park	220	100,000	1,264,556	12%	J-A-J-O 1st							
Rouge State Bank	118	50,000	352,845									
Industrial Morris Plan	119	500,000										

*Under one ownership—stock combined

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Columbia Motors	5¾	5¾	14	4	5
Hoover Steel Ball	13	24¼	18	14½	
Great Lakes Eng.		¤184	183	110	
Liberty Motor (new)	4¾	5¾	130	65	50
Liberty Motor (old)	47	58			
Noble Coil, com.	70	72	1.20	58	70
Invader Oil	1.45	1.55	1.88	1.78	1.50
Mich. Cop. & Brass	15¾		26	19¾	16
Un. Mtg. 100% com.	16½				
Un. Mtg. 90% com.	110¾				
Federal Discount	8	9¾			
Det. Mort., com.	12½	3¾			
Det. Mort., pfd.	15¾	5¾	6¼	5½	6¼
Det. Cop. & Brass	18	25			
Wilson Truck	15¾	6½			
McCord Mfg. com.	11	12			
McCord Mfg., pfd.	70	80			
Duplex Truck	15	8			

* Old basis. †Nominal

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Briscoe Motor	12	15
Chalmers Motor	1	2
Curtis Aeroplane	7	10
Goodrich, com.	40¼	40¾
Harroun	1	3
Lee Tire	20	20¼
Nash	300	325
Pierce	24	24¾
Republic Truck	19¼	20¼
Saxon	4¼	4¾
Stromberg Carb.	28	33½
White Motors	38	39

Grand Rapids Stocks

The closing quotations on Public Utilities on Tuesday, January 18, 1921, are reported by the Corrigan Company as follows:

Cities Service, com.	239	241
Cities Service, preferred	64¾	65¼
Cities Service, Bankers	29¼	29¾
Cities Service, Debenture B	126	126
Cities Service, Debenture C	89¾	91
Cities Service, Debenture D	84	86
Commonwealth Power & Licht, com.	12	13
Do preferred	33	36
American Public Utilities, com.	3	12
Do preferred	19	35
United Light & Railways, com.	20	20
Do preferred	56	80
American Light & Traction, com.	78	80
Do preferred	74	77

$10,000 ADDED TO CAPITAL

The Kent City State Bank, Kent City, has increased its capitalization from $20,000 to $30,000.

CLARK HEADS FIRST NATIONAL CO.

Emory W. Clark, president of the First & Old Detroit National Bank, was elected president of the First National Company, dealer in bonds and investments, at the annual meeting of the company. Mr. Clark succeeds Leo M. Butzel, who resigned to devote all his time to his law practice. D. Dwight Douglas, secretary of the company, was added to the board, other members of which are Henry E. Bodman, Leo M. Butzel, Roy D. Chapin, Emory W. Clark, S. T. Cropo, Samuel T. Douglas, C. G. Edgar, Dexter M. Ferry, Jr., Harry J. Fox, Ben Jamin Gottfriedson, Lewis H. Jones, Gilbert W. Lee, Gordon M. McGregor, W. C. Rands, J. H. Simpson and E. D. Stair. Net earnings before taxes for the year 1920 were more than $175,000. The First National Company, First and Old Detroit National Bank and Central Savings Bank are under one ownership.

PORT HURON PERSONNEL CHANGES

E. J. Ottaway is the new vice-president of the United States Savings Bank of Port Huron, and L. W. Miller, who has been with the bank a long time as assistant cashier, has been elected cashier. The cashiership has heretofore been held by President Cecil Peck. The United States had a healthy growth during 1920.

MUNISING CAPITAL INCREASE

The First National Bank of Alger County at Munising, has voted to increase the capital stock from $60,000 to $100,000, and offered the sale of the increased stock at $150 a share. It was also voted to transfer $20,000 from undivided profits to surplus and thus create a combined capital and surplus of $200,000.

NEW BANK AT JEDDO

Harry Tappan, Port Huron, and William J. Lamb and William C. Ernest, Jeddo, are the principal incorporators of the Jeddo State Bank, Jeddo. The capital is $20,000. The institution will conduct a commercial and savings business.

Webb, Lee & Co., will buy, sell or quote—Mich. Mortgage & Investment, Bankers Land, Federal Discount, Michigan Finance, Union Mortgage, Detroit Mortgage, Little Wonder Stove, Koupin Realty, Kelvinator Corporation, Palace Theatre, Columbia Theatre, De Luxe Theatre, J. C. Wilson Truck

Detroit Bank Clearings

Week of Jan. 19, 1921	$101,985,892.70
Week of Jan. 12, 1921	90,172,447.14
Week of Jan. 5, 1921	$107,862,926.35
Week of Dec. 28, 1920	$ 77,828,441.87
Week of Dec. 21, 1920	$108,526,806.09
Week of Dec. 15, 1920	$107,814,129.32
Week of Dec. 8, 1920	$109,922,508.00
Week of Dec. 1, 1920	$ 91,142,143.36
Week of Jan. 12, 1920	$121,340,087.23
Week of Jan. 12, 1920	129,447,009.21

AMERICAN STATE NAMES BARLUM

John J. Barlum, well-known Detroiter, has been elected a vice-president of the American State Bank of Detroit. He is president of the Postal Steamship Company, president of the Postal Hotel Company, which operates the Hotel Griswold, and is interested in the Barlum Realty Company and Thomas Barlum & Sons, wholesale and retail meat dealers.

A CORRECTION

In our issue of January 1 it was stated erroneously that the quarterly preferred stock dividend declared by the Jewett, Bigelow & Brooks Coal Company was 1¾ per cent. It should have read 2 per cent.

Active Bonds and Notes

Security—Maturity	Bid	Ask
Am. T. & T. 6s, Oct. 1, 1923	96¾	97
Anaconda 6s, Jan. 1, 1929	86	87
Anglo-Am. Oil 7½s, Apr. 1, 1925	100¾	100¾
Balt. & Ohio 6s, July, 1920	92½	93
Bel. Govt. S. F. 7½s, June 1, 1945	96¾	97¾
Beth. Steel 7s, July 15, 1923	97¾	98½
Brit. Govt. 5½s, 1937	96¾	97
British 5½s, Oct. 1, 1922	95¾	95¾
Canadian 6s, Apr. 1, 1926	90	91¾
C. C. C. & St. L. 6s, July 1, 1923	90½	91¾
Hock. Valley 5s, Mar. 1, 1934	92	93
Ill. Cent. 4s, Jan. 1, 1934	59¾	60
Jap. Govt. 4s, Jan. 1, 1931	59½	59¾
Jap. Govt. 1st 4½s, Feb. 15, 1925	78¾	78¾
N. Y. Central 7s, Sept. 1, 1930	102¼	102
Norway 8s, 1940	99¾	100¾
Penna. Ry. 7s, Apr. 1, 1920	104	104½
St. Paul 4½s, Jan. 1, 2014	64	65
Sidvay 8s, 1927	101¾	102
Swedish Govt. 6s, June 15, 1939	82¾	83½
Swiss Govt. 8s, July 1, 1940	102	102¾
U. S. Rubber 7½s, Aug. 1, 1920	100¾	100¾
Virginian Ry. 5s, May 1, 1962	82½	85
Western Elec. 7s, Apr. 1, 1925	99¾	100¼

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT

Cleveland, New York, Cincinnati, Boston,
Columbus, Toledo, Denver, Youngs-
town, Akron, Colorado Springs

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer
any bonds purchased and pay ½% fee, mak-
ing them
FREE OF ALL STATE TAXES.

The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY
SERVICE
SAFETY
You will find the personal, friendly
service of our bank of great assistance
in helping you to meet the unusual
financial demands incident to the pres-
ent war conditions. We should like to
co-operate with you.
The Grand Rapids
National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

MATTHEW FINN
High Grade Municipal
and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Jan. 14, 1921	January 7, 1921	Jan. 16, 1920
Total gold reserves	$2,085,454,000	$2,080,282,000	$2,042,878,000
Legal tender notes, silver, etc.	203,054,000	196,566,000	60,403,000
Total reserves	2,288,558,000	2,276,848,000	2,101,281,000
Bills discounted—Secd by Gov't war obligations	1,024,497,000	1,104,536,000	1,251,454,000
All other	1,424,923,000	1,502,818,000	748,611,000
Bills bought in open market	203,412,000	234,769,000	575,675,000
Total bills on hand	2,652,953,000	2,842,108,000	2,675,740,000
U. S. Government bonds	25,888,000	26,102,000	27,626,000
U. S. Victory notes	19,000	19,000	64,000
U. S. Certificates of indebtedness	289,650,000	261,785,000	319,654,000
Total earning assets	2,968,844,000	3,130,014,000	3,022,524,000
Bank premises	17,955,000	17,889,000	10,461,000
Uncollected items, other deductions gr. deposits	706,765,000	744,111,000	1,116,852,000
5% Redemption fund against F. R. Bank notes	12,799,000	12,289,000	12,865,000
All other resources	6,112,000	4,998,000	5,463,000
Total resources	6,000,713,000	6,185,719,000	6,272,446,000
LIABILITIES			
Capital paid in	99,815,000	99,808,000	87,529,000
Surplus	202,036,000	202,036,000	120,120,000
Government deposits	9,570,000	24,592,000	34,699,000
Due to members—Reserve account	1,756,325,000	1,795,343,000	1,943,561,000
Deferred availability items	595,452,000	525,586,000	849,854,000
Other deposits, including foreign gov't credits	27,464,000	24,158,000	107,890,000
Total gross deposits	2,302,211,000	2,278,649,000	2,935,913,000
F. R. notes in actual circulation	3,159,491,000	3,270,023,000	2,949,879,000
F. R. Bank notes in circulation—net liability	231,177,000	313,352,000	258,457,000
All other liabilities	23,952,000	21,661,000	20,523,000
Total liabilities	6,000,713,000	6,185,719,000	6,272,446,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	48.1%	46.4%	45.1%
Ratio of gold reserves to F. R. notes in circulation (after setting aside 35% against net deposit liabilities	54.8%	52.1%	51.5%

DEBITS TO INDIVIDUAL ACCOUNT AT CLEARING HOUSE BANKS
SUMMARY BY FEDERAL RESERVE DISTRICTS

Federal Reserve District		Number of centers included	WEEK ENDING (In thousands of dollars) Jan. 12, 1921	Jan. 5, 1921	Jan. 14, 1920
No. 1	Boston	13	406,754	372,091	523,278
2	New York	7	4,625,813	5,494,590	5,495,521
3	Philadelphia	12	402,231	382,101	440,109
4	Cleveland	14	596,967	782,825	577,974
5	Richmond	6	164,726	203,713	183,299
6	Atlanta	15	214,318	252,272	201,669
7	Chicago	23	1,023,666	1,152,595	1,175,025
8	St. Louis	5	206,553	257,255	272,625
9	Minneapolis	12	154,589	170,229	189,522
10	Kansas City	15	244,615	246,357	282,258
11	Dallas	12	166,018	178,068	176,463
12	San Francisco	19	532,295	548,926	537,791
	Total	153	8,635,678	10,737,672	10,155,754

FLOWER VALVE COMING NICELY

At a meeting of creditors of the Flower Valve Manufacturing Company, Detroit, held recently, much confidence was expressed in the outlook for the future of the company. Orders have been coming in in fair volume and prospects of more busines in the near future are good. This concern has been in hands of Union Trust Company, Detroit, as receiver, and is being operated by a creditors' committee.

THEY TAKE AN INTEREST AT ALMA

Stockholders of the First State Bank of Alma surely take an interest in their bank. Eight hundred and nine shares out of 1,000 outstanding were personally represented at the annual meeting, January 11. Reports of the progress of the bank for 1920 showed 884 new depositors. Earnings were more than 8 per cent on stockholders' investments. Capital, surplus and undivided profits were $225,459.01 and total deposits $1,320,335.96. Total assets exceeded $1,500,000. Lester A. Sharp, Francis King, Chas. G. Rhodes, Chas. O. Ward, Carl H. Washburn, J. M. Montigel and E. C. Crandell were elected directors.

TWO LANSING BANKS MERGE

Directors of the Lansing State Savings Bank and the American Savings Bank this week authorized the merger of the two institutions, which will be known as the American State Savings Bank. This is the biggest piece of bank financing in the history of Lansing, and gives the new bank total resources of $7,600,000, deposits of $7,000,000 with 20,000 depositors, and a combined capital of $500,000.

J. Edward Roe, one of the organizers of the Lansing State Savings Bank, and its president, becomes president of the new American State Savings Bank. Charles E. Toms, cashier of the American State Savings Bank, becomes vice-president and cashier. Directors of both banks will be retained, the board to comprise 24 members.

The home of the institution will remain in the Lansing State Savings Bank building, where the American Savings Bank has been housed since the present fire which destroyed the American bank block. While the merger has not been ratified by the stockholders, it is known they are favorable.

The other officers of the new bank are: Vice-presidents, W. K. Prudden, Samuel H. Carpenter, M. R. Carrier, Clarence E. Bement, Donald E. Bates and L. C. Abbott.

FIRST NATIONAL OF GLADSTONE

In sending out its semi-annual dividends for the latter part of 1920, the First National Bank, Gladstone, made it known that the institution had passed the half-million mark and that during the year it increased its totals by more than $125,000 as compared with 1919. The institution will be five years old next August. Plans have been completed for new quarters, which will be erected this year.

Digitized by Google

Who's Who In Michigan Finance

Frank G. Smith, Vice-President First & Old Detroit National Bank

Frank G. Smith was born in Milwaukee, September 2, 1871, son of Hiram N. and Laura Poole Smith. He came to Detroit with his parents in September, 1875, when his father became associated with Leonard Laurence & Company, manufacturers of picture frames and mouldings. His father died in 1880 when Frank was nine years old.



FRANK G. SMITH

As a boy Mr. Smith attended the public schools but began early to learn something about business by carrying papers after school and by working in a printing office during vacations. On January 8, 1887, at the age of 16, he entered the First National Bank as a messenger and advanced successively through the positions of collector, collection clerk, assistant receiving teller, bookkeeper, receiving teller, corresponding clerk, discount clerk, assistant cashier, cashier and then vice-president.

In looking back over his early business training years Mr. Smith says: "Whatever I have or am I owe to a good mother and to the business training received at the hands of my old friends and associates, John T. Shaw and Emory Wendell, both of whom in their time were presidents of the bank. Michigan never knew any better nor more able bankers than they. In their school I served my apprenticeship and to it I owe whatever success I have attained as a banker more than to any particular talent of my own. Those principles of good business, which I learned as a boy from these two successful bankers, have always stood me in good stead throughout my life, and I hope it will be ever so."

Mr. Smith "hobbies" on his farm on the shore of Lake Huron, which he says is a real producing farm and not a place to "spend money." He belongs to the First Congregational Church of Detroit and the Bankers, Detroit, Detroit Athletic, Boat and Golf clubs.

B. OF C. DIRECTORS NOMINATED

Eight nominees for directors of the Detroit Board of Commerce have been named. Nomination is considered equivalent to election and the new directors will take office April 1. They are: Judson Bradway, Harvey C. Campbell, Harry M. Jewett, Samuel R. Kingston, J. K. Livingston, W. A. C. Miller, John A. Russell and C. B. Van Dusen.

NATIONAL C. OF C. MEETING

Representatives of the Detroit Board of Commerce who will attend the national council of the United States Chamber of Commerce, in Washington, January 27 and 28, are John W. Staley, president of the Peoples State Bank, and W. D. Biggers, general manager of the Continental Company. The housing problem and nominations for officers are among the subjects to be considered. The annual convention will be held April 27, 28 and 29 at Atlantic City.

ST. CHARLES

St. Charles State—Directors: A. T. Sanderson, Dr. W. H. McEwen, Frank Sanderson, Frank A. Bement, Fred M. Dodge (succeeding A. C. Love), John M. Mertz and William C. Mertz of Saginaw. A. T. Sanderson was re-elected president, Dr. McEwen vice-president, and F. D. Vedder, cashier.

Permanent, Dependable, Responsible

These qualities, plus our experience, make our specialized service of value in the successful handling of Trusteeships, Re-organizations, Receiverships and the Transfers and Registration of Stock.

Consultations, without obligation, invited.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

It is Logical—

Our bonds must be safe—for banks, trust companies, and estates purchase them—They are legal investments for all funds held in trust.

If they appeal to bankers—the most conservative class of business men—they should appeal to you as an investment which produces the maximum income without prejudice to safety.

6%

DETROIT MORTGAGE CORPORATION
Real Estate Exchange Bldg.
Third Floor

SAFE INVESTMENT BONDS
FOR SAVINGS
JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.
CHERRY 2600

A Bank with a Reputation, 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
45-47 Fort St. West, Penobscot Building. 14 Branches

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

FINANCIALLY, matters are gradually and surely righting themselves. After an almost continuous rise since a year ago, the note circulation of the Federal Reserve Banks has begun to decline, the reduction for the second week in January being $110,000,000. Since December 23, 1920, the total reduction has been $220,000,000. Another significant indication of returning normalcy is the further increase in ratio of gold reserves to deposit and note liability, the figure for January 14 being 45.1 per cent for all the Reserve Banks, an increase from 46.4 per cent the week of January 7. Loans by the Federal Reserve Bank to its members, including paper rediscounted for them, went down $150,000,000 during the week under review and purchased acceptances fell off $31,000,000. In the aggregate the Federal Reserve Banks exhibit a falling-off of earning assets of $161,000,000, which is the first time since January 9, 1920, that the total of such investments fell below $3,000,000,000. Since October 15, 1920, this total has declined $453,400,000. Along with these returns there was a reduction of about an even $100,000,000 in the deposits of the member banks (including all deferred and uncollected items).

These figures are most significant at this time and give us concrete evidence of the scaling-down process that business in general is undergoing throughout the country. The loan burden that the Reserve Banks have carried continuously, since the Government first began to lean on them in the financing of its huge borrowings coincident with the war program, is beginning to lighten, as these figures show. Note Circulation is still $265,000,000 more than that of January 16, 1920, but this is not surprising in view of the times, and a continued down-ward trend of note circulation figures should follow the contraction of the loans and deposits of member banks.

The weekly reports of debits of member banks in 153 leading cities of the country reflects not only the contraction of business everywhere evident now but also shows the slowing-down of business following the holiday rush. Average debits per day for the week ended January 12 were $2,439,000, as compared with $2,148,000 per day average for the previous five-day week. A year ago the similar figure was $1,523,000. The complete comparative balance sheets of the combined Federal Reserve Banks and a tabulation of the debits as furnished by the Federal Reserve Board at Washington is given on a following page and we would encourage all students of the business situation who have not already made it a habit to examine these figures weekly, to do so at once.

Liberty bonds at the close Tuesday were still climbing, and all issues except the first 3½s scored gains over a week previous. In fact the gains of the taxable issues again reflect the buying which small investors are supposed to be making of funds heretofore invested in stocks. Foreign exchanges again advanced during the week. Sterling was $3.6275 January 5 and $3.7675 January 18. German marks rose to $1.71 per hundred on Tuesday notwithstanding further increases in currency issue by the Reichsbank and an almost stationery gold reserve.

Those old reliable barometers, bank clearings and commercial failures, are serving us well these days. As regards clearings it must be borne in mind that rising prices during the first half of the year may have given an exhibit of increasing totals while the number of transactions settled thereby was declining. Thus the activity of business, judged by the number of accounts settled, may have begun to decline before the volume of clearings gave evidence of it. The compilation of the Financial Chronicle tells the story adequately and is reprimed here:

CLEARING HOUSE RETURNS

The following table indicates that the total bank clearings of all the clearing houses of the United States for the week ended January 15 have been $7,916,562,332, against $9,467,239,469 the week previous, and $9,838,469,942 the corresponding week last year.

Clearings—Week Ending January 15.	1921	1920	Per Cent
New York	$3,559,386,642	$4,550,546,618	—21.8
Chicago	486,792,385	606,663,182	—19.5
Philadelphia	361,712,801	445,221,617	—18.8
Boston	285,063,247	378,983,021	—22.7
Kansas City	156,606,883	225,229,880	—30.7
St. Louis	128,154,749	167,572,439	—17.6
San Francisco	125,800,000	148,889,161	—15.5
Pittsburgh	121,545,333	133,018,806	—1.4
Detroit	74,491,401	101,759,811	—26.8
Baltimore	72,691,809	81,168,666	—10.4
New Orleans	51,987,860	92,996,090	—44.7
Eleven cities, five days	$5,400,066,111	$6,921,149,316	—21.1
Other cities, five days	1,192,479,928	1,310,371,218	—9.0
Total all cities five days	$6,592,546,039	$8,241,820,564	—20.0
All cities, one day	1,324,016,294	1,596,649,378	—17.1
Total all cities for week	$7,916,562,332	$9,838,469,942	—19.5

There is another factor which we should take into consideration before long. With the country bank loaned up tighter than a drum, how is the farmer going to get funds with which to buy seed, along about March and April? As it appears now, he will have but one alternative, and that will be to sell some of the hoarded grain. Small wonder that the cunning foreign wheat purchasers are unwilling to bid more than about $1.75 for May delivery. Just as likely as not when seeding time comes around one farmer another finds that selling crops is the only way to raise money, there will be a grand rush to beat the neighbors before the avalanche spoils the price. Reports have come in during the last week that here and there a few farmers are selling, and it is to be hoped, not for the city man's benefit, but particularly for the crop hoarder, that a few more sellers will grow steadily the few remaining months of the winter while present prices are offered. For if our farmer friends are holding a savage fist up to the buying world now, what will be their feeling next April, when after waiting all winter, they find prices further diminished?

Money in New York was loaned freely at 6 and 6¼ per cent during the week, with plenty in supply, but this affair is still a long way from affecting Detroit and Michigan. The Chicago Federal Reserve Bank is still quoting 7 per cent on commercial and industrial paper, and mercantile paper running 60 and 90 days still brings around 8 per cent to the discounter. However, there is a sign of weakening at the base of the market. New York, and should the rest of the world by any hook or crook begin to pay up some of the $4,600,000,000 frozen credits tied up in export business, or begin to liquidate either the principal or interest on the $10,000,000,000 war loans, such actions ought to ease the money situation in Michigan and the rest of the interior within a reasonably short time. At any rate, the "hitting-on-eggs" feeling so often noted during November and December has nearly passed.

Current Investment Offerings

CORRIGAN COMPANY, GRAND RAPIDS

	Rate	Maturity	Price	Yield
G. T. Ry. Equipment	6%			7%
United Gas Improvement (2-yr. notes)	8			
Southwestern P. & L. (20-yr. notes)	8			
Steel & Tube (S. F. gold notes, Series A)	7			
Northwestern Bell Phone (20-yr. bonds, Series A)	7			

A. B. LEACH & CO., FORD BLDG., DETROIT

Brooklyn Edison Co. Gen.	7	12-1-40	97¾	7.25
Columbia Gas & Electric	5	1-1-27	85	8.70
Middle West Utilities Co.	8	12-1-40	95.25	8.50
Sioux City, Ia., School	5	1-1-41		5.70
Portsmouth, Virginia	5½	1-1-51		5.80
Chelan County, Wash.	6	12-1-26		5.60
		10 12-1-40		to 6.00

MERRILL, LYNCH & CO., PENOBSCOT BLDG., DETROIT

Soicer Mfg. Co.	6	'21-'24		8½
Truscon Steel Pfd. Stk.	7	....	$ 10	7
*Warine Hat Pfd. Stk.			100	8

BOLGER, MOSSER & WILLAMAN, DETROIT

Gerrish, Twp., Roscommon Co., Mich. Highway Imp.	5	9-15-29		6.25
Houston Co., Tex., Road District 15	5½	'28-'31		6.60
Rock Island, Ill., School District	6	1-1-26		6
Okeechobee, Fla., Road and Bridge	6	'29-'44		6.10
New Morrison Hotel, Chicago, First & Refunding Mortgage	6	'26-'30		7
Wisconsin Chair Co., secured gold notes	7	'22-'24		8

AMERICAN LOAN & TRUST CO., DETROIT

The Bemb-Robinson Co.	6	'26-'27		6
Clayton & Lambert Mfg. Co.	6	'24-'30		7
Adolph Meyers	6	'26-'29		6

PAYNE, WEBBER & CO., PENOBSCOT BLDG., DETROIT

Cedar Rapids Mfg. & Pr. Co. 1st mort. bonds	5	1-1-'53	79	6.62
Montreal Light, Heat & Pr. Co. 1st mort. bonds	5	4-1-'33	82½	7.20
City of Bergen, Norway, external bonds	8	11-1-'45	Mkt.	8.30
Commonwealth Edison Co. 1st mort. bonds	5	6-1-'43	Mkt.	6.40
Kansas City Pr. & Lt. Co., 1st & ref. bonds	8	12-1-'40	100	8.00
Chilean Govt., Sterling Loan of 1911	5	$510 per £200 ($972)		

FENTON, DAVIS & BOYLE, CONGRESS BLDG., DETROIT

Muskegon, Mich., School	5½	'23	....	5.40
Province of Ontario	6	'27		7
Govt. of Newfoundland	6½	'28		7½
Empire Dist. Elec. Co., 1st lien and gen. mtge.	8	'49		8.15

HALSEY, STUART & CO., FORD BLDG., DETROIT

Sears, Roebuck and Co., Serial Gold Notes	7	10-15, 21-23	....	Mkt
Southwestern Power & Light Co., secured notes	8	8-1, '25		8.50
S. S. Kresge, Serial Gold Notes	7	1-1, '22-25		8
Swift & Co., Gold Notes	7	10-15, '25		Mkt
The Rudolph Wurlitzer Co., debentures	6	8-1, '23-29	....	8
Utah-Idaho Sugar Co., 1st mortgage	7	7-1, '22-30	....	7.75

*Including 30% bonus of common.

ALVARADO MINING SURPLUS

The surplus, after dividends, of the Alvarado Mining & Milling Company, for the year ended December 31, 1920, is $203,200.

Digitized by Google

Who's Who In Michigan Finance

William J. Schechter, Cashier, Continental Bank, Detroit

William Joseph Schechter is a Detroit product. He was born February 10, 1876, on Sherman street, son of Karl and Christina Schechter. His father was a brewer and a man highly respected on the East side of Detroit for his staunch character and genial personality. William went to St. Mary's school at the corner of Monroe and St. Antoine streets and then attended the University of Detroit. In 1891 he worked for Richmond & Backus in their shop on Jefferson avenue, repairing typewriters, from which job he went to Port Huron to become shipping clerk for the Michigan Sulphite & Fibre Company. After giving up this work he attended the Detroit Business College.



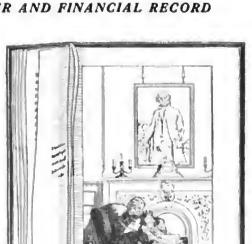
WILLIAM J. SCHECHTER

While working in Port Huron he became acquainted with the banking firm of Noble & Wagner, and in 1894 he opened the private bank of Noble & Wagner at Port Hope, which he conducted until 1897, when he came back to Detroit and began work in the Peninsular State Bank. He worked his way through various clerical positions up to the position of savings teller, which he gave up in 1911 to become a state bank examiner under former Commissioner E. J. Doyle. On November 1, 1915, he was appointed a national bank examiner and on January 1, 1920, was elevated to the position of chief national bank examiner of the Cleveland Federal Reserve District.

It is a noteworthy achievement of Mr. Schechter's career that during his supervision of the Cleveland district his force examined all the banks twice during 1920, a record that had not theretofore been made by the men in charge of that district. Schechter knows banks from deposits to dividends and he brings to the new Continental Bank 26 years of valuable experience.

Cleveland Stock Exchange

	Last Sale
American Multigraph	19
American Ship	75
Dow Chemical	200
Firestone Tire & Rubber	90
Do 6% preferred	80
Do 7% preferred	75
Fisher Ohio Body	19
Do preferred	63
Goodrich Tire, common	39¼
Do preferred	71⅜
Goodyear Tire & Rubber	24
Do preferred	68
Grant Motors	3⅜
Grasselli Chemical	125
Interlake Steamship	215
Jordan Motors	90
Miller Rubber	80
Murray Ohio	9
National Acme	25
Paragon Refining	25
Peerless	25½
Portage Rubber	22½
Do preferred	43
Products & Refining Corp.	6¼
Do preferred	7⅛
Standard Parts	7⅛
Do preferred	20
Stearns Motor	20⅜
Torbensen Axle	72
Victor Rubber	14
White Motors	36
Youngstown Sheet & Tube, pfd	71½



Your Children's Future

A Living Trust enables you to provide definitely and adequately for the preparation of your children for their life's work. Your interest in your business—great though it is—does not equal the interest you have in their proper education and training.

Our Book, "Living Trusts", Tells About It

This beautifully illustrated book is interesting reading for anyone—it is doubly so for the man with children. Here is a typical true story from its pages:

"A man died, leaving a widow and several children. The property left was enough to give them every comfort. One of the children, however, was a spendthrift son. He was unmanageable and was constantly getting his mother into trouble. She feared greatly for herself and the children, should anything happen to lessen her strength or ability. She came with her troubles and together we worked out the details of a living trust which provided a good income for the mother and children. It even assured the education and training of the children and the safety of the property in case of her death. Not long after she became entirely incompetent mentally. The trusteeship which she had established now carried forward her plans as she had wished them carried out."

Then, too, Living Trusts solve many other personal and family problems. Let us send you a copy of this book without cost or obligation. Write or phone for it.

First Trust Company in Detroit

Union Trust Company

Griswold and Congress

Digitized by Google

Banks and Bankers

FLINT GAINS FINANCIALLY IN 1920

The five banks at Flint showed a gain in clearings for 1920 over 1919 of $15,000,000, despite the falling-off in business since September. Comparative figures follow:

1920.	$130,811,577.
1919.	$116,040,206.
1918.	$ 75,528,093.
1917.	$ 86,256,864.

The Industrial Savings Bank is increasing its capital to $1,000,000, has made extensive changes in its main offices in the Flint P. Smith building and has increased the number of its branches to six by addition of offices in Murray Hill and on Leith street. The Genesee County Savings Bank has completed its new home, which has been in prospect for a long time, the 11-story fireproof office building being one of the finest structures in the city. The First National Bank has taken over the quarters formerly occupied by the Genesee County. The offices will be refinished and rearranged to take care of the growing business of the First National. The Union Trust & Savings Bank has added valuable space to its quarters by moving its abstract department to new, attractive rooms on the second floor of the building, and also has made extensive improvements in its main offices. The Citizens' Commercial & Savings Bank increased its capital during the year from $150,000 to $450,000.

PONTIAC BECOMES A RESERVE CITY

Pontiac banks now have total resources in the neighborhood of $20,000,000 and the importance of the city as a banking center is such that Commissioner Merrick has acquiesced in the request of the Pontiac bankers to designate the banks of their city as "reserve banks." This means that Michigan state banks now members of the Federal Reserve System and who may desire to keep their reserve with the Pontiac banks may now do so. Application for this designation was made about a month ago by Cranor Smith, president of the Pontiac Commercial & Savings Bank, on behalf of all the local institutions.

FIRST NATIONAL OF MARQUETTE

The First National Bank of Marquette makes a statement of condition as of December 29 showing deposits of $3,534,688, and capital, surplus and undivided profits of $349,423.62. This represents a gain of about $100,000 in deposits over a year ago and $41,000 in the capital and profits item.

EMPLOYES BANQUETED

The Wayne County & Home Savings Bank, Detroit, gave a dinner to 24 branch managers and nine officers, January 12, in the bank dining rooms, which had for its object the promotion of the thrift week program. Director Fred Guenther gave the boys an enthusiastic talk on "Courtesy and Good Will."

STATE BANK OF MERRILL

Cashier John Dufty, of the State Bank of Merrill, has favored us with a statement of his institution as of January 8, 1921, showing total assets of $674,790.16. Deposits are $614,163, or more than $50,000 gain over this time a year ago. A praiseworthy feature of his statement is the lack of borrowed money obligations.

FARMERS "STANDING PAT"

D. B. Lyon, cashier of the First State and Savings Bank, Holly, was a Detroit visitor Friday of last week. He reports that there is some disposition on the part of farmers to sell crops but that the great majority are still on strike.

BANKERS' CLUB ELECTION

At the banquet of the Bankers' Club of Detroit, held January 14 at the Hotel Statler, the following were elected to official positions for the ensuing year: President John Ballantyne; vice-president, George H. Kirchner; secretary-treasurer, Charles H. Ayers (re-elected). The meeting was attended by 249 members from Detroit and up-state. Thirty-four new members were admitted. The speaker of the evening was Dr. Marlon L. Burton, president of the University of Michigan, who gave a forceful and absorbing address on the subject of what constitutes a "live man." James T. Keens occupied the toastmaster's chair.

NEW SAFE DEPOSIT VAULT

The Detroit Trust Company is cutting a stairway down from the main office to the basement to provide an entrance to its new safe deposit vault, now under construction. There will be about 1,200 safety deposit boxes, the majority of which will be the larger sizes to care for silverware and other bulky valuables. Plans call for completion about the middle of March or the first of April.

KALAMAZOO BANKS HAVE GOOD YEAR

Figures available from Kalamazoo's four banks as of the close of business December 28 and 29 show that deposits during 1920 gained about $4,500,000. This is believed to be due to the thrift work done by the financial institutions of the city. Bank officials are optimistic regarding the future of Kalamazoo and report that the depression has not as yet been reflected in savings deposits.

TO BUILD IN ROYAL OAK

The property at the southwest corner of Fourth and Main streets, Royal Oak, has been purchased by the Royal Oak Savings Bank from Joseph Braun, of the Braun Lumber Co., Detroit. The lot, which has a frontage of 60 feet on Main street and of 110 feet on Fourth street, was bought so that the bank might have a suitable site for the erection of its own home at a future date. This is the bank that Geo. A. Lehman, formerly of Saline, recently took charge of as vice-president and cashier.

AMERICAN STATE BANK OF DEARBORN

The American State Bank of Dearborn, which started in business about January 1, 1920, has been put on a basis of 6 per cent per year, the first semi-annual dividend of 3 per cent having just been declared. This institution has footings now of more than $500,000. The stockholders and directors feel elated over the success of the institution, which is remarkable considering the fact that it has been in operation only a little more than a year.

READ COMPANY NAME CHANGED

The firm of Wm. A. Read & Company, Detroit, has been changed to Dillon, Read & Company. All of the former partners continue in the new firm, with W. M. L. Fiske, E. J. Bermingham and William A. Read, Jr., added.

NEW IRVING DIRECTOR

At the annual meeting of the stockholders of the Irving National Bank of New York, January 11, James Clarke retired as a director and Hubert T. Parson, president of the F. W. Woolworth Company, was added to the board.

CONTINENTAL BANK BOARD

The following have been elected directors of the new Continental Bank, Detroit, which opens today, Saturday, January 22: John G. Barbas, Charles H. Bryan, Charles A. Burr, Charles W. Burton, William G. Burton, Horace J. Caulkins, Arthur Colton, Louis A. DeHayes, Thomas F. Farrell, Albert Fisher, Alfred T. Gibson, Vincenzo Giuliano, Thomas Glynn, Henry J. Guthand Max Jacob, Henry Komrofsky, Clarence H. Ladd, Anthony Maiullo, James D. May, Otto Misch, Louis A. Peters, Carl Reese, Julius Porath, William J. Schechter, Arthur E. Schreiter, Alvin G. Sheehan, Alexander J. Stuart, Walter G. Toepel, Edward C. Van Leyen.

Michigan Bond Items

Hilliker, Perkins, Everett & Geistert, Grand Rapids, are offering an issue of $250,000 of 8 per cent serial bonds, of the Grand Rapids Brass Company, due serially in installments of $12,500 during the next ten years, beginning July next. The loan is to finance expansions made in the business and for increased working capital.

John C. Thompson, New York bond expert, has placed his approval upon the issue recently voted by Wayne county for the erection of bridges over the River Rouge at West Jefferson avenue and Fort street west.

A New York syndicate consisting of Kuhn, Loeb & Company, Kidder-Peabody Company and the Hilgarten Company has taken up the $10,126,000 public utility bond issue of Detroit at a premium of $153,442.20.

Wayne County's $400,000 bond issue for the insane hospital to be built at Eloise will be taken up by the Detroit Sinking Fund Commission. The hospital will have accommodations for 300 patients and is to be ready August 1.

Mount Clemens has voted to bond for $40,000 to provide for water main extensions and equipment.

Public Utilities

Birmingham—The village commission has decided to begin at once connecting the 12-inch well sunk several weeks ago and to sink another 12-inch well, which will make three wells for the town and add at least 400,000 gallons of water daily to the supply of 275,000 gallons obtained last summer. From the tests made by experts, it is said that Birmingham need not go outside its own territory for all the water needed.

Gaylord—A proposition has been submitted to the municipality by the Cheboygan Electric Light & Power Company, offering $10,000 for the local electric light and power plant and allowing the town to retain title to the land, wells, reservoirs and pipe lines. It is also provided that the town is to contract with the Cheboygan company for not less than 30 street lamps at $110 a lamp a year and for not less than 37 fire hydrants at $20 a year. The company is to have a 30-year franchise. The matter will be submitted to the voters.

Hillsdale—New gas rates for Hillsdale have been fixed by the Michigan Public Utilities Commission. The minimum rate is $1 instead of 75 cents. It the meter is not used at all during the month, the charge will be $1 and for that charge up to 400 feet of gas may be used, as compared to the maximum of 300 feet formerly. For more than 400 feet of gas the consumer will pay 21 cents per 100 feet up to 10,000 feet, less 1 cent per 100 feet if paid before the tenth of the month. For more than 10,000 feet the price will be 18½ cents.

Lansing—Judge Charles B. Collingwood has issued a restraining order in the case of the Michigan Public Utilities Commission and the Valley Home Telephone Company against William J. Moore, owner of the Moore telephone system, which companies operate in the Thumb district. The order restrains the Moore company from further violations of the rate regulations, fixed July 30, 1920, by the Commission and orders the company to send bills to its patrons, whom, it was claimed, were given contracts for future 'phone service at lower rates than set by the Commission. The action was started by the Valley Home Telephone Company.

Digitized by Google

General Financial News

PANTLIND HAD GOOD YEAR

The Pantlind Company, Grand Rapids, after paying interest on its bonds, will have funds available for its first dividends. The stock is 6 per cent cumulative, $450,000 outstanding, and the dividend will be sufficient to pay the 1920 apportionment. This concern was organized to promote the erection of the hotel. The Pantlind Hotel Company, as the operating company is known, besides paying 6 per cent on preferred stock, disbursed 24 per cent on its common stock last year. The large dividend disbursement has been in part to even up the three lean years when the stockholders received only nominal returns.

REAL ESTATE TAX PROGRAM

The Michigan Real Estate Association, an organization composed of the local real estate men's associations throughout the state, has appointed Lester C. Batdorff, Battle Creek, its executive secretary, with offices in Lansing and Detroit. Mr. Batdorff also will act as field agent for the Detroit Real Estate Board. One of the purposes of his appointment is to organize a campaign to do away with some of the inequalities in the state taxation program, under which, the real estate men allege, real property is compelled to carry 80 per cent of the tax load.

MUNSHAW HEADS INVESTMENT CO.

Officers were elected by the Michigan Investment Mortgage Corporation, Lansing, last week as follows: President, Glen R. Munshaw; first vice-president, Frank S. Coleman, Grand Rapids; second vice-president, Bert J. Baker, Lansing; third vice-president, William R. Burns, Detroit; secretary-treasurer, William R. Town; assistant, V. J. Padgett.

BOND COMPANY ELECTS OFFICERS

The First Bond and Mortgage Company, Lansing, has elected the following officers: President, James I. VanKeuren; chairman of the board, R. E. Olds; first vice-president, Frank A. Stoltz; second vice-president, Smith G. Young; third vice-president, Harry Olstead; treasurer, Carl H. Moelter, and assistant treasurer, William A. Ring. The latter has been cashier.

LIBERTY NATIONAL ELECTION

At a meeting of the directors of the Liberty National Bank, New York, last week, the following officers were elected to serve one year: President, Harvey D. Gibson; vice-presidents, Daniel G. Reid, Alexander V. Ostrom, Charles W. Riecks, Ernest Stauffen, Jr., Joseph A. Bower, James G. Blaine, Jr., Joseph S. Maxwell, George Murnane, Sidney W. Noyes, Maurice F. Bayard.

Frederick W. Walz was appointed cashier; Bert Clark, assistant to the president; Frederick F. McGlynn, Theodore C. Hovey, Louis W. Knowles, Raymond G. Forbes, Danforth Cardozo and Edward J. Whalen, assistant cashiers, and Donald D. Davis, trust officer.

COMMERCIAL FINANCE CORP.

The Commercial Finance Corporation, Grand Rapids, has elected as directors Seymour J. Barkwell, Homer H. Freeland, Anthony J. Pauels, R. H. Schantz, Hugo C. W. Friedrich, George W. Wallace, Martin Charles Huggett, Charles C. Ashton, Bartel A. Beneker, Henry M. H. Friedrich, William E. Slater, John B. Nykerk, James G. Pierce and Oscar W. Braman.

MUSKEGON DEPOSITS GROW

During the last six months of 1920 total deposits of the Muskegon banks increased $10,655.89 in spite of the business depression. Total resources increased $779,037.74. The loan item increased $785,926.77. This is a good showing.

Guaranty Trust Company of New York

NEW YORK LONDON PARIS BRUSSELS
LIVERPOOL HAVRE CONSTANTINOPLE

Condensed Statement, December 31, 1920

RESOURCES

Cash on Hand, in Federal Reserve Bank and Due from Banks and Bankers	$217,780,215.72
U. S. Government Bonds and Certificates	36,909,728.37
Public Securities	44,227,524.52
Other Securities	37,275,670.61
Loans and Bills Purchased	501,582,486.50
Real Estate Bonds and Mortgages	2,804,110.00
Foreign Exchange	5,244,047.77
Credits Granted on Acceptances	57,901,984.08
Real Estate	8,435,705.67
Accrued Interest and Accounts Receivable	11,501,864.88
	$923,633,338.12

LIABILITIES

Capital	$25,000,000.00
Surplus Fund	25,000,000.00
Undivided Profits	12,075,072.37
	$62,075,072.37
Outstanding Dividend Checks	966,400.50
Accrued Interest Payable and Reserves for Taxes and Expenses, and Other Liabilities	20,379,570.92
Notes, Bills, and Acceptances Rediscounted with Federal Reserve Bank	74,328,844.23
Notes Secured by Liberty Bonds Rediscounted with Ferderal Reserve Bank	19,435,800.00
Acceptances—New York Office	44,867,543.08
Foreign Offices	13,034,441.00
Outstanding Treasurer's Checks	51,221,978.47
Deposits	637,353,687.55
	$923,663,338.12

UNDIVIDED PROFITS ACCOUNT

CREDITS

Credit Balance January 1, 1920		$ 6,239,889.57
Miscellaneous Credits During Year		155,624.66
Profits for Year, after deducting all expenses and taxes, including high cost of living allowance to employees, the charge-offs in connection with Real Estate and bad and doubtful debts, both domestic and foreign		12,355,950.50
Total Credits		18,751,464.73

DEDUCTIONS

Dividends Paid During Year at Rate of 20% per annum	$5,000,000.00	
Appropriated for distribution to officers and employees on Additional Compensation Plan	1,676,392.36	6,676,392.36
Credit Balance January 1, 1920		$6,239,889.57

Digitized by Google

DIME SAVINGS BANK
FORT AND GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Grand River & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison
Sherman & Chene
Dix & Artillery

Banks and Business Houses

seeking to establish their Detroit banking connections upon a basis that is broader in its scope than ordinary transactions require—which means a service that extends into the benefits of co-operation in special requirements—are invited to communicate with this institution which specializes in serving in the Michigan field.

Capital and Surplus $3,750,000.00

Michigan Finance Corporation
120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Texas Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Michigan Bank Elections

ALPENA

Alpena National—Directors: William H. Johnson, William T. Hoey, James H. Kerr, E. C. Spens, John A. McPhee, Nason Johnson, C. H. Osgood and Carl Alfsen.

ANN ARBOR

Ann Arbor Savings—Directors: M. J. Fritz, Carl F. Braun, Emory E. Leeland, William D. Harriman, Walter C. Mack and William L. Walz. Officers: Michael J. Fritz, president; Carl F. Braun, vice-president; W. D. Harriman, vice-president; William L. Walz, cashier; John C. Fritz, assistant cashier. Alfred F. Bush, assistant cashier. Hy. H. Hinsdale, assistant cashier. The vacancy in the chairmanship of the board caused by the death of Chas. E. Hiscock was not filled.

Farmers and Mechanics—Directors: H. J. Abbott, J. E. Beal, G. J. Burke, C. C. Freeman, James Foster, G. M. Martin, G. W. Millen, D. F. Schairer, R. F. Schumacher, S. W. Smith, Charles A. Sink, G. S. Vandawarker, W. W. Wadhams and H. A. Williams. Officers: H. A. Williams, president; J. E. Beal, vice-president; G. W. Millen, vice-president; F. T. Stowe, cashier; E. L. Jenkins, assistant cashier and G. J. Burke, counsel.

First National—Directors: Waldo M. Abbot, S. W. Clarkson, M. J. Fritz, Robert F. Gauss, Harry M. Hawley, E. D. Kinne, Walter C. Mack, George W. Patterson, D. B. Sutton, Erwin E. Schmid, Harrison Soule and Frank A. Stivers. Officers: E. D. Kinne, president; Harrison Soule, vice-president; Robert Gauss, cashier; Charles A. Gruner, assistant cashier; Harry M. Hawley, assistant cashier, and Irwin Stoll, auditor. Harry M. Hawley and Irwin Stoll, assistant cashier and auditor, are new additions to the roster of officers.

BENTON HARBOR

American National—H. S. Gray was re-elected president; W. F. Bowland, cashier, and George R. Bater, W. E. Sheffield, S. E. Doster and A. W. Flintrup, vice-presidents. Directors: Willard J. Banyon, Burr Bertram, J. S. Caldwell, J. N. Kirk, Wm. H. Andrews, J. J. Miller, H. S. Gray, W. F. Bowland, H. U. Rapp, S. E. Doster, A. W. Flintrup, James Jakway, Wm. Chapman, George R. Bater, Michael Daly, Max W. Stock, W. E. Sheffield and Wallace A. Preston.

Benton Harbor State—Officers: H. D. Poole, president; G. M. Valentine, vice-president; M. P. Resch, cashier, and K. E. Sutherland, assistant. Directors: F. G. Bradford, E. C. Bowlby, C. A. Conkey, I. W. Conkey, H. D. Poole, M. P. Resch, D. B. Sutherland, L. F. Sutherland, B. Wm. Wallace, M. B. Wells, G. M. Valentine, B. F. Wells and S. L. Wells.

Berrien County—Officers: John Robinson, chairman of the board; Frank H. Ellsworth, president; Arthur B. Higman and Chas. Young, vice-presidents; James M. Rose, cashier, and Paul Parrish, assistant cashier. Directors: John Robinson, Chas. L. Young, F. H. Ellsworth, Claude P. Sykes, Chas. Handley, W. Irwin Bryan, Jr., Arthur B. Higman, Jas. M. Rose and Albert H. Burger.

Farmers & Merchants National—Officers: O. B. Hipp, president; John R. Price, Milton Hinkley and George B. Thayer, vice-presidents; C. M. Niles, cashier; B. H. Bittner, assistant cashier; Olaf Brevig, second assistant cashier; W. H. Poundstone, trust officer and auditor. All directors re-elected.

BIRCH RUN

Birch Run State—Directors: Charles Wolohan, William B. McGregory, H. J. Frost, Miles L. Hadsell, Frank J. Newman and Ernest R. May. Mr. Wolohan was elected president, Mr. McGregory vice-president, Mr. Frost cashier, and Herbert S. Walter, assistant cashier.

BRIGHTON

Brighton State—Directors: F. T. Hyne, A. L. Smith, G. L. Pitkin, Jr., A. Nelson, F. M. Bergin, W. S. Perry, J. Gallagher. Officers: President, F. T. Hyne; vice-president A. L. Smith; cashier, R. I. Newcomb.

CALEDONIA

State Bank of Caledonia—Directors: Charles Rice, Henry Rice, Fred Ruehs, J. C. Proctor, John Murray and Freia S. Brown.

CALUMET

Calumet State—Directors: Thomas Heatson, Thomas Collins, Joseph Borsch, G. Martini, F. J. Kolhaas, W. J. Uren, O. W. Bruna and Edward Ulseth.

CARSON CITY

State Bank of Carson City—Officers: President, E. C. Cummings; vice-president, E. D. Lyon; cashier, Ira Cummings; assistant cashiers, B. E. Comers and F. C. Burchfield.

Farmers & Merchants State—Officers: President, E. R. Stebbins; vice-presidents, William E. Adams and M. H. Kipp; cashier, Paul V. Bretz.

Additional Bank Elections Will Be Published Next Week

Digitized by Google

Endorsed By the Home Folks

The CHARACTER as well as the reputation of a Life Insurance Company is a good deal like that of an individual. A reputation may be secured by promises, but CHARACTER is MAINTAINED only by RECORD of SERVICE.

The Detroit Life Insurance Company has endeavored ALWAYS to maintain its standing for SERVICE to the people. That such a standing is secure may be judged from the record of business done in the year just closed. The Detroit Life Insurance Company during 1920 broke all records of Michigan companies in the amount of life insurance sold in Michigan, the total amount being $7,581,442. This certainly is material evidence of the fact that the people of the State of Michigan appreciate SERVICE, and show that appreciation in a most substantial manner.

Another notable evidence of the progress made by the Detroit Life Insurance Company may be seen by an understanding of these two facts:

The average increase in the amount of paid for new insurance in 1920 of all American Companes was 24%.

The increase of the Detroit Life for the same period was 43%.

Pyramids of Progress

INSURANCE IN FORCE

December 31, 1911	$1,729,970.00
December 31, 1913	$4,051,150.00
December 31, 1915	$7,199,500.00
December 31, 1917	$11,750,811.00
December 31, 1920	$22,005,000.00

GROSS ASSETS

December 31, 1911	$234,443.20
December 31, 1913	$314,010.86
December 31, 1915	$484,718.74
December 31, 1917	$902,355.25
December 31, 1920	$1,789,561.39

JUST One Moment, Please!

The DETROIT LIFE is a Company of SERVICE, backed by the PEOPLE, endorsed by the BANKS, approved by the STATE, a HOME institution that offers the MAXIMUM of PROTECTION and SECURITY at the lowest rate consistent with CONSERVATIVE business practice. Maybe you haven't ENOUGH. For details call at the Home Office, Woodward and Forest Avenues, or ask any of our agents throughout the State.

Achievements During 1920

New Insurance Paid for in 1920 *(An increase over that of preceding year of 43%)*	$ 7,581,442
Net Gain Over New Insurance Paid for in 1919	2,276,442
Paid for Insurance in Force December 31, 1920 *(A net increase of 30%)*	22,005,000
New Business Written During the Year	9,439,706
Net Gain Over New Business Written in 1919	2,766,199

DETROIT LIFE INSURANCE COMPANY

"THE COMPANY OF SERVICE"

M. E. O'BRIEN, President JAMES D BATY, Secretary

Digitized by Google

INVEST IN 6% DETROIT REAL ESTATE BONDS
and
Help the Housing Situation

These Real Estate Mortgage Bonds are secured by FIRST MORTGAGE on DETROIT HOMES worth more than double the amount of the loan.

The mortgage describes the property and each bond of the series on which the loan is made. *This allows the Investor to select his security, make personal inspection* and *become thoroughly satisfied* before purchasing a bond.

Our Company—which is under the supervision of the State Banking Dept.—guarantees the title and interest coupons, attached to the bonds, and collects the bond, when due, free of charge.

For details call, phone or write.

AMERICAN LOAN AND TRUST COMPANY

Total Assets More Than Five and One-Half Million Dollars

Griswold and Larned Sts. Detroit, Mich.

"THE OLDEST REAL ESTATE FIRST MORTGAGE BOND HOUSE IN MICHIGAN"

Subscribe for the

MICHIGAN MANUFACTURER
and
FINANCIAL RECORD

The Recognized Authority on All Michigan Matters

Every Week for a Year for Five Dollars

Detroit to Europe Via the St. Lawrence by 1923

(*Continued from Page 8*)

selling at a dollar a dozen and American eggs at 60 cents. However, the condition in which American egg shipments arrived in England literally turned the British noses upward and stomachs downward. His nicely worked-out plan of exporting shell eggs in quantity deteriorated after he had learned the transportation hazards.

In this condition of mind he met Mr. Thomson, who broached the plan, whereat Mr. Hoban became an ardent proponent, his loyalty being based upon egg welfare lines. Later Mr. Hoban took a broader view of the project and became the American representative of the British interests.

"Whether the present interests do or do not put this project through, it certainly will be taken up by some other financial group, for the possibility of establishing such a route exists, and is important, for the reason that it can be accomplished in two years, whereas the consummation of the Great Lakes-St. Lawrence deep water project cannot be attained in much less than seven years, possibly not for 10 years. In the meantime here is potential business unsought," Mr. Hoban says. "The project we represent involves the expenditure of $21,000,000, which can be underwritten in Europe. I do not say it will be entirely unwritten there, for I assume that business diplomacy will dictate organization of an Anglo-American company, in which case some stock would be sold in this country.

"That such will be the case I cannot say definitely. Even the question of whether the car ferries will fly the British or American flag remains to be answered. That it is not a stock-jobbing venture, I most emphatically state."

The costs of this project are identified with ship building, railway construction, and car building. It is estimated that the trackage on Newfoundland will cost $22,400 a mile, or $3,680,000 for the 92 miles of road with a grade of 1.5 per cent.

Diesel engine-equipped ferries will cost, it is estimated, $350,000 each, or $2,100,000 for the six. Wharves, warehouses, freight and refrigerator cars, loading machinery and other facilities will run into the millions of dollars.

The St. Lawrence is said to parallel the Rhine situation. The Rhine washes German territory and has its mouth at Rotterdam, Holland. It has no canals. Germany has been shipping her products down the Rhine and reshipping for ocean crossing at Rotterdam. Incidentally, Germany, no larger in area than Texas, has undersold the world. The answer is cheap labor, a commercial adaptability that meets the requirements of many different peoples, and cheap transportation.

When a comparison of routes with special reference to distances is made between the proposed St. Lawrence-Newfoundland route and those making New York, Baltimore or Montreal the part of embarkation, the St. Lawrence route has the advantage by more than 400 miles and a great saving in handling charges and hazards.

For instance, the distance from Detroit to Newfoundland is 1,300 miles across Newfoundland, 92 miles, and to England and France, less than 2,000 miles; to Ireland, 1,640 miles; to Norway, 2,164 miles.

From Detroit to New York by rail it is 636 miles; New York to Liverpool, 3,490 miles, a total of 4,126 miles, or an excess of 495 miles over the distance from Detroit to Liverpool by the St. Lawrence route. Incidentally, Newfoundland is 700 miles nearer Rio Janeiro, which interests South American shippers.

The foregoing is the project as laid before Michigan manufacturers and exporters. Mr. Owens informs this paper that he has tentative promises of enough business to keep the proposed line in operation without seeking other patronage. This is not surprising, if one has had the pleasure of listening to the mournful recitals of transportation difficulties suffered by Michigan shippers as they were poured out to the International Joint High Commission at the Great Lakes-St. Lawrence waterway hearing, in Detroit, last fall.

Mr. Hoban expects equal interest on the part of Cleveland, Chicago and other lake city shippers, but says that ferries operating on this route will not pick up business enroute. Rather each lake port of sufficient importance will have its own ferries, thus making an ideal feeder system without the profitless delays incidental to tramp steamer method of operation

WILL BUILD KEROSENE ENGINE

A new type kerosene engine is to be made this year by the Reed Foundry & Machine Company, Kalamazoo. The engine is the invention of E. A. Field, Chicago, and the Kalamazoo company has made a deal whereby it has the sole manufacturing rights. The engine will be used in the Reed tractor, in addition to being marketed as a stationary engine.

Digitized by Google

Doing Away With the "Doodads"

(*Continued from Page 8*)

cause the manufacturer of wood frames, aluminum and steel panels, to continue for some time.

"The trimming design of both open and closed cars has remained the same for some time. The straight or French pleat continues to deserve favor. The use of robe-rails is usual, but the foot rest is used intermittently. Even the closed bodies have less ornamentation than formerly, and the omission of toilet and vanity cases and flower holders is common. One dome light and at times corner reading lamps constitute the sole appointments, except that the instrument board may include a clock in addition to the usual necessary equipment. Curtains are used for the rear and side windows only.

"Builders of expensive cars make their product to suit the special-to-order class. Those who produce cars in large numbers for this class of trade usually follow a design that is not extreme, one that relies for its attractiveness on the fine quality of workmanship and the high quality of the material used. The chauffeur-driven car is the rule. The limousine and two-compartment sedan will prevail, with the town limousine, the two brougham and the cabriolet as the types having the lighter bodies."

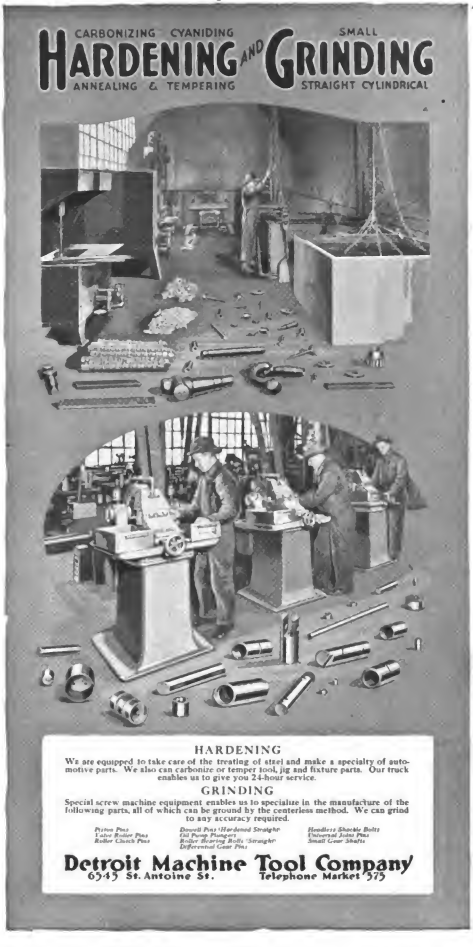
Mr. Mercer's remarks show the tendency to money-saving conservatism, and Mr. Cowle's opinion will carry weight for the reason that he belongs to a buyer class to which the question of price, where other things are equal, is not so important. Mr. Cowle covered considerable territory in transportation, beginning figuratively in the air and descending gradually to the hard earth.

"The transportation problem is," he said, "the co-ordination of a great number of different types of transportation vehicles, ranging from wheelbarrows to airplanes, such as trucks, single-horse rigs, double-team outfits, automobile trailers, double-end electric platform trucks, automobiles, gasoline motors, gasoline tractors, electric trucks, motor cars and experimental airplanes and dirigibles."

"Cut off all the nicknacks," said Mr. Cowle. "Strip down your chassis until there's nothing left but essentials; take your motor vehicle apart and eliminate every possible non-essential; get down to bedrock, and the put together a vehicle that will be simple and efficient. You will not only cut down your cost of manufacture and your cost of operation, but you will automatically get rid of high cost, accomplish a saving in upkeep and very greatly increase the sale of your product. Automobile design has been too much influenced from the sale standpoint; too much influenced by what your competitor is doing, by what he is using as a talking point, by what he thinks will sell a car to the women. Cut off your freak handles, clean up your dashboard, eliminate all the fancy things—that's what makers of other vehicles do. You must remember that, after all, aside from a special few to whom you sell high-grade fancy jobs, you are selling transportation."

COURT CLOSES CHARLOTTE FACTORY

J. C. Keith is perpetually enjoined from operating his cold air wood register plant in Charlotte by a circuit court decree, it being claimed that the use of the sawmill, planing mill and sander by gasoline engine is a nuisance owing to the noise. B. J. Chibertson was the chief complainant. This action puts out of business one of Charlotte's smaller manufacturing industries, which has been closed several months by temporary injunction. Mr. Keith is offering his home for sale and has been looking for a location for his business in other towns.



Digitized by Google

Michigan Develops a Chinese Art

(Continued from Page 10)

the dust from the paper, and then to the cookers. These cookers are also cylindrical tanks, but not as large as the tanks in which the wood pulp is cooked. A shaft on each end of the cooker allows it to be revolved, power being supplied by a motor at one end. Soda ash is put into the cooker with the paper and steam is admitted through a journal bearing. The cooking process takes from eight to ten hours, during which time the cooker is slowly but continually revolving, the process thoroughly dissolving the sheets of paper and reducing the contents of the tank to a mass of pulp.

This mass is now dumped into a large vat, where it is stirred until needed for the washers. A washer is similar to a beater, but while the beating is taking place, a stream of clean water is running into the tank and an equal amount of dirty water is passed out. When the pulp has been washed sufficiently, a quantity of bleaching material is added and the stirring proceeds for another half hour. It now proceeds to the beaters, where the required quality of paper is provided for by mixing various kinds of stock together, such as rags with wood, sulphite stock with soda stock, ground wood with various kinds of fibers, etc. Every class of fiber requires its own special treatment, and this has to be varied and modified in each case to suit the qualities of the paper to be made from it; from which it can be seen that the preparation of the pulp is one of the most important and delicate operations in the entire process of paper making, requiring experience, skill and careful manipulation. If the paper is to be colored, the color is also added here.

From the beaters the pulp passes through an agitator, then through a refining engine, and thence to the paper machine, where it goes through the same process as the tag paper. If the paper is to have a smoother finish than that given it by the machine just mentioned, it is run through a super-calendering machine, through a set of rolls which give it smoother ironing, imparting a glossy finish in much the same manner as the laundry irons a starched collar.

Coated and glazed papers are turned out in a coating mill, which is a separate industry. Uncoated papers are colored by mixing the color with the pulp while it is in the beaters, but coated papers are colored by coating the paper with a mixture containing the coloring matter as it is unwound from the roll. As it passes from the first roll to the second, two brushes the width of the paper scrub the color into it so that it will be evenly distributed. As it leaves the second, or receiving roll, it is automatically looped on hangers attached to a chain conveyor which travels slowly over a series of steam pipes, drying the color on. It is now rolled up again and sent to the friction calendering or flint machines, either of which adds the glossy finish. The friction calender irons the paper between two rolls, one of which is steel and the other cotton fiber. This steel roll runs at twice the speed of the cotton one, and the friction which is generated gives the paper a smooth, glossy finish. The "flint machines" are constructed so that an arm holding a smooth flint stone rubs across the paper, thus generating friction which gives the paper the finish desired.

Parchment paper is made from stock containing a large percentage of rags. The rags are sorted as they enter the mill, so that no buttons, rubber or other substances get into the machines. They are then put in the rag cutter, where they are chopped into small pieces. The dust is then fanned out of them in a duster, after which they go to the boilers, where they are boiled and bleached in soda ash for 10 to 12 hours. From here on the process is very much the same as with book paper. The paper, however, is thinner and of finer quality than book paper, and has yet to go through an acid bath, which gives it the qualities necessary in parchment paper.

Heavier Grades

In this operation the paper travels around a roll which carries it through a bath of sulphuric acid, after which it is sprayed and washed through approximately 14 water baths, or just enough to remove all traces of the acid. The acid bath has the effect of making the paper waterproof, however, so that a sack of it will hold water for days without leaking. The Kalamazoo Vegetable Parchment Company is known all over the world for its parchment papers. This company also manufactures waxed paper, which is made by running the paper through a bath of liquid paraffin, through a set of rolls which act as a "wringer" to squeeze out all superfluous wax, and then over a roll which chills the wax; after which it is rolled up again. The "cold" roll is kept cold by a stream of cold water which runs into the roll through one journal, and out through a pipe in the other. This company uses 3,000,000 pounds of India wax a year, in the manufacture of waxed papers.

The paper from which binder board, wallboard and paper boxes and containers is made, is composed of old papers, to which is added a certain amount of kraft, or sulphate pulp. Some of this pulp comes from Maine, some from the South, but most of it from Norway and Sweden. The kraft and old papers are mixed together in the beaters, passing then through the storage tanks and engines and so to the paper machines. The River Raisin Paper Company uses what are known as cylinder machines. In these machines, instead of flowing upon a screen, the pulp flows into a tank under the machine, in which revolves a cylinder of the fine brass screen before described. As this cylinder revolves it picks up a thin layer of pulp above the screen cylinder. Running in contact with it is another cylinder carrying a "felt," which, as it comes in contact with the pulp, picks it off and carries it along. There are several of these cylinders, and as the felt passes along, it adds a layer of pulp from each one, the number of cylinders used depending upon the thickness of paper required. The felt then carries the paper through several sets of squeezer rolls, eventually leaving the felt and proceeding through the paper machine as before described. Binder board or box board is made by pasting several of these sheets of paper together. A pasting machine which pastes these sheets together automatically will turn out 250,000 pounds of board one-tenth of an inch thick in ten hours, and one machine at the River Raisin company's plant has turned out as high as 317,000 pounds, cutting it into three sheets, each 140 inches long, at the same time.

These sheets go through a slotter and creaser, which cuts the necessary slots and makes the necessary creases, so that the board can be folded together in the form of a box. This machine will slot and crease 6,000 of these boxes a day. This company also has its own printing machines, so that such printing as is required can be done on the boxes before shipping to the consumer.

Paper is shipped in various ways; in rolls, in flat bundles, and in cases. If it is to go out on rolls, it leaves the machine ready to be packed. If it is to be shipped in sheets, the rolls are machine-cut to the proper size. In the Kalamazoo Vegetable Parchment Company's plant, a Hamblet cutter stands at the "dry" end of the giant 165-inch Fourdrinier machine. This is a double-acting cutter, cutting two sheets at a time, which are counted as they come out by an automatic counter. Attached to the cutter is a "lay-boy" and, combined these two machines will cut and lay off a minimum carload of paper, 24,000 pounds, in one and one-half hours.

The importance of Michigan as a paper producing state is evidenced by the fact that more than $150,000,000 is invested in the industry. Michigan's mills employ more than 11,000 people, who draw from them nearly $18,000,000 in wages and salaries annually.

Some Signs of the Motor Up-Trend

(Continued from Page 11)

passed on to the Wilson Foundry & Machine Company, Pontiac, to get ready to resume operation February 1. This is a unit of the Willys-Overland and makes many of the Overland parts.

These are other indications of improvement in the automobile situation. The Studebaker Corporation, in announcing 1920 results, says that of the 52,000 motor cars this company built in 1920, 4,000 more cars were made during the second half of the year than during the first, the output being 28,000 and 24,000 respectively. Furthermore, sales during the last three months of the year totaled 10,000 cars, or an average of 3,333 a month, which, considering the conditions then prevailing, is a decidedly good record. All told, officials say, unsold new cars on hand total only 1,600, or about a two weeks' supply. Production both at Detroit and South Bend, Ind., has been resumed on the basis of 800 cars a week at each end, or, all told, 1,600 cars.

In outlining the situation in the Wall Street Journal, B. J. Westcott, president of the Westcott Motor Car Company, says in part:

"Since July 1, 1920, sales have been greatly restricted, being about 20 per cent of the monthly average for the first six months of the year, but compared with corresponding fall and winter periods of previous years prior to 1919, the reduction would not be considerable.

"There is recently noted a marked increase in reported retail sales by agents, although not accompanied by re-orders, which lends encouragement to expect improved factory shipments in the very early future; indeed some slight increase is already noted.

"The splendid spirit of intelligent co-operation upon the part of all branches of the industry and the banks is permitting a situation fraught with grave danger to work itself out in a sane manner. The industry as a whole is basically sound, and the opinion in most conservative quarters is that the end of 1920 marked the culmination of the acute strain, and that beginning the first of the year, conditions improved.

"The automobile trade was among the first to feel the depression and will also be one of the first to recover.

"The automobile industry is third in volume in the nation's business and should be promptly relieved of the burdensome and unfair dis-

Digitized by Google

criminatory production tax, which no longer has the excuse of a war time measure."

The W. A. Paterson Company, Flint, which is one of the smaller yet one of the oldest among the automobile makers, expresses confidence. The demand for its cars has been increasing, and while orders are not coming in by the hundreds, the officials are well pleased with the way business is picking up. The company has arranged to have exhibits of its 1921 models at most of the important automobile shows to be held this and next month in such cities as Philadelphia, Baltimore, Duluth, Minneapolis, Akron, and Chicago.

The H. H. Franklin Manufacturing Company, Syracuse, N. Y., in a recent announcement said:

"The demand, the sales, of Franklin cars has been such that the plant was not closed for inventory purposes between Christmas and New Years, but, instead, departments were kept operating their full time except for actual time required in counting parts. The company put on a 'Big Business-for-December Drive,' engineered by the sales and advertising departments, which resulted in a production of 33 cars a day during the month, as compared with an average of 39 cars a day during the twelve months ended August 31, 1920, and 16 cars a day just prior to our price reduction announcement of last September. The company is carrying on another vigorous sales campaign this month, giving special attention to the southern states, where, generally, business is particularly poor.

"We are not offering any special inducements to dealers in the matter of credit. Reports show that Franklin dealers are not stocking cars but are selling them as fast as received from the factory.

"Basic conditions are sound, and the great trouble with business today, as a rule, is the policy of watchful waiting."

The Packard Motor Car Company of New York recently made a survey in New York and vicinity of the garages which rent space to more than 1,600 motor vehicles engaged in general commercial hauling, reports the Wall Street Journal, and this investigation, conducted six weeks ago, disclosed that about 50 per cent of all these vehicles were idle.

"By keeping in constant touch with these garages," said president Lee J. Eastman, "we have seen the percentage of idle trucks decrease until today—six weeks after the first survey was made—only about 21 per cent of the vehicles are still inactive.

"In order to check up on the accuracy of the above figures we made another survey of several firms operating fleets of trucks in general trucking, contracting and department store delivery. This was made since the first of this year and showed that only about 14 per cent of the trucks operated by these concerns were idle.

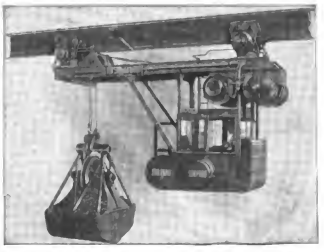
"This constant up-trend in activity in transportation undoubtedly reflects a similar uptrend in business conditions and indicates that in the metropolitan district there has been a decided improvement in the last five weeks."

Surveys of this kind have been made, it is said, by a number of other truck distributors and they have come to the same conclusion.

BELDING FOUNDRY CO. ELECTION

The fourth annual stockholders' meeting of the Belding Foundry Company, Belding, was held in the company's new office building, January 12. Like former years, 1920 proved very successful and the company's finances were gratifying to the stockholders. The same board of directors was re-elected. Henry J. Hartman, of the Hartman Foundry, Grand Rapids; J. C. Jenkins, Big Rapids, and A. B. Johnson, William F. Sandell and Albin Johnson, Belding, constitute the board. J. C. Jenkins, president; William F. Sandell, vice-president; Albin Johnson, treasurer, and A. B. Johnson, secretary and general manager, were again re-elected.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163 CAD. 6164

PRODUCTION FOUNDRIES COMPANY

We have successfully specialized to
SAVE YOUR DOLLARS
by our modern intensive production methods applied by an expert organization in our
40 TON
GRAY IRON FOUNDRY
OF ANN ARBOR, MICHIGAN
On Michigan Central Main Line for Carload Lots
BRANCH SALES OFFICE
315 Park Building, Detroit Telephone Main 8336

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

Brakes Go on Truck Over-Sales

(Continued from Page 6)

horses. If the truck he buys fails to bring success to his business, he is sold, but not equipped.

"On the other hand, if the buyer finds he has been equipped up-to-the-minute with profit-showing motor vehicles, and in times of stress is not over-equipped, he has been forever sold on the motor truck as the proper transportation for his business, and the truck industry has made a friend and an unattached salesman."

It was the general opinion of the conference that unwise and unlucky investments in motor equipment had caused a reaction to horse-drawn vehicles, which change of heart can be halted only by a different brand of truck sales-manship in the future and education of the cartage man to the proper utilization of the truck.

The Association seems to be convinced that railroad intercity freight business for distances up to 60 miles will be taken over by the truck. The Association believes the railroads realize this and for that reason are determined that the cartage business shall come under the control of public utility commissions. It is preparing to fight it.

Cost accounting and bookkeeping systems for the cartage business will be developed by the Association with a view to adopting standard systems to be offered the membership. Branch associations are to be organized in Milwaukee, Baltimore, Md., Camden, N. J., Washington, D. C., Boston, Mass., and Quincy, Ill.

Annual Meeting June 20

The annual meeting will be held on or about June 20 in Detroit, or rather Detroit will be the place of assembly, for the delegates are to be taken for a three-day cruise on the Noronic, where all sessions will be held while the ship is cruising about the lakes.

This plan, it is believed, will assure maximum attendance at all sessions. As the delegates will be invited to bring their families along, the convention will become more or less of a vacation trip. The convention committee consists of E. Foster Moreton, Detroit; Thomas O'Brien, Detroit; Joseph X. Gavin, Chicago; H. C. Morr, Philadelphia, and Isaac Goldberg, New York.

Directors elected to fill vacancies are as follows: Thomas O'Brien, Detroit; Hupp Teels, St. Louis; Joseph Cavanaugh, Philadelphia, and P. J. Finnegan, Chicago. The by-laws and constitution are to be revised, the work being left to the former presidents, to report at the annual convention. All the men so far mentioned, with F. L. Henk, secretary of the national association and manager of the Detroit Transportation Association, and J. T. Counsell, Chicago; A. T. Barton, Kansas City; W. T. Grund, St. Louis; W. J. Devine, Philadelphia; George Reichel, Cincinnati, and M. T. Green, Buffalo, attended the conference.

Trailer Makers Indorse An Outdoor Exhibition

Two new officers and members of the executive committee were elected at the annual meeting of the Trailer Manufacturers' Association of America, held at the offices of the Association in Grand Central Palace, New York, a few days ago. J. H. Fertig, Newark, N. J., president, and H. C. Fruehauf, Detroit, first vice-president, were re-elected. Max Herrmann, Beloit, Wis., was named second vice-president to succeed C. H. Martin, Springfield, Mass., and Henry M. Wood, Cincinnati, was elected secretary-treasurer to succeed J. C. Eudebrock, Cincinnati. Mr. Herrmann and Mr. Wood were also elected to serve on the executive committee.

A number of members expressed a desire to participate in a national outdoor exhibition and demonstration of motor trucks, trailers and material-handling machinery in the event that plans for the promotion of such an event begin to take shape in the motor vehicle industry.

Representatives of the following companies attended the meeting: Arcadia Trailer Corporation, Newark, N. J.; Eagle Wagon Works, Auburn, N. Y.; Fruehauf Trailer Company, Detroit; Highway Trailer Co., Edgerton, Wis.; F. P. Lyons, Inc., Manchester, N. H.; Martin Rocking Fifth Wheel Company, Springfield, Mass.; Northway Trailer Company, Rochester, N. Y.; Shadbolt Manufacturing Company, Brooklyn, N. Y.; Trailmobile Company, Cincinnati, O.; Troy Wagon Works Company, Troy, Ohio; Warner Manufacturing Company, Beloit, Wis.

PONTIAC INDUSTRIAL EXHIBIT

The trade and advertising committee of the Pontiac Retail Merchants' Bureau, at its meeting at the Board of Commerce last week indorsed a movement to conduct an industrial exhibit of Pontiac manufactured products which, according to statistics gathered, now number in excess of 20. The exhibit will last a week and all merchants will co-operate, it is said, by devoting window space to the products and to posters of the exhibit. According to present plans, the exhibit will be held during April.

MOTOR FEES SET NEW RECORD

Taxes and fees collected by the Michigan State Department, Lansing, during 1920 for registration of motor vehicles, chauffeurs, operators, transfers, etc., reached the record sum of $5,644,583.02. In 1919 the aggregate was $3,719,423.29. Half of the amount is apportioned to the counties on the basis of the quota paid in by each county. The other half goes to the state highway department, to maintain state highways and pay state rewards, while the county funds are to be used by local officials on roads. About $1,000,000 had been received by the state through the motor vehicle tax up to the first of the year, and it probably has doubled since then. The total number of motor vehicles taxed up to January 1 was 53,549, and trucks, 9,626. Six hundred and nine trailers were licensed.

Federal Incorporation of U. S. Firms in China Urged

The foreign trade committee of the Detroit Board of Commerce has drafted a resolution urging Congress to enact into law the Dwyer bill providing for the federal incorporation of firms doing business in China and the exemption of such firms from income and excess profits taxes so that they may conduct their business upon competitive basis with British and other foreign concerns engaged in business in China.

Federal incorporation is desirable for the reason that the Chinese are not familiar with the incorporation laws of the various states in the United States, and are therefore loath either to invest money in these concerns or do extensive business with them. They do know and are appreciative of the United States, and federal incorporation of American business interests in China would insure their confidence, it is believed.

It is argued that unless federal incorporation is accomplished and exemption from taxation granted, three out of five American corporations in China will have to go out of business. Other foreign firms in China are tax-free and therefore have the advantage over Americans.

WOLVERINE INCREASES CAPITAL

Directors of the Wolverine Insurance Company, Lansing, have authorized an increase in capitalization from $100,000 to $200,000, the is sue to go before the Michigan Securities Commission at once. The company started last June with a capital of $100,000, which is all subscribed. The company proposes to enter eastern territory.

ADRIAN PLANT WORKS NIGHTS

Besides a full day force at the plant of the Peerless Wire Fence Company, Adrian, one department of the plant is being operated with a night force. The working schedule of the factory is four days a week on a 10-hour basis and two days on a 12-hour basis.

Revised Forest Taxation Urged by Commission

The Michigan state tax commissioners have recommended to the 1921 Legislature changes in forest taxation whereby the present system of taxing growing timber would be abolished. The new plan provides an annual tax at a fixed rate upon land value and upon mature timber value, and a percentage tax upon yield, payable whenever any portion of the timber crop is harvested.

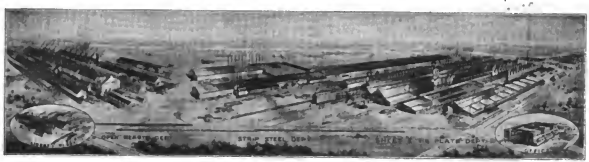
The report says that the land value would be the same as the assessed value of wild, unimproved bare land of similar quality in the same locality, while the mature timber value would be the stumpage value of merchantable forest products upon the land, immature forest growth not to be considered in determining either land value or mature timber value. Land value is not to be changed except after regular intervals, while timber value is not to be increased, but to be decreased whenever any yield tax is paid, each decrease to be the same as the stumpage valuation at the time of the harvesting.

The report points out that this plan of taxation would prevent over-taxation by not allowing at any time annual taxation of the growing forest; meets the requirements that the investor shall be in a situation to calculate with a reasonable certainty the future cost of carrying his investment; very considerably reduces the annual tax burden of the owner and provides whereby annual taxation can be reduced to a minimum; protects the interests of the owners of other classes of property and the interest of the local community, and encourages the owner to let his forest stand as long as possible instead of harvesting it quickly.

The report further declares that this preservation and establishment of forests would give industry a new source of raw materials, consumers would be benefited by reduced and stable prices; and farmers would be aided by removal of competition of lands devoted to forestry with lands devoted to general farming. The total amount of taxes forest property would pay annually would be greatly reduced.

The Commission recommends that all of the annual land and timber tax and a substantial portion of the yield tax be allotted to the township and school districts in the township, that the county should receive the balance general yield tax, and the state nothing or only a small portion. The determination of the values would not be left to local assessors, but to the state tax commission.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354



Miscellaneous Building,
United States Rubber Co.,
Morgan & Wright Plant,
Detroit, Mich.

Modern industrial plants

require the services of experienced engineers to design and supervise construction.

Layouts for plant expansion should be based on thorough studies of manufacturing operations and arrangement of departments. We furnish this complete service.

LOCKWOOD, GREENE & CO.

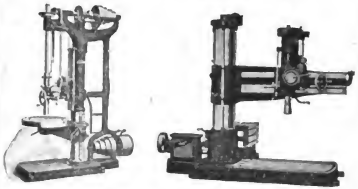
ENGINEERS

1227 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK
DETROIT CLEVELAND CHARLOTTE PHILADELPHIA
SANTIAGO, CHILE
LOCKWOOD, GREENE & CO. OF CANADA, LIMITED, MONTREAL
COMPAGNIE LOCKWOOD GREENE, PARIS, FRANCE

If You Have Drilling Problems

we will solve them with



Cincinnati Bickford Tool Co's Radial and Upright Drilling Machines

Leaders since 1874

THE MOTCH AND MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

New Corporations

FOR WEEK ENDING JANUARY 25, 1921

New York-Detroit Realty Co., Detroit; real estate; Henrietta and Leo R. Grosslight, Detroit; Arthur Silverfield, New York 25,000

Warren Service Garage Co., Warren; general garage and automobile business and accessories; Jerome B. Moore, Frank J. Licht, Calvin B. Moore..... 10,000

Michigan Land & Home Corp., Detroit; to buy, sell and deal in real estate and things necessary or incident thereto; Jacob P. Sumerackl, Walter Sumerackl, Harry L. Diehl, Detroit.

Detroit Willys Light Co, Detroit; to buy, sell and deal in lighting plants, accessories, etc.; Russell V. Judson, Harry R. Price and Maude Faulkner, Detroit 1,000

Inter-state Iron Co. (F), Virginia, Minn.; W. T. Rotter, Ishpeming, Michigan agent 5,000,000

Modern Beverage Co., Kalamazoo; manufacture and sale of mineral and soda waters; Simon Stasbery, Mendel Davidson, Isidore S. Klansky, Chicago, Ill. 10,000

Lakeview Marketing Assn., Lakeview; to buy, hold and sell farm produce and farm supplies generally; W. D. Orr, secretary, Frank Hehrenwald, Robert E. Finncane, Lakeview..... 10,000

Wagner Motor, Inc., Detroit; to buy, sell, repair and deal in self-propelled vehicles of every kind and character; B. A. Wagner, Wilfred C. Wagner, C. Wagner, Detroit 100,000

Troy Development Co., Royal Oak; purchasing, holding and dealing in sand, gravel and real estate; Charles W. Upton, Rochester; Henry J. Willert, Edward A. Tucker, Royal Oak..... 20,000

Fort Shelby Garage Co., Detroit; general garage business; John Gillespie, Julius L. Krimmel, Fred H. Panser, Detroit 200,000

Singer Oil Co., operations at Lewiston, Mont., office at Detroit; to drill and operate for petroleum, oil and gas; Leslie J. Wright, Ontario; Julius Singer, Sidney Miller, Detroit..... 80,000

Neighbor Tire & Repair Co., Detroit; to deal in automobile tires and accessories and repair and carry on a general automobile repair business; Emil Fenske, W. F. Hemminghaus, Edwin B. Snow, Detroit..... 10,000

Michigan Typewriter Exchange, Detroit; to buy, sell, trade and exchange; Charles Muenze, Lillian Muenze, Willis B. Hoodenow, Detroit 5,000

Grand River Building Co., Detroit; to purchase, sell and deal in real estate; John G. Orr, Grover C. Smith, F. Iverson Hendrie, Detroit.. 75,000

Jeddo State Bank, Jeddo; commercial and savings bank; Harry Tappan, Port Huron; William J. Lamb, William C. Ernest, Jeddo..... 20,0

Hoenscheid Force Feed Drill and Tool Co., Detroit; to manufacture, buy, sell and deal in twist drills, etc.; Peter J., Sr. and John A. Hoenscheid; Gerald W. Craighead..... 80,000

W. S. Hallman Co., Coloma; growing and dealing in all kinds of nursery stock; Wendell S. Hallman, Jacob and George Friday, Coloma 75,000

Detroit Paste & Glue Mfg. Co., Detroit; to manufacture and sell at wholesale and retail all kinds of paste, glues and gums; David J. Licht, Detroit; Joseph Deiner, Cleveland, O.; Aaron A. Rose, Detroit 100,000

By-Products Sales Corp., Detroit; disposal and sale of by-products and waste materials; John B. Corliss, Jr., Stanley R. Dickinson, Clarkston Newton, Detroit 10,000

Booth & Flinn, Ltd. (F), Pittsburg, Pa.; Henry Ledyard, Union Trust bldg., Detroit, Michigan agent..... 750,000

Susquehanna Holding Corp. (F), Buffalo, N. Y.; James E. Breakey, 210 Manhattine ave., Detroit, Michigan agent 75,000

Aluminum Manufacturers, Inc. (F), Cleveland, O.; Lockwood F. Younger, Joseph Campau ave. and Dunn road, Detroit, Michigan agent; common stock, 40,000 shares, non-par value; preferred, $5,000,000.

Cara Inn Co., Detroit; to plan, design and construct restaurants, cafes and cafeterias and buy and sell same; John S. Nicholson, 2130 Cass ave., George S. Nicholson, Roy B. Sunderg, Detroit 20,000

Westerdale Motor Sales Co., Detroit; to buy, sell and deal in automotive vehicles, parts and accessories; Harry E. Westerdale, 66 Alexandrine ave., M. C. Westerdale, Highland Park; Gustave Kaercher, Cleveland, O. 25,000

Polish United Automobile School, Detroit; to establish, maintain and operate a school for teaching automobile repairing; Albert Gurski, 5713 Parker ave., Constantine Bogorski, Stanley Pietrasak, Detroit 18,000

Niedner Rifle Corp., Dowagiac; manufacture of gun barrels and rifle bullets; William A. Straley, Adolph O. Niedner, Coy W. Hendryx, Dowagiac. 20,000

A. G. Noble Co., Albion; to buy and sell new and used automobiles; Arthur G. Noble, Marc C. Reed, Donald W. Ruff, Dowagiac 25,000

Pruner Coal Co., Inc., Ann Arbor; to retail coal in Ann Arbor; Earl G. and Bertie Pruner, William J. Clancy, Ann Arbor 15,000

Coldwater Electrical Co., Coldwater; to manufacture, buy and sell electric and other mechanical apparatus; A. T. Norris, H. D. Sluerburne, H. D. Keller, Coldwater 10,000

Ever Hot Heater Co., Detroit; to manufacture, buy, sell and deal in water heaters, plumbing and plumbers' supplies; Frank W. Shuell, 5223 Cass ave., Delmar C. Briggs, Walter H. Fortune, Detroit..... 80,000

Angus McCallum Corp., Detroit; manufacture and sale of roads machinery; George B. Brink, 184 Turdell, Highland Park; R. L. Wilcox, Jackson; R. A. Shappell, 1535 Canfield W., Detroit 25,000

Surety Corp. of America, Detroit; to buy, sell and deal in stocks, bonds and securities as a scrate; Daniel W. Collins, 545 Second blvd., Dorothy M. Collins, Detroit; Sidney Schuett, Buffalo, N. Y. 40,000

Three-Five-Seven Tire & Service Co., Detroit; to deal in tires and automobile accessories, conduct garage and repair shop; Alvale H. Pitts, 84 Parrand ave., George R. Clark, W. H. Parmer, Detroit 20,000

Consolidated Gravel Co., operations at Brighton and Milford, office at Detroit; to manufacture, quarry, remove, sell and deal in sand, gravel and stone; Gustavus F. Smith, also trustee, Cameron Currie, 26 Buhl Blk., Detroit 150,000

NOT AN AGENT BUT A MANUFACTURER

I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.

TELEPHONE
MAIN 8545

MAY I SERVE YOU?

CASTINGS
IRON, BRASS, BRONZE,
ALUMINUM
PRODUCTION QUANTITIES

Production Machine Work

PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS

SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $300,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

COAL
C.C. OREY.
COKE
1304 MAJESTIC BLDG. DETROIT, MICH.

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Detroit, January 29, 1921

MAKING STEEL IN FOUR HOURS

(Financial Section Page 31)

Vol. 27. No. 5 *Price Fifteen Cents*

Automotive Efficiency for 19 years



Every Long Cooling System is scientifically adapted to the particular engine which it serves, thereby assuring the maximum of cooling efficiency

Long Cooling Systems are specially designed to meet specific requirements of any manufacturer. They unquestionably guarantee *positive, demonstrated efficiency*, and for nineteen years have been produced at minimum cost, in needed quantities, at all times, and in uniform quality and perfectness.

Trained, experienced, and specialized engineering experts—adequate production facilities—a *complete* organization to render helpful service are readily available here when you want them.

LONG MANUFACTURING CO.
Detroit, Michigan

LONG
COOLING SYSTEMS

The Recognized Standard for Tractor, Trucks and Motor Cars.

Digitized by Google

MICHIGAN
MANUFACTURER
AND
FINANCIAL RECORD

Established 1907

CONTENTS

January 29, 1921

	Page
Making Steel in Four Hours—Rothert process, product of which was tried out in Detroit, also slashes costs, proponents assert. By Howard Campbell.	7
Ford's Campaign for New Money By Harold High.	8
The Needs of the U. of M. By Alfred Fischer.	9
How Michigan Casts Its Metal—Something about the methods used in making castings in state which ranks fifth in this line of enterprise.	10
Income Tax Guide	13
Michigan and the Open Shop—Employers are not opposed to unions as such, but are insisting upon freedom of contract. By F. W. Hersey.	14
News of the Legislature	15
Detroit Notes Improvement By Marc Braun.	16
The Saginaw Situation	17
News of the Motor Industry	18
Wills-Lee Begin Operations	19
Transportation Matters	20
The Week's Building	22
Fisher Body Corp. Plans	23
Editorial	24-25
Financial Section Edited by Phil S. Hanna.	26-35
Michigan Bank Elections	34
New Corporations	43-44

Vol. 27 **Detroit, Mich.** **No. 5**

Published Every Saturday by the Manufacturer Publishing Company
Suite 411 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google

Engineering Architecture

When the time arises our organization will deem it a privilege to be of service to you

ESSELSTYN - MURPHY
Architects Engineers
Marquette Building, Detroit

Engineering and Architectural service based upon the broad foundation of knowledge and vast range of practical experience

Digitized by Google



Increased Production and Higher Earnings for Operatives on "BLISS" Presses

In the plant of the Chain Belt Company, Milwaukee, "BLISS Presses form the backbone of their extensive mechanical equipment. In view of the possible output of these "BLISS" Presses, limited, apparently, only by the degree of dexterity of the operative, the workmen, themselves, asked to be put on a piece work basis in order that they might have an opportunity to increase their earnings.

This was done, with the result that the average daily output was raised to 8,000-10,000 pieces which enabled the company to set a much higher production schedule.

BLISS

1857

E. W. Bliss Company

Main Offices: BROOKLYN, N. Y., U. S. A.

American Factories: BROOKLYN, N. Y. *and* HASTINGS, MICH.

BLISS

1921

SALES OFFICES

CHICAGO, People's Gas Bldg. DETROIT, Dime Bank Bldg. CLEVELAND, Union Bank Bldg.
CINCINNATI, Union Trust Bldg. BUFFALO, Marine Bank Bldg. ST. LOUIS, Boatmen's Bank Bldg. PITTSBURGH, Keenan Bldg.

FOREIGN SALES OFFICES and FACTORIES

LONDON, ENGLAND, Pocock Street, Blackfriars Road, S. E. PARIS, FRANCE, 100 Boulevard Victor-Hugo, St. Ouen

(No. 129)

Digitized by Google

LEADERS

Each and Everyone in Their Respective Fields



American Steel Split Pulleys.



The "original" steel split pulley, correctly designed—well made—true diameters—balanced—light weight combined with strength. Transmits maximum power with minimum belt slip.

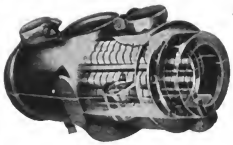
U. G. Cast Iron Hanger Frames.

Well designed — strong — simple in construction. Large diameter plungers with lathe cut threads support bearings. Set screws for side adjustment.



Pioneer Steel Hanger Frames.

Made of "Open Hearth Steel"—unbreakable under all conditions — light weight—less expensive to handle, haul and erect.



Hyatt Roller Bearings.

The line shaft bearing of the "Highest Practical Efficiency." Anti-friction of course. Pay for themselves in from 12 to 15 months. Durable—Practical —Efficient.

Limestone Wood Split Pulleys.



Made of selected wood. Rims built in sections, nailed and glued. Arms built integral with rims—cannot work loose. Standard bushings.

Palmer-Bee Transmission provides an equally complete, well known and rated line of clutches —collars—couplings—shafting—and—Charlotte Leather Belting.

Palmer-Bee Company
DETROIT

"Everything for the Transmission of Power and Handling of Material"

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

Making Steel in Four Hours

Rothert Process, Product of Which Was Tried Out In Detroit, Also Slashes Costs, Proponents Assert

By HOWARD CAMPBELL

SINCE the beginning of time the various stages in the development of civilization have been gauged and marked according to the uses made of the materials with which Nature has provided us. Anthropologists have apportioned the long centuries of man's progress from the pre-historic dawn down to modern times into three areas: the stone age, the bronze age and the iron age, and we are now living in the fourth—the age of steel.

Our modern civilization is practically built on a framework of steel—steel that is handled through the several stages of its production by men who work half naked in terrific heat. But so necessary has steel become to industry that the production and price of it has come to be regarded as a barometer of the world's activities.

For more than half a century the methods of making steel have been the same; in fifty-six years few if any improvements have been made in either processes or equipment, but now out of the West comes the news that a process of smelting has been developed by which the highest grade of steel can be produced from low grade ores in approximately four hours. This discovery was made by Dr. E. H. Rothert, of Seattle, Wash., and is the result of twenty years of experimental and research work. Dr. Rothert is well known throughout the country as one of the foremost metallurgists. What his process will mean to the industrial world can readily be seen when it is known that the total annual consumption of iron is more than 100,000,000 tons, of which more than 60,000,000 tons is produced in the United States alone.

Deals With Titaniferous Ore

The Iron Masters of the world have long known that the present processes of steel making are crude—at best unscientific and burdened with much duplication, waste and excessive cost. And besides this, no process has hitherto been discovered which would deal with the richest but most refractory of all ores, that known as the Titaniferous ore. By the use of Dr. Rothert's furnace and process, however, the highest grade of tool steel, it is said, can be produced from titaniferous or magnetite ore in from four to six hours.

The use of iron probably began in Egypt some three or four thousand years before the Christian era, an iron tool having been found in excavations made while exploring the Great Pyramid, known to have been built at least 4,000 years B. C. Just how the Egyptians made iron is, of course, unknown, but the primitive Iron Master of the first century made iron out of the ore just as he found it, by the use of charcoal. In the fourth century some pioneer scientist invented the bellows, but no further improvements were made until 1735, when an Englishman built the first coke furnace, the forerunner of the modern blast furnace. In 1740 the crucible process of making tool steel was invented and in 1784 the puddling furnace was devised, both of which processes are generally used in steel making at the present time. In 1856 Sir Henry Bessemer, of England, and another genius, although an unhonored one, William Kelly, of Cincinnati, simultaneously invented what has come to be known as the Bessemer process of producing carbon steel.

The present process of steel making begins with the blast furnace, which reduces ordinary hematite ore to pig iron. The furnace as now used is practically the same the world over and is the result of decades of experimentation. The successful operation of a blast furnace depends very largely on the available supply of ore, coke and limestone. The second operation in the production of steel is the open hearth, in which the excess carbon is taken out of the metal and the iron converted into steel ingots. From the open hearth the ingots go to the puddling furnace, where the metal is further decarbonized and impurities removed. Puddlers are among the highest paid laborers in the steel industry, and quite properly so, because they not only work in intense heat, but at labor which shortens their lives.

The next step is the crucible furnace, in which the steel is again melted, the desired percentage of carbon added according to the grade of steel required, after which the product is again poured into ingots. The final process in the manufacture of tool steel is the reheating of the ingots in the alloying furnace, where such additional chemicals as chromium, nickel, etc., are added; then the rolling, hammering and tempering.

In 1864 the last great step forward in steel making methods was brought about by Martin Pierres, a Frenchman, who developed the open hearth process, which has since practically displaced the Bessemer process. Since that time no appreciable progress had been made until recently, when Dr. Rothert completed his experiments with the development of an electric furnace by which it is said he produces crucible steel from crude ore in from four to six hours. In other words, if the claims made for it are correct, in a single process and at a total cost of less than ten cents a pound the Rothert Furnace covers the whole ground of the blast furnace, open hearth, puddling furnace and crucible furnace.

Iron ore and fluxing material placed in the Rothert Furnace is at the end of four hours poured as steel ingots of the greatest tensile, tension and compression strength, it is asserted, eliminating the pig-iron stage of production. And so perfectly has Dr. Rothert said to have advanced his process that the heated crucible steel can be conveyed direct from the electric furnace to the alloying furnace, from which he can produce any known grade of alloyed steel. This includes the finest grade of tool steel, from which razors, knives, etc., are made. This steel has a tensile strength of 24,800 pounds per square inch.

By this process, also, the element of Titanium which has hitherto been considered an insuperable barrier to the smelting of magnetite ore not only is utilized but becomes the most important element in the steel. The importance of this fact will be patent to metallurgists and steel workers.

The Saving Claimed

A study of recent market prices shows that carbon steel sells at approximately 35 cents a pound, with high speed or alloyed steel selling at around $1.40. By the Rothert process, it is declared, carbon steel can be produced at a cost of 10 cents a pound, and the finest tool steel at a total cost, including reheating, alloying and rolling, of approximately 70 cents.

Since completing his furnace and processes Dr. Rothert has been visited by a number of scientists and metallurgists, some of whom hold chairs of metallurgy and chemistry in various schools, and who wished to see the operation of the furnace for themselves. Some of these men personally assisted in the work, and all of them are agreed, so it is said, that Dr. Rothert's discoveries will revolutionize the steel industry. The Continental Motors Corporation, Detroit, has tested the steel, and R. W. Carney, superintendent, is quoted as saying that "the carbon steel furnished for test takes a nice temper and shows a beautiful grain after hardening, which makes it highly efficient for drill stock and chisel work."

The principle on which the furnace is built, and the exact stages at which the various alloys are added in the Rothert process are, of course, jealously guarded by the inventor, who is said to have obtained patents covering every phase of the proposition, but who is withholding the information to protect his own interests.

The plant of the Rothert Process Steel Company is located in Seattle, which city was selected because of the presence in that locality of very large quantities of all the materials entering into the process of manufacture, in-

Digitized by Google



POURING THE METAL INTO THE INGOT MOULDS IN THE PLANT OF THE ROTHERT PROCESS STEEL COMPANY, SEATTLE

cluding electric power. Huge deposits of magnetite iron ore are said to be owned by the company in the vicinity of Seattle and on Vancouver Island, and negotiations are reported to be under way for the purchase of other deposits within 60 miles of Seattle. Native ores run from 60 to 65 per cent iron in quality, as compared with a 30 per cent iron content of hematite ore now in use in the East.

What the development of this process on a large scale will mean to all industry can hardly be conceived. Our modern office and factory buildings are built on steel framework, our modern ships are practically all steel, the railroads and street car tracks are of steel, our automobiles contain practically all kinds

(*Continued on Page* 40)

Ford's Campaign for New Money

By HAROLD HIGH

NEGOTIATIONS between the Ford Motor Company and a group of New York bankers for a loan variously reported to aggregate anywhere from $75,000,000 and $116,000,000 were said to be near consummation Monday of this week. By the time this page reaches its readers, announcement of the details may have been made. If it has not, it will be due in all probability to one of three reasons: Unwillingness of the Ford Interests to meet the conditions imposed by the bankers, with a resultant termination of the conferences; further delay in the negotiations, or the discovery by Mr. Ford of another source of money supply.

By making his corporation an exclusively family affair, Mr. Ford has been able to erect such barriers of censorship about the institution that if two or three years ago it were next to impossible to obtain from within the organization information about the progress of the business, it is impossible to do so now. What has leaked out lately about the problems Mr. Ford and his executive staff are being called upon to solve has not come out of the Ford offices, but rather from those on whom Mr. Ford has been obliged to call for assistance and co-operation in meeting the changed conditions in which he finds his corporation. Therefore whatever may be reported must be taken not only as wholly unofficial, but wholly uninspired as far as anyone in authority at the Ford plants is concerned.

But some of the reports which have been keeping the wires between New York and Detroit hot, the last 10 days come from sources which it is impossible to ignore. It is from these sources, and from men in Detroit whose relationships, either past or present, with the Ford Motor Company give their pronouncements weight, that what follows is written. The reader may take them as being as reliable as it is possible to obtain, and in no sense as more of the rumors, of which there is a new crop daily.

A newspaper dispatch from New York a week ago said that agents of the Ford Motor Company were in Wall street trying to arrange a loan of $50,000,000 to $75,000,000. According to the story, they had interviewed about every-



JOSEPH A. BOWER

body they believed would or could furnish the money, but had been turned down by one after another, among whom were certain men of Jewish blood, who are rankling under the unkind things Mr. Ford has been saying about their race in the columns of his Dearborn Independent.

However, if reports which came by wire from New York to Detroit Monday are to be credited —and it would appear that they should be, because of the nature of the business which made them necessary—the Ford representatives finally had succeeded in getting favorable consideration from the Morgan group, which includes, among others, J. P. Morgan & Company proper, the Liberty National Bank and the National Bank of Commerce in New York. J. P. Morgan & Company had issued no statement, but the National Bank of Commerce had denied to inquirers that the loan had been arranged. J. A. Bower, formerly vice-president of the Detroit Trust Company, but now vice-president of the Liberty National, and a Morgan lieutenant, refused either to confirm or deny that the loan had been made, as had been reported.

Mr. Ford was reported as maintaining that he could get along with $75,000,000, but it was said that when Edwin R. Stettinius, one of the Morgan partners, looked over the Ford balance sheet, he remarked that it was $116,000,000 that the company would have to have. To recall some of the recent Ford financial transactions and review some estimates of the company's present financial position is enlightening as bearing on the amount needed.

The general public has always had the idea that Henry Ford had such an unheard-of amount of cash on hand—as witness the fact that the banks declined to allow him to carry a checking account because of the huge figures in which he dealt—that at first it will be hard to

(*Continued on Page* 42)

Digitized by Google

The Needs of the U. of M.

An Examination of the State's Physical Properties at Ann Arbor and the Proposed Construction Budget

By ALFRED FISCHER

NOTHING advertises government and governmental practice like heavy taxation. When the machinery is running smoothly and municipal, state and national officialdom worry along on nominal amounts raised by taxation, the average citizen can be aroused no more than by a week-old newspaper or the discovery of a new planet. But when the powers that be take the froth off his bank account, then put high priced steaths into his store, factory, warehouse and home to see what there may be that is further taxable, then he begins to sit up and take notice.

Just as we had a stone age and an iron age, we are now having a "sit-up-and-take-notice" age. It is characterized by heavy taxation and heavier spending of public monies, which, by the way, are coined in the same mints that produce private monies. There never was a time when every governmental unit had so many aspirations, wanted to do so much, and all of it at once. Part of this is due to the suspension of activities during the war, but more is due to "mob psychology." The various groups of officials figure that everybody is doing it, so it must be all right.

That is the state of mind in Michigan and intruding upon it comes the heaviest demand ever made in the history of the state from one of its most important institutions for a large building program. The University of Michigan has asked the 1921 Legislature for an immediate appropriation of $8,690,000, to be expended for additions and new buildings and equipment during this year and next. Then it wants an additional $10,000,000 during the next four years after the first amount has been provided. This is to be in excess of the money raised by the mill tax, which is for maintenance, and which in 1918 amounted to $1,241,500, according to the Michigan Manual. It is not at all impossible that the amount sought may be revised during the present session, because much of the money set aside by the 1919 Legislature for University buildings has been spent to maintain the various institutions and is no longer in the treasury. This latter condition hits the University of Michigan harder than it does any other state institution, for it has an unexpended balance for buildings of $722,000, which was allowed for a teachers' training school and for a new unit of the state hospital. The school building appropriation is for $250,000 and the hospital $472,000.

In his request for buildings, President Marion LeRoy Burton, of the University of Michigan, has not considered the danger of having previous appropriations being taken from him. His schedule submitted to the state budget commission covers eleven items, as follows:

Item No.	Name of Building	Requested for 1921-22	Requested for 1922-23
I.	First section of general building for Literary College	$ 450,000	$ 450,000
II.	Museum	450,000	450,000
III.	Engineering shops and laboratories	750,000	750,000
IV.	Physics laboratory	400,000	400,000
V.	Medical building	450,000	450,000
VI.	Completion of model high school	175,000	175,000
VII.	Addition to College of Dentistry	200,000	.....
VIII.	Chemical laboratory	200,000	200,000
IX.	Biological station at Douglas Lake	40,000	.....
	Totals	$3,115,000	$2,875,000
			$5,990,000
X.	Completion of University Hospital		1,500,000
	Total for buildings and equipment		$7,490,000
XI.	For purchase of land		1,200,000
	Grand total		$8,690,000

In addition, he has items on his desk of further needs in buildings and equipment which total about $10,000,000, which he hopes to get from the next two Legislatures, and which include the following proposals:

Fireproof law library building	$ 500,000
Home for nurses	750,000
Additional requirements for state library	55,000
Men's gymnasium	1,200,000
Storage facilities for coal	25,000
Boilers for heating plant	42,000
Warehouse	225,000
Connecting new hospital to heating plant	225,000
Additional elevators in old hospital	24,000
High pressure mains	12,000
Garage	1,200
Stores and wagon sheds	2,700
Fire station for campus	3,000
Fire protection system	17,000

Also several other items on which figures are still tentative, including dormitories for students, a hydraulic laboratory, a building for the Department of Architecture, and an administration building. None of the items in this second tabulation are in the requests for this year.

That is the schedule which Dr. Burton has prepared, after learning the wants of his various deans and from the heads of the colleges and from the regents. In putting them forward in the forceful manner he has, the attention of the entire state has been attracted to the University as nothing else could ever have done. Announcements from time to time during other years, that a university doctor had discovered a cure for leprosy, that models of German submarines were first tested in the University naval tank, that the germs of hookworm, sleeping sickness and other tropical diseases were first isolated and artificially bred on the campus, all stirred up the pride of the people of Michigan. But never until the taxpayers were asked to allow an additional tax levy of $1 each year for two years to provide needed buildings has the University become a subject of general discussion. The result has been that everybody with a theory of education, a grievance against the school for any of its minor policies and practices, or those most loyal to it from intimate residence or study, or from an appreciation of what it means to the country, is talking very loudly and expressing himself for the benefit of whomsoever will listen. It all comes back to our first premise, that taxation is a wonderful advertising medium.

To the person who visits the campus and many are doing so now for the first time—the fact that the University is run down at the heel becomes evident. There is concession, which is a temporary condition. But even if there were only half as many students in attendance, there would be need for at least $8,000,000 worth of buildings and equipment. It is not a matter of having pretty structures. The demands of the courses that must be taught well, and the ever expanding variety of subjects which must be taught in all departments, added to the wear and tear of daily use of equipment, create the problem. This is fundamental and must not be confused with other issues, such as increasing tuition for students from outside the state, and similar matters, which are being much discussed, particularly in rural centers. One of the least considered, but in the minds of many a most important factor in the situation, is the evidence that the curtailed facilities and the congestion on the campus have seriously interfered with graduate and research work. The under-classmen overrun everything, crowding out those who would like to go into seclusion with a germ or a theory and see what it has to tell mankind. This sort of deprivation exacts a serious penalty. It is only a couple of new buildings alone to relieve this condition.

One of Dr. Burton's most exploited but least forceful exhibits to legislators, editors and others whom he has invited to observe the situation at first hand is the University Hospital. It is predicted here that when the grand fight for his appropriation finally is made the next order of business at the Capitol, this will prove his Old Man of the Sea. University Hospital is exhibited as a sort of chamber of horrors, where insufferable congestion is displayed in all departments, and the fact set up that because of the tremendous crush of cases going through all the time, it is impossible to keep the place clean.

Now the University of Michigan hospital is a hybrid institution. It is at once a state hospital where people without means may come for free treatment. It is also a teaching hospital, where indigent cases are cared for while students may study. The standards of a teaching hospital, unfortunately, have never been as rigid in matters of sanitation and cleanliness as they might have been, nor is the same attention given to detail and personal service for patients as in so-called closed hospitals or other private places. This is no brief for closed institutions, which are not a part

(*Continued on Page* 36)

AUTO CLUB ACTIVITIES STARTED

The Flint Automobile Club organization has been completed and the charter members number 300. Besides the main office of the club in a business building, a touring bureau will be opened in Hotel Durant. Dallas W. Marshall was chairman of the club's organization committee.

The Lansing Automobile Association will open offices and a touring bureau in Hotel Kerns some time next month.

PAPER MILLS CUT WAGES

Six of the 12 paper mills in Kalamazoo have reduced the wages of employes an average of 17 per cent which cut corresponds to the voluntary increase granted last May.

LOGGING OPERATIONS CURTAILED

Reports from Houghton are that there has been a drastic curtailment of logging operations in the Upper Peninsula, due to the slump in the market for lumber. Although lumbermen throughout the northern peninsula look for a steady market for the product later in the year, there is said to be little or no demand for lumber at this time, despite a reduction of from 35 to 40 per cent in prices. A smaller number of camps are operating than for several years, although the amount of lumber on hand is said by operators to be below normal.

Wages of men employed in the woods have been reduced from $70 and $90 a month to $40 and $50. The supply of labor is said to be ample.

Digitized by Google

How Michigan Casts Its Metal

Something About the Methods Used Making Castings In State Which Ranks Fifth in This Line of Enterprise



LOAM MOLD MADE BY RUSSEL WHEEL & FOUNDRY COMPANY FOR HUGE DETROIT EDISON COMPANY CASTING
At the left the core is shown in process of construction. In the center it is shown finished. At the right is the completed casting.

By HOWARD CAMPBELL

IN THE TWO YEARS from October, 1918, to October, 1920, there were put into operation in Michigan 45 new foundry enterprises, bringing the total of such establishments in the state to 388 and giving Michigan fifth rank among all the states of the Union in this respect. Pennsylvania is first, with 803; Ohio second, with 688; New York third, with 582; Illinois fourth, with 484, and Wisconsin sixth, with 367.

Detroit ranks fourth among American cities in foundry enterprises, having a total of 122. Chicago is in first place, with 194; New York second, with 125; Cleveland third, with 123, and Philadelphia fifth, with 100.

The gain made by Michigan in the last two years is the largest both in numbers and percentage. Thus the Wolverine state has forged further to the front in another line of industrial endeavor, offering still greater possibilities for the employment of men and equipment in this field.

Although the automotive industry has caused the concentration of foundries in three or four of the principal Michigan cities—Detroit, of course, being the leader—such plants are to be found in almost every city of any size. Some of them give employment in hundreds of men; others, located in the smaller centers, employ only a few, but each in normal seasons, be its output large or small, finds a ready and constantly expanding market for its product.

Two of the largest malleable iron castings manufacturers in the world are located in Michigan. One is the Albion Malleable Iron Works, at Albion, which employs 1,200 men and turns out 250 tons of castings daily. The other is the Michigan Malleable Iron Company, Detroit, which employs a force of more than 1,200 men and produces in excess of 100 tons of castings every 24 hours.

Among the concerns producing aluminum and brass castings, the General Aluminum & Brass Manufacturing Company, Detroit, is one of the foremost, with an output of 25 tons daily. Another leader in the Aluminum Manufactures, Inc., Detroit, with a daily production of 65 tons. The Charles B. Bohn Foundry Company, Detroit, produces 15 tons of aluminum and 15 tons of brass castings daily.

Among the producers of steel castings, the Detroit Steel Castings Company stands well toward the top, with a daily capacity of 50 tons. This company employs about 500 men. The Wilson Foundry & Machine Company, at Pontiac, is a large producer of gray iron castings, turning out from 300 to 350 tons every twenty-four hours. Between 1,200 and 1,300 men are employed.

In addition to these, which do work on contract for corporations using castings, are the concerns with foundries for producing their own castings. Among the foremost in this category are those of the Ford, Packard and Cadillac motor car companies and the Michigan Stove Works (largest concern of its kind in the world) and Detroit and Peninsular Stove companies, all of Detroit.

Michigan is in a fortunate position as regards the supply of raw materials for the foundry industry by reason of its extensive iron and copper mines. Considerably more than half the ore consumed within the state is mined within its borders.

To begin at the beginning, founding is the art of making metal castings. It consists in preparing molds, mixing and melting the metals, pouring the metal into the molds and removing the castings from the molds and cleaning and preparing these castings for the machine shop.

A great many of the iron commodities with which we come in contact every day are produced in this manner. Automobile cylinders, flywheels and pistons, stoves, steam radiators, sewing machine frames, typewriter frames and a multitude of other articles are poured from the molten metal.

Studies of the most ancient and primitive ruins indicate that the metallurgy of copper, tin and iron was practiced in its crudest form in the earliest periods of man's development. On account of the ease with which it is worked, copper was probably the first to be used. Copper objects appear in the pre-historic remains of Egypt and bronze articles have been found which, according to the best authority, date from the Fourth Dynasty (from 3800 to 4700 B. C.); and the earliest of recorded history states that Tubal Cain (3875 B. C.) was a "master in every kind of bronze and iron work." Reliefs have been found dating as far back as 3700 B. C., showing that furnaces and bellows, however crude they may have been, were a part of the foundryman's equipment; and crucibles have been found among the ruins on the Sinai Peninsula.

However primitive they may have been, the methods employed by this "master" and his coworkers were the foundation of an industry which has always been and will always continue to be of prime importance in the commercial field. That this branch of industry should increase in size and importance in Michigan is a natural sequence of the extraordinary growth of the metal working industries in this state.

In the manufacture of modern machinery four classes of castings are employed, each having its individual physical properties. These are gray iron, copper and its alloys (including brass and bronze), aluminum and mild steel. By far the greater number of castings



COMBINATION MACHINE USED BY ATLAS FOUNDRY COMPANY, DETROIT, FOR MAKING MAXWELL TRANSMISSION CASES
At the extreme left the workmen are placing the flask on the machine. The next photo shows the mold being squeezed. In the third photograph is shown how the machine raises the mold from the pattern, and at the extreme right the workmen are removing the mold from the machine.

Digitized by Google

are made of gray iron—that is, iron which may be machined directly as it comes from the mold, without further heat treatment. This is due not only to the fact that gray iron is the most common and therefore the cheapest of all metals, but also because it is comparatively easy to machine. Brass or bronze are usually employed for the manufacture of parts which either have to come in contact with liquids, or for the making of parts which, because of their peculiar construction, would be easily broken if made of iron. Iron is rusted by water and literally rotted by oil, while the copper alloys are affected by neither; nor are they as brittle as iron.

The first element to be taken into consideration in the making of a casting is the pattern. This is a counterpart of the casting wanted and is usually made of wood, although if a large number of castings are to be made from the same pattern, it is often made of iron, brass or aluminum. The making of the more complicated patterns requires skillful workmanship, as allowances have to be made for the shrinkage of the different kinds of metals in cooling, the problem of setting cores has to be solved, etc.

The pattern having been made, the next step is to prepare the mold from it. Molds in which metal is cast may be made in different ways, but the results are always the same. The common method of forming these molds is to pack molding sand around a pattern of the same shape as the casting that is to be made. The pattern is then drawn from the sand, thus leaving an impression, or mold, in which the metal is cast.



"Pouring Off" in the Packard Foundry

Three Kinds of Sand Used

For the making of molds three different kinds of sand are employed—green sand, dry sand and loam. Green sand molding is the making of castings in molds which are composed entirely of sand in a damp state. Dry sand molding involves the making of castings in molds made of sand in a damp state, after which the sand is dried in an oven or otherwise, so as to make the mold solid and firm. Loam molding usually is done where very large castings are to be made, a mixture of loamy sand and other material being used to form the face of the mold, brickwork forming the supports. This form of mold also has to be thoroughly dried before the metal can be poured into it.

The green sand mold is most commonly used, as it involves the smallest amount of time and expense and is good enough for the usual forms of castings. The mold is formed in a frame, or box, made of wood or metal and having neither top nor bottom, and called a flask. It usually is made in two parts, the upper half being called the "cope" and the lower part the "drag." The "follow board" is the board on which the pattern is placed while the mold is being made, and the "bottom

(*Continued on Page* 12)

STRAIGHT LINE METHODS

ERNST & ERNST

—have installed Straight Line Methods of Accounting and Cost Finding in more than 1500 industrial plants. Each will testify to entire satisfaction in the service. The executives of each will emphasize the fact that Straight Line Methods assure them at all times exact knowledge in all departments of their business—factory and office, buying and selling, production, maintenance, overhead—and that they have gained from the service better organization, better system, larger profits.

The definite value of Straight Line Methods is due to the accounting skill and practical engineering experience of each member of our several System Staffs. Their intimate knowledge of the problems in business organization and management has been gained through their application of Straight Line Methods in varied lines, nation-wide in scope and over a period of many years. Our Central Clearing House and Research Department, devoted to acquiring the most authentic figures and methods, coordinates this knowledge and makes it available to individual needs; thus assuring a broad, comprehensive view-point, and one which is totally unbiased.

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK
PHILADELPHIA
BOSTON
PROVIDENCE
WASHINGTON

CHICAGO
MINNEAPOLIS
ST. PAUL
ST. LOUIS
KANSAS CITY

CLEVELAND
BUFFALO
PITTSBURGH

CINCINNATI
INDIANAPOLIS
TOLEDO
ATLANTA
RICHMOND

NEW ORLEANS
DALLAS
FORT WORTH
HOUSTON
DENVER

STRAIGHT LINE METHODS

Digitized by Google

(*Continued from Page 11*)

board" is the board on which it rests after being turned over. The first operation is to place the drag on a bottom board, then set the pattern as near the center of the board as possible. The drag is then filled with sand which is "rammed" or pounded down as solid as possible. The sand must fill the flask level with the top. Then the follow board is placed over the mold and it is turned over, which brings the pattern to the top. Fine, dry sand called "parting sand" is now sprinkled on the mold and the cope is set on. This is also filled with sand and rammed, more sand being added until the flask is full. A hole is made down through the sand in the cope with a "sprue pin," so that the metal can be poured into the mold. A number of fine holes are made down through the sand with a wire to serve as vents for the escape of gases when the metal is poured, and the cope is then lifted off.

If it is necessary that a recess or hollow space be left in the casting, a core must be used. A core is made of sand mixed with a "binder" of oil or molasses, shaped to the size and dimensions of the hole required, and baked so that it may be handled without breaking. The making of cores, while apparently quite simple, really requires a considerable amount of skill, with the result that this branch of foundry work has developed into a trade in itself. Cores of some regular shape, such as round, square, hexagonal, etc., may be made in core machines, which force the mixture through a tube of the required shape. Cores of irregular shapes and sizes are made by molding the core sand in a core box, which is usually a wooden box of the required shape and size. Long, slender or heavy cores which might otherwise be broken have iron rods molded into them to give them additional strength. Dry sand molds and large cores are dried or baked in ovens in which the temperature is from 300 to 400 degress Fahrenheit.



ROLL-OVER MACHINE IN PACKARD MOTOR CAR CO. FOUNDRY

This machine is used to make crank case castings. The photograph at the left shows the completed mold ready to be turned over. At the right the mold has been deposited on the floor and the machine table, together with the pattern, has been withdrawn. The machine is operated by compressed air, the workmen in the right hand picture being at the controlling device.

The cores are placed in position at the points where the holes or recesses are desired, and the flask is put together again. Then when the liquid metal is poured in through the gate in the cope, it fills the depression or mold left by the pattern and flows around the cores. The metal "sets" or becomes solid again very quickly, after which the cope is taken off, the casting is pulled out of the sand, the cores broken and shaken out of it and the casting left to cool.

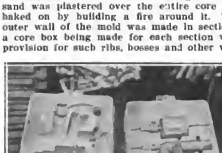
Although until very recently the making of molds has been done by hand, the last few years have seen the development of machines which perform some of the operations more or less perfectly. Some of these machines are constructed for "ramming" the sand, while others are used for drawing the pattern. They are called ramming machines or pattern-drawing machines accordingly, and machines which combine these operations are called combination machines. Such machines are especially well adapted for the production of castings that are to be produced in large quantities. No very definite line can be drawn between work that can be economically done on a molding machine and that which cannot. The kind of machine must also be considered in deciding whether a mold can be made economically by machine, as each machine has its own limitations. The vibrating type of machine known as "squeezer" rams the sand by squeezing the mold, but it cannot pack the sand beyond a certain depth. However, there is no limit to the depth of mold than can be jolt-rammed. Squeezers are suitable for molding flat articles, such as builders' hardware, stove-lids, wrenches, etc., while the jolt machine is used for making molds which are either too large or too deep to be handled successfully on a squeezer.

Some Installations

The Atlas Foundry Company, Detroit, uses a combination machine for making Maxwell transmission cases. This machine jolts, squeezes and strips or draws the pattern. The pattern plate in this case is fastened to the machine. The flask is put on and filled with sand, which is packed by jolting. As it settles down, more sand is added until the flask is full, after which an extra amount of sand is added, the squeezer head is brought forward and the mold is finally packed by squeezing. The mold now being completed, the squeezer head is pushed back and the mold is raised automatically from the pattern. The mold is then removed from the machine, which is then returned to the original position. The whole operation takes less than a minute. At the present time six men and one machine are making 200 of these molds a day. The machine operates by compressed air at 80 pounds pressure.

A "roll-over" machine is used by the Packard Motor Car Company for making crank case molds. In this case also, the pattern board is clamped to the machine table, which serves as a follow board for the flask. The flask is set on to the pattern board and filled with sand, which is tamped by jolting. When the flask is full, a bottom board is clamped on and the machine table automatically turned over, depositing the flask on the floor at the opposite side of the machine. The table, together with the pattern, is then raised from the mold and rolled back to its original position. The Packard company makes 60 of these molds daily on one machine.

The process of making a cast iron condenser casting, as was recently done by the Russel Wheel & Foundry Company, Detroit, is a good example of loam molding. As is usual in making a casting which is wholly or partly of circular shape, the first operation was to set up a "sweep" or gauge, with which to determine the outline of the casting. A brick wall was then laid for the core or inner wall of the mold, the wall being built to a true circle by swinging the sweep arm around as the bricks were laid. Additional brick frame work was then built, following out the design on the casting, after which a coating of loam sand was plastered over the entire core and baked on by building a fire around it. The outer wall of the mold was made in sections, a core box being made for each section with provision for such ribs, bosses and other variations as occurred in the outer surface of that section of the casting. These sections were made of sharp or dry sand, mixed with oil for a binder, and containing iron rods to make them more solid. After forming in the core boxes, the sections were baked to make them solid so that they could be handled. Then these sections were put together, making a solid wall eight inches thick around the core, with just enough space between the core and the wall for the thickness of the casting, allowance being made, of course, for shrinkage. A core plate, or a huge plate made with an iron framework faced with loam sand and baked, was then put over the top and the mold was complete. The iron was poured into two gates at the same time, both being at the bottom of the mold and on opposite sides. Where a mold is gated at the bottom, the metal is poured from the top, but through a separate channel connecting with the gate at the bottom of the mold, so that the metal will run into the mold on an angle. Deep cylinders and other castings of this type usually are gated in this manner, because if the metal were poured in through top gates, it would splash at the bottom and cut through the mold.



COMPLETED MOLD FOR CARBURETOR CASTING

This photograph shows the mold open, with the core set in place. In the foreground is a finished casting.

Cupolas

The furnace generally used for melting the iron is known as a cupola, and consists of an iron shell lined with firebrick. Cupolas usually are made from three to seven feet in diameter inside the lining, although cupolas as large as ten feet in diameter are in use in some of the larger foundries. Near the top of the cupola is the charging gallery, where the fuel and iron are loaded in, and at the bottom is the tap hole, by which the molten iron and slag are run off. The amount of heat required to melt the iron is obtained by forcing a blast of air in through a row of openings situated a short distance above the bottom of the cupola.

The operation of the cupola is begun by lighting a bed of coke and coal, more fuel being added as rapidly as possible. When the fire is up to the level of the afholes, a blast of air is forced in and the temperature rises quickly. Then the charging is begun, iron and coke being added in alternate layers. At first the tap is left open, but as soon as the metal

(*Continued on Page 37*)

Digitized by Google

REES JACK
DOUBLE WORM GEAR DRIVE



Interior View of Double Worm Gear Drive

They are
Powerful—Safe—Speedy

REES JACKS, being constructed on the screw principle, are safe, because the teeth are constantly in mesh—efficient, because they move the heaviest loads with minimum effort.



Truck Model

THE CHAS. A. STRELINGER CO.
Machinery—Tools—Shop Supplies
"EVERYTHING FOR THE SHOP"
149-165 E. Larned St. DETROIT Cadillac 7080

Rules to Follow in Filing Tax Returns

Recent Treasury Decisions on Income Reports

RECENT Treasury decisions affect materially returns of income taxes which will be made by business men for the year 1920. Among the more important is the decision in relation to valuations of inventories, in accordance with which a taxpayer may, regardless of his past practice, adopt the basis of "cost or market," whichever is lower," for his 1920 inventory. In his return the taxpayer must state that it represents a change from his former basis. Thereafter, changes can be made only after permission is obtained from the Commissioner of Internal Revenue.

In the case of a merchant, "cost" means the invoice price less trade or other discounts, excepting strictly cash discounts approximating a fair rate of interest, which may be deducted or not at the option of the taxpayer, provided a consistent course is followed. To the net invoice price should be added the cost of transportation and other necessary charges incurred in acquiring possession of the goods.

In the case of manufacturer, "cost" means the cost of raw materials and supplies, expenditures for labor and indirect costs incident to production, including a reasonable proportion of management expenses, but not including any cost of selling or securing return on capital.

"Market" means the current bid price prevailing at the date of the inventory for the particular merchandise. The burden of proof as to the correctness of the price rests upon the taxpayer in each case. Where no open market quotations are available, the taxpayer must use such evidence of a fair market price at the dates nearest the inventory as may be available, such as specific transactions, or compensation paid for cancellation of contracts or purchase commitments. Where, because of abnormal conditions, the taxpayer has regularly sold such merchandise at prices lower than the market bid price, the inventory may be valued at such prices. The correctness of the prices will be determined by reference to the actual sales of the taxpayer for a reasonable period before and after the date of inventory. Prices which vary materially from the actual prices so ascertained will not be accepted as reflecting the market. In such instances the penalties prescribed for filing false and fraudulent returns—a fine of not more than $10,000 or one year's imprisonment or both, together with the cost of prosecution and an added assessment of 50 per cent of the tax—may be asserted.

The value of each item in the inventory may be measured by cost or market, whichever is lower. An entire stock may not be inventoried at cost and also at market price, and the lower of the two inventories used. Inventories on whatever basis taken will be subject to investigation by the Commissioner of Internal Revenue, and the taxpayer must satisfy the Commissioner of the correctness of the prices adopted. He must be prepared to show both the cost and the market price of each article included in the inventory.

Business enterprises for the purposes of the income tax may be divided into three classes: those engaged in making, those engaged in producing, and those engaged in trading. To these may be added another class which neither produce, make nor trade, but render what may be designated as business service, such as transportation, storage, livery and garage service, in which case the gross income would be the total amount received or earned.

In mercantile accounting the gross profit for a given period is obtained from a group of accounts known as trading accounts, consisting of inventory, purchases, sales, freight, returns and allowances, and in certain cases discount and freight charges outward. Discount should be charged or credited to the distribution accounts of the business. Freight outward should be considered a selling expense.

There are three elements which enter into the cost of a manufactured product—cost of material, cost of labor and manufacturing expense, sometimes called overhead. The first and second elements go to make up the prime cost of manufacturing. Gross income in such business means total sales less the prime cost of goods sold. Treasury regulations provide that in determining gross income, subtractions should not be made for depreciation, depletion, selling expenses or losses, or for items not ordinarily used in computing the cost of goods sold.

The Revenue Act provides for the deduction of business expenses. Among the items to be treated as business expenses are material, labor, supplies and repairs in the case of a manufacturer, while a merchant would include his purchase of goods bought for resale. In either case the amount to be taken as a deduction for the year 1920 should be determined by

(*Continued on Page 38*)

Digitized by Google

Michigan and the Open Shop

Employers Are Not Opposed to Unionism As Such, But Are Insisting Upon the Freedom of Contract

By F. W. HERSEY

SINCE the establishment of the United States Railroad Administration there has been in existence a National Adjustment Board, located in Washington, where all disputes arising in the relationships of railroad owners and rail workers gravitate for settlement. Months ago the United States Railroad Administration went out of existence, but the National Adjustment Board continues to flourish. The railroad employer has but nominal jurisdiction over his employes.

If some breach of discipline or some act of gross carelessness justifies the discharge of a worker, and that worker happens to be a member of a railroad brotherhood, as practically all of them are, it is more than likely that the local to which the discharged worker belongs will seek to have the case brought before the National Adjustment Board. If the local is successful in this effort, the railroad concerned must have its witnesses in Washington for the hearing on the case.

The Bone of Contention

The establishment of the National Adjustment Board was the result of an agreement between the railroad brotherhoods and Director General McAdoo, during the war period, which provided that all grievances of the rail workers should be given a hearing and just treatment accorded. The Government fostered such an agreement simply to prevent strikes and keep the carrier system in operation at a time when disaffections would have been serious.

Now that the war is over, the railroads are back in the control of their owners, and as relations between employer and employe in this country have been always regarded as of no direct concern to the state or national governments except in great emergency, the railroads, naturally, desire that the National Adjustment Board follow the Railroad Administration into oblivion.

On the other hand, the railroad brotherhoods, realizing what a powerful weapon the National Adjustment Board is, have set their machinery to work to keep this board, or a similar organization, in existence. The new Transportation Act plays into their hands inasmuch as it provides that such national agreements may be made if desired, but are not compulsory.

The drafting of such an agreement, or the establishment of a national adjustment board, assuming the present one was eliminated, would be departing from all traditions in American industrial life. Manufacturers and railroad men throughout the country are opposed to any such agreement as well as to the establishment of any national adjustment board.

Lovett at Chicago Conference

For the purpose of getting the views of industry at large on the subject in concrete form, representatives of the state manufacturers' associations met in Chicago a week or so ago for a conference. At this meeting not only the plan of the brotherhoods for national jurisdiction over rail labor disputes, but also the problem of the open shop and immigration restriction were discussed. Three resolutions were adopted.

One was in the form of a protest against the continuation of the National Adjustment Board or the formulation of any agreements which would remove the control of labor policies from the jurisdiction of railroad employers. The second expressed the opinion of the manufacturers that closer supervision of immigration should be conducted and that the national legislature should appropriate sufficient money to make such supervision possible. The manufacturers recognized that with the present limited foreign consul organizations a proper supervision of immigration at its source was impossible. The third resolution was to the effect that manufacturers would encourage freedom from contract between workers and employers. There was nothing in the resolution indicating opposition to unionism.

John L. Lovett, general manager of the Michigan Manufacturers' Association, attended the conference as spokesman for the manufacturers of this state, who are advocates of open shop conditions without being opposed to labor organizations. Mr. Lovett discussed in a general way the concensus of opinion among association members concerning the open shop.

"This seems a queer time to talk about closed or open shop, or any of the other problems of the relationship of employer and employe," he said. "There is not a great deal of business for anybody, and far from enough work. On the other hand, what better time to give thought to labor and every other problem which has affected industry in the past and will have some influence in the future.

"The talk of making Detroit a closed shop city, and eventually all of Michigan is brave talk. Any talk of eliminating present closed shops and forcing the open shop into general acceptance is equally brave—and equally futile. There always will be open shops and closed shops, but it is not the intention of the manufacturers of this state to stand quietly by and allow present day union labor leaders to turn this state into one huge closed shop.

Want Freedom of Contract

"The stand our association takes is that the freedom of contract shall remain inviolate; that the employer shall have the right to employ workers and pay them according to their ability to produce, regardless of what lodge, church or union they may belong to, and that the workers themselves shall have the right to work where they please, how they please and under what terms they please, and that they shall be unmolested by organization officials.

"I fail to see how closed shop conditions could improve the status of workers in this state. The percentage of employes organized is very small, yet despite this fact it is widely known that the highest wages and best conditions anywhere in this country obtain in Michigan. Labor has had no small part in the rapid industrial development of the state, but unionism has been a negligible factor.

"Men have flocked here from all over the country, attracted by the high wages and good working conditions, which would indicate that the open shop policy, which prevails, is not so objectionable to the workers. In fact, manufacturers are convinced that many labor organization activities of the last year or so have not been so much the expression of the will of the workers as the evidence of the autocracy of questionable leadership.

"I am one of those who believe implicitly in the integrity of the majority of workingmen and women. I believe they still take pride in the productive ability in the quality of their work, and have an ambition to get ahead. When we talk about the employers of Michigan we are not discussing men who have inherited industrial leadership without a personal effort in its development. Most of the men we recognize as employers of labor in this state came up from the works.

"Do you realize that nine-tenths of the pattern shops and machine shops in Michigan are owned by men who graduated from the bench and machine by their own efforts? It is a fact that numbered among present employers of labor there are not a few former union men and quite a number of former union officials, and I notice they operate open shops.

The Bricklayer's Story

"While I was in Grand Rapids recently I listened to the story of a veteran bricklayer, one of those men who made bricklaying more than a day's work for a day's pay. To him it was almost an art. He achieved and held the title of champion bricklayer of the state, if not of the country. If I were to mention his name almost every building contractor of long standing would instantly recognize it. This

(*Continued on Page* 40)

For Filling a Tank

NOW that the railroads have been restored to control of their own properties, it is interesting to learn of incidents close to home in which the unions and their agents during Federal control worked hardship and unnecessary expense on the roads.

An incident is reported which concerns a man who owned a few acres of land close to a water tank at a point on the Pere Marquette between Saginaw and Ludington. His duties for the railroad were merely to start a gasoline engine about 10 in the morning, let it run 20 minutes and then shut it off when the tank was full of water. Perhaps he would be obliged to start the engine again after dinner in the evening, but, all told, the actual time he spent on the job was trifling. Yet the railroad paid him $60 a month and he was satisfied, for he could tend his small farm notwithstanding.

One day along came a government inspector, appointed by McAdoo but really selected by W. G. Lee. After learning that the pump tender's duties involved some work at 10 a. m., and again about 7 p. m., he was aghast, and decided that he should have pay for regular eight hours' work, with one hour overtime for working after 6 p. m. Result: The farmer afterward received $122.83 a month instead of $60 for the same work, and about $1,300 back pay.

Digitized by Google

Bills Begin to Put in Appearance at Lansing

The state legislature is beginning to get down to business. The first of the long list of bills are making their appearance. A step toward carrying out the centralized government program of Gov. Groesbeck was taken last week when two bills were introduced providing for a central administrative board and transferring to the auditor general nearly all of the state auditing.

Rep. William O. Lee, Port Huron, offered a bill to provide punishment for house or apartment owners who refuse to rent their property to families with children—a fine of $500 or 90 days in jail, or both. Senator Herbert F. Baker wants an investigation of the Patriotic Fund as handled by the Community Council Commission. A house bill calls for the repeal of the law that created the commission.

Rep. A. B. Glaspie, Oakland county, has introduced a resolution urging the Michigan delegation in Congress to seek federal legislation returning power over the railroads to the state.

Because of the colder climate and longer winter, with less time in which to use automobiles, Rep. Robert B. MacDonald, Houghton, seeks to reduce the automobile license to three-fourths of the rate, for owners north of Mason, Lake, Osceola, Clare, Gladwin and Arenac. Among the other bills and resolutions introduced last week are: A bill making it a felony to steal automobiles, with a maximum penalty of 25 years in state prison for each offense; resolution asking Congress to repeal the Esch-Cummings railroad bill, and a bill permitting incorporated villages to bond to exceed 5 per cent of their assessed valuation.

Rep. Joseph E. Watson, Branch county, introduced a bill to amend the banking law whereby smaller state banks will be given authority to act in a fiduciary capacity such as administrator, executor, guardian or trustee of an estate, or any other trust capacity. The bill empowers the banking commissioner to grant such jurisdiction, and, if dissatisfied, the banks may appeal to a board composed of the governor, auditor general and state treasurer for a final decision. The stockholders would be held liable to double the extent of their capital stock. The big trust companies of the state may oppose the proposal.

A CORRECTION

On page 38 of our issue of January 15 it was stated that the Detroit branch of the Crucible Steel Company of America had moved from 1326 Woodbridge street east to 1437-59 Franklin street. This was in error, the business which made the change in location being the Atlas Crucible Steel Company, which has its headquarters in Dunkirk, N. Y., and manufactures high speed and carbon and alloy steels, and drill rod, etc. The purchase of the Franklin street property will enable the Atlas company to have twice its present warehouse space, necessary in the proper handling of a rapidly increasing business. The removal from the old to the new quarters will be accomplished by February 1, after which all business will be conducted from the new address.

LINCOLN HIGHWAY OFFICIAL RESIGNS

F. A. Selberling, president of the Lincoln Highway Association, has resigned and is succeeded by J. Newton Gunn, president of the United States Tire Company. G. S. Hoag is made field secretary. Paul H. Deming, Detroit, and H. F. Campbell, Indianapolis, resigned as directors. W. O. Rutherford, Akron, O., was elected a director.

HAYNES CO. REPORTS SALES

The Haynes Automobile Company, Kokomo, Ind., reports that at the New York show contracts for 4,000 cars were made with dealers, distributors and customers.



Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR.

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product Glass Plants Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

Detroit Notes Improvement

But Ford and Dodge Inactivity Remains Big Factor; Wage Question is a Serious One for the Employers

By MARC BRAUN

IMPROVEMENT in the labor and manufacturing situation in Detroit as well as elsewhere in the state has been recorded during the last week, but business men say there cannot be very much of an advance as long as the Ford Motor Company and Dodge Brothers remain closed.

"More than 60,000 of the probable 120,000 to 140,000 men now idle in the city are Ford and Dodge workers," said a city official. "Of the remaining unemployed it is certain that about half will be able to return to work, not necessarily the next day, but a few days after Ford and Dodge resume. There are several establishments employing more than 1,000 men each which have been practically closed ever since Ford closed, and which have let it be known that they will reopen when Ford goes back to work."

It may be added that outside Detroit, in other Michigan cities, there are many people idle, directly due to the fact that the Ford Motor Company is closed or because the company gave stop orders in December when it closed. It is said that quite a number of concerns are more or less in the same situation owing to the Dodge shut-down.

During the week ended January 22, some 1,500 men were added to the working forces of the 79 concerns reporting labor conditions to the Employers' Association of Detroit. At the end of the week the records showed a total of 34,466 men employed in these plants, 17,013 working at the rate of 34 hours a week. It is quite likely that during the present week several hundred more men were called back—perhaps even more than last week, but a number of works managers stated that while they were adding men, they were going about it deliberately.

Quite a number of the automotive factories also made it known that beginning with the week of January 31 they expected to put on men, and that if the Chicago show, the first week of February, gave fair results, they probably would bring their personnel up to above 50 per cent of normal. One concern, the Detroit Pressed Steel Company, intends to reopen February 1 with 500 to 600 men. This is the most important announcement among several.

A matter which is being more freely discussed now than in some weeks past is that of wages at the Ford and other automobile plants. Officially nothing on the subject has been given out, but in various quarters it has been heard that the wage matter has been gone over carefully by Ford officials. It is said in labor circles that the Ford company is not likely to pay its men the minimum of $7 a day, as was the case last year, when the plant again starts operations but that $5 a day will be the minimum scale. However, as stated above, this information does not come from Ford officials.

A labor leader said a few days ago that he had been informed that very recently some of the principal employers of the city and the employment managers of their plants held a meeting at one of the clubs and freely discussed the wage question. He said that it was the opinion of the majority present that there was no likelihood of great improvement in the industrial situation until the war-time wages had been cut down to something near the pre-war level. Reductions mentioned, he added, ranged from 10 to 20 per cent and in some cases 25 per cent. It is known that already wages have been considerably reduced in some establishments, but here again it was said that whatever action the Ford and Dodge officials take will have a deciding effect upon all other employers.

This labor leader said that a great many working men realize that war-time wages cannot consistently prevail now and they also know that while living costs have not yet decreased as much as desirable, there is a noticeable decline, which is bound to continue. The one big item which has least decreased thus far is rent. The most noticeable reductions were said to be in the prices of clothing, shoes, shirts and similar necessities. Prices in many restaurants are down to pre-war rates; prices of food products bought on the markets are also much lower than what they were.

RECK MANAGES SCHWARZE ELECTRIC

P. C. Reck, superintendent of the Schwarze Electric Company, Adrian, has been appointed acting general manager to take the place of D. E. Sampson, who has resigned but who remains a stockholder and a member of the board of directors. It has been announced by Mr. Reck that the general policy of the company will be continued. The plant has reopened with about 25 per cent of its normal force.

FENN ESCAPES DEPRESSION

The Fenn Manufacturing Company, Charlotte, which makes scythe snaths, has not felt the effects of the general business depression. As a matter of fact, its officials state that the plant has been and is running with a full force and that no cancellations have been received. Domestic business of the company continues to expand and the export part is increasing. Recently an order was received from England, on which a carload with 830 dozen scythe snaths has been shipped.

HARBOR COMMISSION PROPOSED

For the port development committee of the Detroit Board of Commerce Capt. William H. Adams has drafted a recommendation that a harbor commission be established for Detroit, Wyandotte, Ecorse, Trenton, River Rouge and Oakwood by legislative act, this commission to plan and supervise the condemnation of land, construction of wharves and the collection of harbor taxes and dues. The city plan commission has a counter proposition providing for the appointment of a Detroit harbor commission to be appointed by the city council.

MASON CONTRACTORS ELECT

The Mason Contractors Association of Detroit has elected the following officers for 1921: A. H. Aldinger, president; T. W. Widenmann, vice-president, and W. H. Whittingham, treasurer. R. A. MacMullan has been reappointed secretary.

M. P. A. TOUR PLAN APPROVED

Directors of the Michigan Pikes Association have approved Tour Manager W. D. Edenburn's plan for the "Around Lake Superior" annual run, to start in July and continue 15 days.

FURNITURE SHOW SALES

It is reported from Grand Rapids that during the recent annual January furniture show approximately $1,730,000 worth of furniture was sold, or in other words that each of the 1,730 buyers ordered an average of $1,000 worth of goods.

Digitized by Google

Saginaw Automotive Plants Getting Ready

The various units of the General Motors Corporation in Saginaw are gradually coming back into production. Four hundred men are at work at the engine plant—about one-fourth of normal; about one-fifth of normal, 100 men, are at the malleable plant; the foundry has 10 to 15 per cent of its usual force, while the steering gear plant, the Jacox, is not yet in operation. Its opening may be delayed until the middle of February.

There seems to be no doubt that the future looks good to the GMC, inasmuch as it has just been made known that the corporation has purchased an entire city block—the one bounded by Hamilton, Niagara, Winton and Throop streets—near the Jacox plant. While no definite announcement has been made as to what will be done with this property, it is the opinion in the city that upon it will be located an addition to the Jacox factory.

However, it is not only the GMC which is looking up. The Erdman-Guider Company, closed body builder, which has also a plant in Detroit, is making preparations for an immediate increase in production, this being the direct result of the New York show. A. R. Guider while at the show wired his associates in Saginaw as follows:

"The New York automobile show has been a real success and the results exceed those anticipated by the most optimistic exhibitors. Sales have been better than at previous shows and the general feeling voiced at the meeting of the National Automobile Chamber of Commerce by the vice-president of the Guaranty Trust Company is that the depression in the automobile industry is rapidly passing.

"The manufacturers for whom Erdman-Guider Company build closed bodies, including the Cadillac, export Paige, Saxon and Columbia, report unusually good business, and we expect immediate orders to increase our production under present contracts which we have with those companies. The Saxon company has closed a new contract for 1,000 cars in one state alone, and reports that the closed type of car, the bodies of which are manufactured at our Saginaw plant, aroused much complimentary interest at the show.

"The company has received several inquiries to close on new contracts, deliveries to commence at once. And we anticipate that one of these contracts will be opened next week."

When running with a full force the company employs up to 400 men.

AINSWORTH'S NEW PRODUCT

The Ainsworth Manufacturing Company, Detroit, has brought out a special amber-colored visor for windshields, which protects the driver from the glare of the sun but does not interfere with clear vision.

STEEL TREATERS MEET

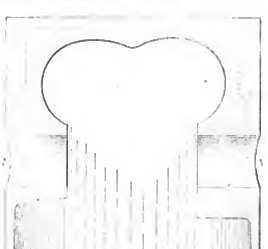
The January meeting of the Detroit chapter, American Society of Steel Treating, was held Thursday evening of this week at the Board of Commerce building. A. F. MacFarland, metallurgical engineer of the Vanadium Alloy Steel Company, presented an interesting paper captioned "Some Notes on the Heat Treatment and Structural Characteristics of High Speed Steel."

LA BELLE IRON PICKING UP

The La Belle Iron Works, Steubenville, O., is now running 25 per cent of normal and is expected to increase the run steadily, the outlook being considered favorable.

HOLLAND ENGINE PLANT SOLD

The plant of the Holland Engine Company has been sold to a company incorporated at $50,000. This property has been in a receiver's hands.



MOTOR PISTONS

Automatically Drilled—Two-at-a-Time

Piston-drilling practice at one of the leading automobile plants involves the use of "NEW BRITAIN" Multiple-Spindle Automatic Chucking Machines of the "Doubled" type. Many advantages are the result.

Production—210 pieces per hour, down time averaging less than five per cent.
Drilling both holes simultaneously means *double* drill press production; doing two pistons at once increases this to *four times*, and the provision of idle chucks, enabling work to be removed and replaced while drilling is in progress, still further enhances production by the "New Britain" method to *five or six times* that of the drill press.

Skilled labor is not required for the successful and efficient operation of these machines. There are no heavy jigs or fixtures to handle, such as are necessary where work is done in a drill press.

The drills operate horizontally and readily clear themselves of chips; whereas if operated vertically there is a tendency to clog and the tool becomes dull quite quickly.
The turret fixture which holds the pistons is fitted with guide bushings which insure accurate alignment of the drilled holes whether drill spindles are in absolute alignment or not.

Machines may also be fitted to drill and ream at one setting. If you make pistons you'll want to know more about the "New Britain." Write today.

The New Britain Machine Co., New Britain, Conn., U.S.A.

4612 Woodward Avenue DETROIT Phone Glendale 1354



NEW BRITAIN (NB) AUTOMATICS

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

SOME MOTOR SALES INCREASES

The Buick Motor Company, of New York, has announced that during October, November and December, 1920, it delivered a total of 2,538 Buicks, valued at $5,234,024, which breaks all its former sales records from October to January. The Reading Automobile Company, Reading, Pa., which sells the Buick and Dodge cars, states that during November and December, 1920, more of these cars were delivered than during any corresponding period in the twenty-two years of existence of the company. Furthermore, the gain for December was 300 per cent over December, 1919.

NASH MOTORS PROFITS

For 1920 the Nash Motors Company, Kenosha, Wis., showed a profit of $7,007,047 after charges, taxes and dividends of $315,000 on preferred stock were paid, which represents $122.49 a share on the 54,550 shares, as compared with $93.06 in 1919.

KALAMAZOO'S SHOW A SUCCESS

The ninth annual Kalamazoo automobile show, which ended last Saturday, was the biggest and best this city ever had. It resulted in many sales and an exceedingly large number of future buyers' names being put down on the salesmen's notebooks. Cars shown were Dodge, Cadillac, Chevrolet, Overland, Roamer, Reo, Scripps-Booth, Buick, Mitchell, Grant, Packard, Paige, Marmon, Studebaker, Willys-Knight, Hupmobile, Essex, Hudson, Nash, Auburn, Oakland, Oldsmobile, Franklin and Ford.

Nineteen-twenty was a good year, if not a record breaker, with many of the dealers. Otis H. Boylan, of the Kalamazoo Implement Company, said that Reo passenger cars and speedwagons aggregating more than $450,000 in value were sold. Thomas M. Orrell, sold, gross, $500,000 of Oakland, Franklin and Kalamazoo vehicles. The Kalamazoo Auto Sales Company, which handles Overland and Willys-Knight, reported sales totaling $1,200,000. F. N. Milliman, of the Milliman-Curtis Company, says it was the best year in the sale of Mitchell and Scripps-Booth cars he ever had.

CHALMERS PLANT HIRING MEN

Within the week the Maxwell-Chalmers corporation has added 450 men to the working force of 1,500. During the week of January 17 the total number of men called back to Detroit plants was 1,364.

JOINING DURANT MOTORS

According to reports from Los Angeles, R. C. Durant, who has represented Chevrolet, Scripps-Booth and Sheridan interests on the Pacific coast, has resigned as vice-president and sales manager of the Chevrolet Motor Company of California and will join the Durant Motors. The report also includes C. M. Steves and Capt. A. G. Waddell as new additions to the Durant organization.

REPUBLIC RUBBER PLANT AT WORK

The plant of the Republic Rubber Corporation, Youngstown, O., has resumed production.

DEFIANCE TRUCK'S NEW OFFICERS

The Defiance Motor Truck Company, Defiance, O., has elected the following officers: C. H. Kettenring, president; J. C. Ayers, vice-president and general manager; Charles Behringer, vice-president and works manager; H. R. Morse, secretary; J. F. Robertson, treasurer. The foregoing were also elected to the board of directors. Frank W. Warrington, formerly assistant sales manager of the Denby Motor Truck Company, who is now general sales manager of this company, was elected a director.

DUPLEX TRUCK ADDS DIRECTORS

Stockholders of the Duplex Truck Company, Lansing, have voted to amend the by-laws to increase the number of directors. Charles W. Nichols and Bert S. Gier have been added.

LANSING WANTS MOTOR SHOW

Because of the interest shown in the national shows and the importance of the industry to Lansing, a movement has been launched there to give an annual automotive exhibition. Both manufacturers and distributors are interested in the proposal.

OLDS MOTOR WORKS GETS ORDERS

From California distributors the Olds Motor Works, Lansing, has received orders for 600 cars and may be obliged to increase the plant's working force.

GRAND RAPIDS TIRE PLANT OPENED

The plant of the Grand Rapids Tire & Rubber Company, Grand Rapids, has been reopened with 400 men at work. L. A. Brown has been elected president of the company.

CADILLAC TO HOLD A SHOW

The Cadillac Automobile Association, Cadillac, at its annual meeting a few days ago decided to hold an automobile show in March, in the MacDonald Auto Sales Company's building.

OVERLAND PROMOTES CULVER

E. N. Culver, 10 years with Willys-Overland, Inc., has been appointed assistant sales manager. Formerly he was sales director of the southern division.

FORD DENIES COAST REPORT

The news published in California that the Ford Motor Company would establish an assembling plant in San Jose is erroneous. Officials of the company say that no building project has been planned in that city and that the report probably concerns a show room and service station to be erected by the local Ford distributor.

PAIGE-DETROIT ADDING TO FORCE

Since the plant of the Paige-Detroit Motor Car Company was reopened January 3 with 100 men, the working force has been gradually increased to 830 and about 40 cars a day are being produced. Orders on hand show an excess over normal of about $2,000,000.

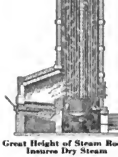
LESTER LEAVES PACKARD

C. R. Lester, technical service manager of the Packard Motor Car Company, and recognized as an authority on technical service in the motor industry, has resigned.

DAIL SALES 50% LARGER

The Dail Steel Products Company, Lansing, reports that during the last year sales have increased 50 per cent. The plant has been operating on full schedule and has not laid off an employe who has been with the company six months or more. Officers elected are: President and general manager, Ernest I. Dail; Secretary, E. W. Goodnow; treasurer, Frank N. Arbaugh. These, with A. C. Stebbins and R. M. Potter, compose the directors.

WICKES BOILERS
Vertical Water Tube Type



Great Height of Steam Room Insures Dry Steam
Ask for Bulletins:
Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler Saving Coal in Steam Power Plants.
THE WICKES BOILER CO.
SAGINAW, MICHIGAN
Michigan Sales Office:
1116 Penobscot Bldg. - DETROIT, MICH.

SPRUNK
Engraving Co.
2C Marquette Bldg.
MAIN 1491
EXCEPTIONAL SERVICE IN ENGRAVINGS AND ART WORK

Digitized by Google

Wills Production Starts At Marysville Factory

The period of preparation and testing being now a matter of history, C. H. Wills & Company, Marysville, have made their first public announcement that the new Wills Sainte Claire car is now being produced. While the output at present is limited, it will be steadily increasd so that sales will be in progress by the beginning of March. The prime object just now is to provide all the cars needed by the six distributors which thus far have been appointed, and which are located in New York, Boston, Philadelphia, Chicago, San Francisco and Los Angeles.

As was announced in this publication in its issue of October 2, 1920, the Wills motor has eight cylinders and is of the V-type, the cylinders being set at an angle of 60 degrees. The valves and camshafts are of overhead type of construction and the camshafts are driven by means of spiral bevel gears, no chains being used. Ball bearings are used throughout. The car, which has a wheelbase of 121 inches, weighs approximately 3,000 pounds, and while the sales price has not been finally determined, it is said that it is likely to be around $3,000. The wheels are special steel disc design and are fitted with 32 by 4½-inch cord tires.

Probably the principal feature of this newcomer in the American automobile market is the fact that a special steel, known as Molybdenum, is used in its construction, and that this new steel was developed by Mr. Wills. Unless we are mistaken, Mr. Wills has been granted patents relating to his Molybdenum steel. The claim is made that the new alloy is stronger than other steels and makes possible the construction of lighter parts than with the ordinary alloys. It is also said that through its use vibration is greatly reduced.

In designing the Wills Sainte Claire, Mr. Wills not only brought out a car which embodies his own ideas as to what a fine automobile should be, but he has combined in it some of the fine points of the best known cars made.

Judging from the fact that some 4,000 automobile dealers have applied for the agency or distribution rights in their respective territories, it is evident that the new machine created considerable interest even long before it was in bine print. That is due to the fact that Mr. Wills is known in the automobile trade and industry as the man who put the Ford on the map mechanically. It was he who designed the now famous Ford Model T. He was identified in an executive capacity with the Ford Motor Company from 1903 to 1919, being latterly chief engineer.

The complete roster of officials of C. H. Wills & Company is as follows: C. Harold Wills, president; John R. Lee, vice-president; Kirkland B. Alexander, vice-president; Charles Morgans, vice-president; Ferris D. Stone, secretary; Frank P. Book, treasurer; George S. Anderson, assistant secretary-treasurer. It may also be of interest to state that the financial institutions interested in the company are all Boston firms, namely, the National Shawnut Bank, Kidder, Peabody & Company and F. S. Moseley & Company.

The plant has been under construction for more than a year and the working force has been gradually increased. This week marks the beginning of the real production activities. Fifteen hundred men have gone to work.

STAMPING DIRECTORATE ENLARGED

The Lansing Stamping & Tool Company has increased the directors from five to seven. They are Charles Lawrence, G. L. Robinson, F. M. Odel, G. F. Conway, E. T. Conway, K. H. Shultes and William Kerns. The officers re-elected are: President, Charles Lawrence; vice-president and general manager, G. F. Conway; secretary and treasurer, F. M. Odel.



W & S No. 4 Universal Turret Lathe equipped to finish a Cast Iron Pulley

W & S Service

From blue prints or your samples, if you desire, we suggest methods of doing your work and estimate the time and cost of doing it. If your work can be done to better advantage on machines other than our turret lathes, we tell you what we think will do your work best. We have had forty years' experience making and tooling turret lathes and in that time have developed a very excellent Engineering Department to study modern production methods. The Engineers in this department can advise you about all kinds of modern machine equipments.

We beg you to avail yourselves of our facilities. Sending your blue prints and samples for estimate does not obligate you to buy, unless it is your wish to do so.

World's Largest Manufacturer of Turret Lathes.

The Warner & Swasey Company

CLEVELAND, U. S. A.

Detroit Office—Ford Building
Chicago Office—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Detroit—Federal Judges Arthur J. Tuttle, Detroit; John M. Killits, Toledo, and A. C. Denison, Cincinnati Court of Appeals, have ruled that the 3-cent railroad fare in Michigan intra-state traffic shall stand, and have issued a permanent injunction restraining the Michigan Public Utilities Commission from interfering with its enforcement. The judges ruled that during the war state authority was suspended and during the "twilight period" between war and peace war measures must remain in force.

Lansing—Hearings for the purpose of fixing freight rates on intra-state traffic will begin before the Michigan Public Utilities Commission February 1, while the decision as to the respective authority of the state and interstate commissions will be left to the courts. This order issued to all railroads seems to be the result of the failure of the railroads, traffic organizations and sand and gravel concerns to reach a satisfactory agreement. Another order fixes February 2 as the date for the hearing on rates for sand and gravel, to be followed by hearings on other commodities.

Philadelphia—As a protection for ticket agents and the public the Pennsylvania Railroad has ordered the fares printed on the faces of all tickets.

Michigan City, Ind.—At the annual meeting of the Graham & Morton Transportation Company J. S. Morton was re-elected president. Nathaniel Robbins, who last year bought a controlling interest, is now vice-president; Hunter S. Robbins, secretary, and A. Reichlem, treasurer and assistant secretary. The first three named officers and Charles F. Delbridge, Detroit, and W. H. Morton, Benton Harbor, constitute the board of directors.

Lansing—According to W. K. Andrews, Pere Marquette freight agent, the yards in Lansing may be enlarged and a warehouse and office built in the near future. Plans for these were postponed on account of the dullness in business. Track extensions have been built and more are proposed. Many new cars and several engines have been added to the service. The carloads of automobiles and accessories are increasing of late, and among the firms which have contracted for shipping are the Ideal Engine and Capital casting companies.

Bay City—The Michigan Railway Company has been notified by the secretary of the Interstate Commerce Commission that testimony in the case of the interurban lines vs. Pere Marquette Railway, and others will be taken before Examiner Howell, of the Commission, at a hearing to be held in the Board of Commerce rooms, Detroit, at 10 o'clock on the morning of February 7. The case is the outcome of effort on the part of the traction lines to effect an agreement providing for through rates and billing between the electric and steam transportation systems in Michigan. In this action the interurban lines are seeking to show that interchange of business between steam and electric lines will improve service to Michigan shippers.

Kalamazoo—Continuation of the traffic bureau of the Chamber of Commerce, with an increased budget assured to take care of the deficit incurred during the last year and to push the work during the business year beginning February 1, has been recommended to the board of directors of the C. of C. The resolutions declared that the bureau's work was of such a nature that it could be dispensed with.

George J. Bolender, secretary of the bureau, reported that during the 11 months ended January 1 of this year collections for members in refunds from railroads on overcharges totaled $15,988.28.

Detroit—The Lumber Carriers' Association of the Great Lakes, in convention in Detroit, January 18, elected the following officers: President, O. W. Blodgett, Bay City, whose address in the season of navigation is Duluth; first vice-president, Edward H. Thomas, Chicago; second vice-president, F. P. Potter, Cleveland; third vice-president, Herman H. Hettler, Chicago; secretary and treasurer, Captain Charles H. Weeks, 762 Drexel avenue, Detroit.

Grand Rapids—William Miller Wardrop has been elected vice-president, and A. L. Farmelee, secretary and auditor of the Grand Rapids & Indiana Railway. Their offices will be in Grand Rapids.

Washington—In the matter of the Cleveland Cliffs Iron Company vs. the Munising, Marquette & Southeastern Railway Company, the Director-General of Railroads, as agent, et al., the Interstate Commerce Commission has found that the rates applicable on sulphuric acid, in tank-car loads, from New Furnace, Mich., to Steelton, Minn., are unreasonable and has awarded reparation. The case, which was No. 11141 on the Commission's docket, was submitted on October 15, 1920, and decided on December 9, 1920. The finding has just been published.



The Luxeberry Painter Says:

"There are two reasons why I always recommend Berry Brothers varnish products.

"One is that they represent the result of over sixty years of experience.

"The other is whether the order is for a can or a carload, the quality and service are the best."

BERRY BROTHERS
Worlds Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan Walkerville, Ontario

"Nothing Freakish" About Mr. Durant's New Car

Among automotive engineers much interest is being shown in the new Durant Motors, Inc. Some believe the company will bring out something radically new in design, while others point out that Mr. Durant always has been identified with manufacture on conservative lines. The guessing as to the price of the car is lively. There are those who are willing to wager that the figure will be within the reach of anybody wishing an automobile. Some even predict that Mr. Durant hopes to compete with the Ford Motor Company. At the present writing the indications are that, however, the impression in the trade is that the Durant is likely to be marketed at between $650 and $800.

Mr. Durant himself has not given out any details as to his car, but is quoted as having said: "The new company will be in active operation by August 1, 1921. Its purpose will be to bring to the good will as can be possibly made for the money, and the price of it will be less than $1,000. It will not be a freak or anything in the line of something made merely with the idea of it being low in price. The name of Durant bears too good a reputation and the company bearing his name make every effort to maintain that reputation and thus repay the host of friends who have offered their service, their advice, their money, their co-operation."

In a statement to the Philadelphia Public Ledger, Mr. Durant is quoted as follows: "I cannot go into the details regarding the corporation at this time, other than to say that it will have one kind of stock, with every subscriber to the initial offering upon exactly the same basis as to price, with no commissions, bonuses or reservations to myself or associates issued for experience, ability or past performance."

GILKEY SEES A REVIVAL

Dan Gilkey, vice-president of the Acason Motor Truck Company, Detroit, feels confident that the revival in the truck business is on the way. As a matter of fact, he has just closed a rather large contract for Acason distribution in New York city, and this did not come as a result of the New York automobile show or any other.

"Acason is not taking in any shows this year," said Mr. Gilkey. "We feel confident that we shall be able to sell as many trucks as we make, judging from the number of inquiries which have been received at the factory and which come from all over the country. It is evident that business men are again lining up to buy utility vehicles and we look to the future with confidence."

Digitized by Google



COLD DRAWN "COLUMBIA SPECIAL" STEEL

FREE CUTTING SCREW STOCK

COLD ROLLED STRIP STEEL

COLD DRAWN 3½% NICKEL STEEL
(S. A. E. 2320 and 2330 Specifications)

COLD ROLLED AND COLD DRAWN STEELS

COLD DRAWN 40-50 CARBON AXLE STEEL

TURNED STEEL SHAFTING

COLD DRAWN 1¼% NICKEL CHROME STEEL
(S. A. E. 3120 Specifications)

GENERAL OFFICES AND WAREHOUSE
1300 to 1330 West Fort St.

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for
CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.
TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.
JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.
JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.
FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.
IMLAY CITY LIMITED—3:15 p. m.
PORT HURON—8:10 a. m. and every two hours to 6:10 p. m. Sundays only, 11:00 p. m.

Collections of Every Kind and Size
TACTFUL PERSONAL COLLECTION SERVICE for Manufacturers and Dealers Business and Professional Men EFFECTIVE
Write ——— For Interview ——— Phone
B. APPLEBY Dist. Mgr.
11517 Mack Ave., Detroit Hickory 3659-W
"Results or No Pay"

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—The municipal building department reports for the week ended January 22 a substantial increase in the number of permits issued for buildings for which permits were obtained. All told, 193 permits were issued, involving an expenditure of $1,757,678, as compared with 175 permits issued the previous week and entailing an outlay of $434,475. For the corresponding week a year ago the number of permits issued was 197 and the value $1,459,805. The big increase for the week is due principally to the permit for the 18-story Stroh building to be erected on Adams avenue west and which is to cost $1,000,000. The reports from the Detroit Builders & Traders' Exchange for the last two weeks show several more important lettings than for previous recent weeks. Among the contracts awarded were the following: A one-story factory building for the Anchor Building Company, at West Grand Boulevard and Fort street; a three-story store and office building at 1508 Randolph street; a one-story office building for the Mercier-Bryan-Larkin Company, at Miller Road and the M. C. R. R.; an addition to the factory of the Consolidated Cigar Company, on St. Aubin avenue, and a three-story library building. Included in the list of new work projected and in the hands of architects, are the following: A four-story and basement, society and club house; a brick and steel training school to be erected in Ypsilanti; a two-story and basement, concrete and terra cotta bank building for the First State Bank of Royal Oak; a brick and stone church building; a concrete and steel lunch and billiard room; a brick and steel theater building and a number of other items of a varied nature.

Chicago—The National Association of Lumber Manufacturers, in convention here adopted a resolution calling upon all workers in the building trades and contractors, manufacturers of materials and dealers to make reductions in costs wherever possible so that house building could be made possible this year.

Detroit—The city council has approved an expenditure of from $14,000,000 to $16,000,000 for the Conner's Creek sewer and plans have been made to condemn land for it.

Port Huron—Carpenters, painters, paperhangers and other workers in the building trades have voted to accept a 10 per cent reduction in wages, which will affect workers here, in Marysville, Marine City and St. Clair. From 90 cents to $1.10 has been the scale.

Detroit—F. J. Fisher and C. T. Fisher, president and secretary, respectively, of the Fisher Body Corporation, have purchased for themselves and not the corporation 22 acres of land in Ecorse, where it is proposed to erect a plant in the future. No plans have been made as yet. The land is located between the D. T. & I. and Michigan Central railroads.

Holland—The Home Furnace Company is planning to enlarge its plant. James De Young is manager.

Detroit—The city council has approved the purchase of $14,525 for a site on St. Jean avenue on which will be constructed a car barn for the municipal street railway system.

Grand Rapids—The Consumers Ice Company is planning to erect an ice plant here, the building to cost $200,000.

Detroit—This city shortly will advertise for bids on sewer work to cost $2,000,000, the money to come from a recent bond issue of $25,000,000.

Detroit—The spring building show of the Detroit Builders Exhibition Company will be held in the Armory, March 19 to 27. Directors elected are as follows: J. D. Abram, W. R. Anderson, Harry Booth, Charles Brushaber, C. N. Carswell, J. W. Depp, C. H. Keter, E. O. Knight, G. W. J. Linton, Frank P. Miller, J. A. Patterson, C. J. Prost.

New Speed Wagon Axle Brought Out by Clark

A new speed wagon axle has just been put in production by the Clark Equipment Company, Buchanan, manufacturer of a complete line of motor truck axles. This axle is not a converted passenger car axle but is especially designed for commercial car work. The axle is intended for use only on trucks of one ton or less.

In this new Clark product is incorporated the strength characteristic of the heavier type of Clark axles. The axle is a fixed type bevel gear construction with a pressed steel load-carrying member or housing designed specially for truck service. The differential is a standard type supporter in a carrier and can be removed from either the front or rear of the axle. The differential is mounted on ball bearings and the radial and thrust loads are taken on radial ball bearings. The differential is easily adjusted by removing the cover plate located on the back of the load-carrying housing and by removing the adjusting nut in the direction desired, or by moving the third member cage either up or down.

The wheel bearings are of the straight roller type and are designed to take the thrust in both directions. The bearings are so mounted that the thrust on each wheel is taken care of independently by each bearing, rather than transmitting the thrust in the direction of the wheel bearing on the opposite side, which has been the general practice on passenger car axle construction. Taking the thrust in both directions on one wheel bearing eliminates possible wobble and wheel looseness.

The hub is mounted on a six-splined shaft, the drive being taken through this shaft, and is so designed that the hub may be drawn up by tightly clamping the inner race of the wheel bearing.

Brakes are internal, 2½ inches wide, of special design, using four shoes to each wheel. The brake drums are bushed with oilless bearings. This axle is designed to carry 3,000 pounds on the spring pads and to handle 1,600-inch pound torque motor. The standard rear reduction that can be furnished on this model is 5.9 to 1 or 6.2 to 1. The 6.2 to 1 reduction is furnished with spiral bevel gears. The weight of the axle if approximately 360 pounds complete with hub parts.

WOULD TAX DRIVEAWAYS

Senator James Henry, Battle Creek, has introduced in the Legislature a bill imposing a tax of $3 a car on all motor vehicles sent from Michigan assembling plants by the driveaway method into other states. He bases his bill, he says, on the contention that Michigan highways are used and depreciated by such cars, from which the state derives no direct benefit for road maintenance.

During 1920 Michigan iron mines produced 17,232,000 tons of ore and shipped 18,715,000, valued at $53,628,000.

Digitized by Google

Fisher Body Taking Over Its Ohio Organization

The Fisher Body Ohio Company's mammoth automobile body building plant being erected in Cleveland is expected to be in operation March 1, according to an announcement by Richard Inglis, of Otis & Company and an officer of the Fisher Body Corporation, says the Cleveland Plain Dealer, which continues:

"The plant, one of the largest industrial units in the country, is the last word in construction for building motor car bodies and is equipped to do upwards of $20,000,000 of business a year.

According to Mr. Inglis, the Fisher Body Corporation of Detroit will furnish the Ohio company with at least that much business in the first twelve months of operation.

"Stockholders of the Fisher Ohio Body Company are being advised that the Fisher Body Corporation, holder of 55 per cent of the common stock of the Ohio company, proposes immediately to issue to holders of its own common stock five shares of new no par value common stock for each share of present stock.

"After the number of shares of the Detroit company is increased to make this exchange possible, the Fisher Body Corporation will give for each share of the Fisher Ohio common stock one share of the new stock of the parent corporation plus $2.50 in cash. Such exchange is effective when holders of 40,000 out of 45,000 shares held by others than the parent company surrender their stock.

The Fisher Corporation guarantees the 8 per cent preferred dividend on the Fisher company from April, 1920, until July 1, 1922, the first payment of which was made January 1. After that time it is expected that the Ohio company will be able to keep up its dividends on preferred stock.

"Under this plan of merging the common stock of the Ohio company with that of the parent organization, dividends would start with the May 1 disbursement. The Fisher common has been paying $10 a year so that after the shares are split up it is expected that a rate of $2 a year probably will be maintained.

"With this shifting of control from subsidiary to parent company, it would indicate possible simplification of Fisher Corporation holdings, which embrace among other subsidiaries findings and glass plants.

"The Fisher Body Corporation has reduced its inventories to a minimum and is now said to be in an unusually strong cash position. It can effect further economies through the consolidation of the Cleveland plant with that of the parent organization."

Detroit 1921 Auto Show Will Be Held March 19-26

Detroit's twentieth annual automotive show, under the auspices of the Detroit Auto Dealers' Association, will be held in the new Morgan & Wright factory building, on Jefferson avenue, March 19 to 26, according to a decision reached this week by the directors of the D. A. D. A.

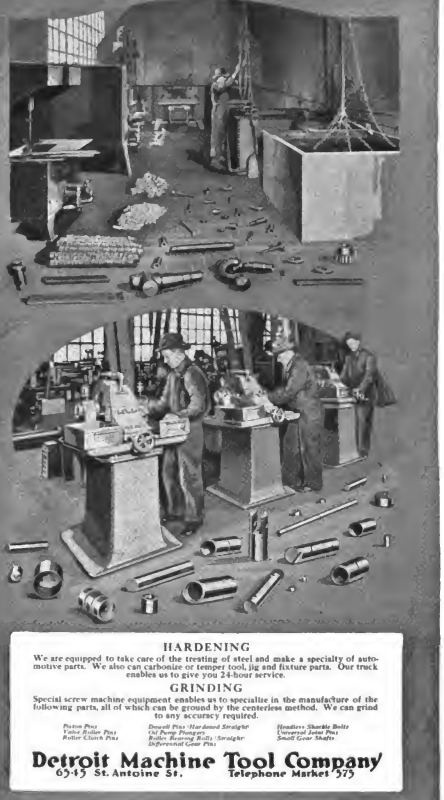
The building, which affords 150,000 square feet of floor space, will be one of the finest factory units in the city. It is now nearing completion. It is made available for the D. A. D. A. through the courtesy of the United States Tire Company, of which Morgan & Wright, Inc., is a subsidiary.

The show will be all on one floor

EVERYBODY HOPES TO OWN A MARMON

For Sale—The prettiest Marmon Coupe in Michigan; driven less than 12,000 miles; has a most excellent power plant and is fully equipped; everything in fine condition. Box W, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit.

CARBONIZING CYANIDING SMALL
HARDENING AND GRINDING
ANNEALING & TEMPERING STRAIGHT CYLINDRICAL



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins — Valve Roller Pins — Roller Clutch Pins
Dowell Pins Hardened Straight — Oil Pump Plungers — Roller Bearing Rolls Straight — Differential Gear Pins
Headless Shuttle Bolts — Universal Joint Pins — Small Gear Shafts

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 525

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, JANUARY 29, 1921

Repeal the Law Exempting Bonds From Taxation

A STEP in the right direction has been made by the introduction into the Legislature of a bill, sponsored by Representative George Lord, repealing the tax exemption now permitted upon bonds of municipal governments of states outside Michigan. If that bill be followed up by another repealing the statute doing away with the exemption now granted to bonds of the municipalities within the state, the work of putting this class of property under contribution to the state will be made complete.

In some previous discussions of this subject we have gone over the general wrong which is permitted to continue by failure to include in the list of taxable property of this state a body of capital which, so far as can be estimated, is equal to one-tenth of the equalized value of the state. Last week we called attention to the favorable effect which the taxing of so much capital, as other property is taxed, would undoubtedly have upon the provision of the houses which are so badly needed in our cities and villages. That the reaction upon other conditions would be equally favorable seems extremely probable. We have now a condition in Michigan in which many industrial institutions are seeking additional capital, either for expansion or for the fixing on capital which has been heretofore provided in part by bank loans. The absence from the normal supply of money capital available for such purposes of the great amount which has been attracted to tax free bonds has had a double effect upon the facility with which money may be obtained for industrial purposes. As Chairman McFadden, of the congressional committee on banking and currency, has shown in some calculations made for federal tax purposes, a 5 per cent tax-free bond is as valuable to a person with $100,000 annual income as a 7.3 per cent investment in real estate or industry. On the same basis of calculation, a 6 per cent bond, tax free, is as attractive a possession from the standpoint of interest as an 8.76 per cent investment in real estate or industry. The double wrong produced by the exemption of municipal bonds which is reflected upon industry is that the exemption attracts money away from it and sets up artificial minimum of return which must be realized before industrial investments can become proportionately attractive. We are fed today with public rumors about the largest of our industries being in the market for sums of money required for its development. The units which go to make up so large a sum which is required must naturally come from people of large means, who apply all their information and intelligence to the realization of the best returns upon their capital. To these the tax exempt bond has already made its appeal and the industrial requirement which we have just noted must compete with the tax exempt bonds to the extent of producing an equal net return. Compare the usefulness of the two bodies of capital. That invested in the tax exempt bonds is a lazy capitalist investment; that which is required for the industrial establishment keeps the wheels of industry turning, keeps men in employment, earns money which will be devoted to expansion, increased employment and is generally useful to the entire community. Yet the price which has to be paid for its use is set by the immunities extended to capital not nearly so usefully employed.

The farmers, the city workers, the producers of raw material for building operations and those who fabricate these raw materials into houses, factories and stores, owe it to themselves and to the best interests and growth of the state to induce the Legislature to repeal the law of 1909 which grants immunity from taxation to the capital invested in municipal securities. So long as a sum approximating one-tenth of the present equalized value of the state is not available for the purpose of taxation there can only be unrest with the present system of taxation.

"Coming Clean"

THE COUNTRY is being flooded with wholesome advice as to the kind of mental attitude everybody ought to strive to maintain in the face of a complex business situation which does not appear to be clearing up as rapidly as might be hoped for. The keynote of the speeches being delivered and the resolutions passed and the letters mailed is that we should be optimistic, remembering that conditions are fundamentally sound and the readjustment is the best thing that possibly could happen to us. We are reminded that our 1920 crops were of unprecedented magnitude—enough to guarantee that everybody will be well fed, and to spare; that our banking system is proof against any and all assaults; that the world's shelves are bare and that therefore the lull in buying can be only temporary. All this evidence, and more, is being adduced to show us that we are not by any means in a precarious position and that all that is necessary for us to do is to keep our wits about us—and "keep a stiff upper lip."

All this is very good and proper, but it appears to us that too little is being said about something else quite as important, and that is that what we need now and shall need during the next few months—and until kingdom come, for that matter—is the practice of the old fashioned brand of honesty which led men to be scrupulously fair in all their business dealings. We need to quit our "four-flushing" and get down to brass tacks.

Most everybody, these last four or five years, has been engaged in the gentle art of "throwing the bull." Oodles of money and oodles of business did it. There was the play of economic laws, to be sure, but there was also the "bull" which threw the equation out of joint, inflating the credit structure, inflating prices, inflating profits, inflating earnings. A lot of "wind" was pumped into everything. Now that the balloon has been punctured, and we are going to have to get used once more to a reasonable amount of money, a reasonable amount of business, a reasonable amount of profits, a reasonable amount of wages and a frank basis of business dealings, we might just as well make up our minds that we are going to have to "cut out the bull."

The man who supplies the raw materials for industry is going to have to come to understand that he must furnish, on the date specified, the quality and the quantity specified; the man who buys the material, too, is going to have to understand that a contract is made to be kept and not to be evaded; the man who wants credit accommodation is going to have to understand that his collateral is worth all he says it is, and that means at current prices; the salesman is going to have to understand that it will be quality and dependability that will determine the price of an article and its precedence in the market, and not that it will sell because there is a "shortage."

Digitized by Google

real or alleged, and everybody is on a "buying spree"; the man who works at a bench is going to have to understand that it is his ability to produce that is going to gauge his wages and his continuity of employment, and not that he will be retained at a fancy figure because nobody can be found to take his place, or because he happens to be a member of an organization that carries a big stick; and the employer, in turn, is going to have to understand that in his dealings with his men he must "come clean." And so on, down the line. We have got to return to first principles.

This means that, in addition to making resolutions, we have got to carry them out. The man who gets down on his knees at church and prays to be delivered from all evil, and then the same afternoon goes out and embraces evil, not only insults his Maker but wastes his own words.

By all means, let's be optimistic; but by all means, too, let's get back to the fundamentals of business integrity. The day of "soft soap" is over.

Germany Today

THERE is a lawsuit in Midland county over a horse which was shot and buried but which during the night came to life, it is alleged, and found his way into the plaintiff's barn, where he ate of plaintiff's oats while said plaintiff slept.

Germany has just about duplicated this trick. After underbidding a large number of English firms, a German concern has obtained a million-dollar contract for electrical appliances and at the same time English merchants are complaining that German fabrics are being offered in London of a fine quality and at prices which are less than English cost of manufacture.

From the current Protectionist we learn further of Germany's come-back. The North German Worsted Manufacturing & Yarn Spinning Company, Bremen, has paid a dividend of 62 per cent and is doing a business four times its pre-war trade. The Mitweida Cotton Spinning Company advanced its net profit from 2,000,000 marks in 1913 to 9,000,000 marks in 1919-20. Nine other textile concerns are paying dividends ranging from 16 to 41 per cent, all of which is being done after paying the huge war taxes and placing heavy reserves. Out of 269 company reports analysed, the Protectionist shows that 178 paid increased dividends compared with the previous year and 52 paid double dividends. Capital stock subscriptions totaling 7,272,000,000 marks were raised during the first three quarters of 1920 and during September there were only two instances in which the money requested was not quickly subscribed. During the period 13 municipalities floated loans totaling 382,000,000 marks.

German coal mines are gaining rapid headway financially. The Vereinigte Koenigs and Laurahwette made 50,000,000 marks profit in 1920. Of 15 companies reviewed, the lowest dividend was 8 per cent and the highest 22 per cent, the average being 15 per cent. Of 13 iron and steel company reports, the average dividend for the fiscal year just ended was 21 per cent. Of eight lace concerns examined, the average dividend has risen from 14 per cent to 26 per cent. Seven electrical firms increased their average from 4 to 7 per cent. The trend of dividend reports of other industries in Germany runs much the same. Paper makers have done especially well on account of large exports to Holland and the United States.

The Reichsbank in its last quarterly report states: "At the end of the third quarter of 1920 the economic life of Germany, after the setback of the spring, now presents a comparatively assuring aspect." One Saxon firm which generally has a turnover of from one and a half to two times the amount of its capital (16,000,000 marks) had during the last half year a turnover of 200,000,000 marks. German commercial travellers are already in England in considerable numbers and German dye houses are offering splendid ranges of dyes in shades far beyond anything British dye manufacturers can produce and at prices 30 per cent below the nearest English prices. Residents in Germany report a much more settled political situation and that there is little likelihood now of any great disturbance. Peoples are better fed; food is more plentiful and a greatly increased willingness to work. The renaissance is proceeding at a pace which few people expected.

Short Measure Stuff

COME ON, LET'S HELP THIS CHAP EXPLAIN.

SONG

You ask me why I love you, sweet,
What makes me worship at your feet.

You tell me why this hawthorn tree
Produced the blossoms that you see;

And tell me why these thrushes here
Are making music for your ear;

You tell me why the sky is blue—
And then perhaps I'll answer you.
—Wayne Gard in the Chicago Tribune.

Nay, I can tell the reason of
My lodicless and reverent love:

I know not why the hawthorn tree
Produced the blossoms that I see;

Nor know I why these thrushes here
Are making music for mine ear;

But oh my love, the sky is blue
Because it's far away from you.
—F. P. A., in The Conning Tower.

My darling, F. P. A. told you
What makes the skies appear so blue;

But he don't know those other things
Concerning which your sweetie sings;

But love, the thrush's warbling comes,
From feeding him a dish of crumbs.

"Religion is not always good stuff," said Bolo Soope to us the other day. "Heard a preacher advise 'letting your light so shine, etc.,' that I took the hint and then the boss called me down because the bills were too high."

The young lady who defied convention by wearing bangs now has a granddaughter who sports a split skirt.

PRETTY SOON NOW

I don't want to get in the cabinet,
A job in the League—not at all,
I can't be away on the opening day
When the umpire bellows "Play Ball."

Henry Ford wants to make a little touch. We don't suppose it will matter what faith that money belongs to, just so he gets it.

Dance reformers are going right down the line. In Grand Rapids they have banned cheek-to-cheek dancing, the shimmy and the camel walk. As Andy Gump would say, Oh, Minuet!

The demands of the farmers on Congress have been recognized. The free seed appropriation has been increased by 50 per cent.—A. F.

Useless Duplication

WHEN F. R. Hathaway, treasurer of the Michigan Sugar Company, appeared before the ways and means committee of the House of Representatives and gave vent to his feelings about the annoyance and foolishness of the Government's action in asking for five to seven almost identical reports of the affairs of his enterprise, he voiced a complaint which should be carried to Congress with emphasis. Mr. Hathaway testified that auditing staffs of the beet sugar manufacturers were kept busy half of their time supplying information in practically identical reports demanded by different branches of the Government at various periods in the year. His is not the first complaint of this nature. We know of a Detroit bank which was requested recently, under penalty threatened, to report the most minute details of all the purchases of the institution during 1917, covering blank books, supplies, deposit slips, etc., notwithstanding the fact that the same office of the Government had advised on two previous occasions that it was unnecessary to go to this trouble. The Fordney proposal to establish a central bureau at Washington whose duty it would be to act for all departments in obtaining reports would cure this difficulty.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

A WASHINGTON computation, printed in Detroit papers Wednesday, exhibits an unpleasant employment situation, but these figures we understand cover the period from December 15 to January 1, and while no doubt the conditions during the holidays is fairly accurately represented, it must be remembered that most of the plants in the city were taking inventory at this time. Statement was made Wednesday that if the Ford plants were to start at once and take on 25,000 men there would be a temporary labor shortage in Detroit.

This brings to mind the all absorbing topic of what is going on inside of the Ford Motor Company. It would be idle to add much to the press reports concerning this company, but one thing seems certain, as a well-known financial man stated, that things are "certainly all balled up." There came Monday a most authentic report that Joseph A. Bower had been selected as treasurer to look after the interests of the Morgan people who had made Ford a big loan, and on Wednesday there appeared in the press an emphatic denial that Ford had been looking for a loan.

The prohabilities and conjectures of the situation are outlined in another part of this publication so that t will be needless to duplicate the theories in this article, but there is a serious side to the proposition that concerns the people of Detroit and elsewhere considerably. And that is the necessity of getting the big Ford plants going at an early date. Mr. Ford has in his farms and many private interests all the means of food production that he may need for his personal well being and in other respects he is fortified personally to stand out against a non-production program for a much longer time than most of Detroit, so that personally he could close shop if he chose to do so rather than meet the terms of outside money loaners. But what of Detroit eventually should he close shop indefinitely? It needs but little imagination to picture the result. However, conceding this turn of events to be unlikely. Suppose, if it is true that Ford needs working capital, he decided to fight it out alone by selling what manufactured cars he may have on hand and leave the big plants idle until such sales have brought in the capital sufficient to start production on the old scale. Overhead is a big item, which could be greatly reduced, and it seems safe to assume that funds on hand would finance such a program for a time. What then would be the eventual effect on Detroit?

There comes to mind many small manufacturers who have been supplying parts and other larger ones, too, who would continue in idleness, to say nothing of the possible annihilation of their businesses. Then there are the 50,000 employes and their families, say 125,000 people all told, directly dependent on the company who cannot pick up like the "suit case" employe and move back to Poseyville or Peoria, and another 100,000 or more indirectly dependent through business relations, and lastly the far greater number of Detroiters whose financial welfare indirectly depends on the Ford pay check for not a small percentage of their daily income, who must consider the effect of a continued shut down of the Ford plants. No, even a protracted partial shut down must not occur.

This is not intended to inspire gloomy forebodings, hit rather to promote sane and sober thinking about an eventuality that is possible because of the peculiar circmstances that seem to have arisen around an institution that as a factor for good or evil is gigantic in its potentialities. Private property rights might enable a man in the position of Mr. Ford to inflict the injury outlined, but the best way to avoid injury is to take steps to prevent it. With almost all the rest of the United States giving daily evidence of a return lu the direction of normal business activities It would be indeed unfortunate if a force such as that wielded by Mr. Ford should even temporarily be misdirected.

We have heen hearing much of deflation of currency, deflation of credit and deflation of prices, but what about deflation of desire? Isn't there as much work to be done in this latter direction as in the others mentioned? There is the man who desired a new car every spring who has decide to make the old one do until he has the purchase price in his pocket; his desire, temporarily at least, has been deflated. Then we have many examples of the retailer who tried to maintain the wartime margin of profit regardless of changed costs and conditions; his desire likewise has been deflated and he is now reconciled to the "half loaf better than no bread" idea. And so on down the line. The farmer especially has some inflated desires, the scaling down of which forms the key factor in the business outlook today, and if he would only throw his purchasing power into the market now there would be added about 48 per cent to the ranks of the buying public.

Current Investment Offerings

CORRIGAN COMPANY, GRAND RAPIDS

		Rate	Maturity	Price	Yld.
Am. Agricultural Chemical Refunding Mortgage Sinking Gold Bonds		7½	2-1-41	87.50	....
Northwestern Bell Telephone First Mortgage Gold Bonds	7	8-1-41		97.50	....
Kingdom of Belgium 20-year Sinking Fund...	8	1941		100¾	....
Province of Ontario....	6	1928		94.50	....
Consolidated Gas, Electric Light & Power Co., Baltimore, First Refunding Mortgage Bonds		7½	..	100	....

FENTON, DAVIS & BOYLE, 610 CONGRESS BUILDING, DETROIT

Kingdom of Belgium 20-year Sinking Fund Gold Bonds	8	2-1-41		....	8.00
Detroit Edison Co., Convertible Debentures ..	6	1-10-31		....	7.85
Province of Ontario....	6	2-1-28		....	7.00
Province of Ontario....	6	11-15-27		....	7.00
Province of Ontario....	6	10-1-23		....	7.35
National Leather Co....	8	11-15-25		....	8.00

HODENPYL, HARDY & CO., CHICAGO

Canton, Akron & Ry. 1st Mtge.	5	1-33		80	7.53
Canton, Akron & Phila. Ry. (Closed) Mtge.	5	3-22		93	12.66
Canton & Phila. Ry. (Closed) Mtge.	5	2-23		91	10.10
Central Ills. Lt. Co., 1st & Ref. Mtge.	5	4-43		74	7.46
Com'l. Pr. Ry. & Lt. Co.	7	5-23		95	15.00
Consumers Pr. Co., 1st & Ref.	5	1-36		82¾	6.90
Consumers Pr. Co., Gen. & Ref.	7	1-30		93½	8.00
Consumers Pr. Co., Gen. & Ref. "B"	7	7-35		95	7.55
Mich Lt. Co., 1st & Ref.	6	7-45		75	7.10
Mich. RR. Co., 1st Mtge	5	5-24		90	9.40
Northern Ohio Tract. & Lt. Co., 7 Yr.	6	6-26		94	8.40
Springfield (Ohio) Lt. & Ht. & Pr. Co., G. R.	5	4-33		80	7.50
Union Ry. Gas & Elec. Co., Coll. Trust	5	7-29		50	11.70
Com'l. Pr. & Lt. Co., (Scrip)				50 & Int.	60

CHARLES A. PARCELLS & CO., PENOBSCOT BLDG., DETROIT

Detroit Edison	8	1931		101	....
Riordin Con. Ltd.	7	1940		99	....
Steel & Tube	7	1950		95¼	....
Ludington, City	6	1946		..	6.40
Belgian Govt.	8	1940		100	....

AMERICAN LOAN & TRUST CO., DETROIT

Detroit Edison Society	5	'23-'25		..	6
Northwestern Serv. Garage Co.	5	'24-'25		..	8
Wm. E. Johnson	5	'21-'25		..	6
Chas. Steinberg	5	'22		..	6

HALSEY, STUART & CO., DETROIT

Detroit Edison Co., 1st & Ref. Mtge. Bonds	8	13-1-40		100	8
Southwestern Pr. & Lt. Co., Secured Notes....	8	8-1-25		98.50	8.50
The Empire District Electric Co., 1st Lien & Gen. Mtge. Bonds...	8	11-1-49		98.25	8.15
Utah-Idaho Sugar Co., 1st Mtge. Bonds.....	7	'26-'30		Acc. to Mat.	7.75
Phoenix, Arizona Union High School District Bonds		5½	4-1-40	Mkt.	5.50
State of Utah Road Bonds		4½	7-1-37	Mkt.	5.15

DETROIT COPPER & BRASS ELECTION

At the annual meeting of the Detroit Copper & Brass Rolling Mills, January 26, the board of directors was increased from seven to nine and the following were elected to serve for the ensuing year: A. H. Buhl, L. D. Buhl, G. B. Davis, F. J. Hecker, F. H. Hoffman, L. H. Jones, R. P. Joy, A. J. Peoples, H. D. Sheiden. Officers: L. H. Jones, president and general manager; R. P. Joy, vice-president; A. H. Buhl, vice-president; F. H. Hoffman, assistant general manager; A. J. Peoples, secretary-treasurer; W. P. Bache, assistant secretary-treasurer; J. E. Workman, auditor; Alexander Henderson, works manager.

JACKSON FIRMS INCREASE STOCK

The L. H. Field Company, Jackson, has increased its capital stock from $100,000 to $500,000, and the Central City Lumber Company from $20,000 to $100,000.

FORD TRACTOR CUT $165

Edsel B. Ford, president of the Ford Motor Company, announced Wednesday that, effective from that day, the price of the Fordson tractor is $625, a reduction of $165 from the former price. The cut has been made possible by lower material prices. Mr. Ford added that there was no chance for any further reduction in the prices now quoted on either the Ford passenger cars or trucks, but that on the contrary there was no guaranty against increase.

MERRICK MUCH IMPROVED

Frank W. Merrick, who has been confined in a hospital at Saginaw the past two weeks on account of an infection in one of his eyes, is reported greatly improved and is expected back in Lansing in the near future.

Digitized by Google

Buhl Sons Co. Move Into New River Front Building

After 63 years continuous business development at one location Buhl Sons Company, the largest hardware jobbers in Michigan, is moving into a new building located at the foot of Adair street, Detroit. The transfer of stock, such fixtures as will be used and general equipment from the old to the new building will be completed early in February, and the formal opening of the concern in its new building will introduce to the business life of this country the largest wholesale hardware concern, in area occupied, in the United States.

The new structure is six stories and has frontages of 350 feet on Adair street and 240 feet on the Detroit river. It is constructed entirely of concrete, trimmed with brick and contains a total floor area of 303,000 square feet, approximately seven acres. Every modern device contributing to the rapid and inexpensive movement of material has been incorporated in the building by John Scott & Company, the architects.

BANKER-FARMER MEETING

East Lansing's big day will be Tuesday, February 1, when 10 group chairmen and 83 county members of the Agricultural Commission of the Michigan State Bankers' Association, together with many other bankers interested in the movement, will meet in the gymnasium of Michigan Agricultural College and hear speakers of national repute on financial and marketing problems from the farmer's viewpoint. A prominent banker will present some phase of the present business situation in its relation to agriculture. There will be two sessions, one at 10 a. m. and one at 1:30 p. m.

J. B. McDougal, governor, and Directors W. A. Heath, James Simpson, George M. Reynolds and J. W. Blodgett, of the Federal Reserve Bank of Chicago, were guests of the Detroit bankers Wednesday at the Detroit Club. Their visit had to do with consideration of a site for a permanent home for the Detroit branch of the Chicago Reserve Bank. Plans for the new home have been made because of the unexpectedly rapid growth of the business of the Detroit branch. Several sites are under consideration, but none have been decided on definitely.

Cleveland Stock Exchange

	Last Sale
American Multigraph	19
American Ship	75
Dow Chemical	200
Firestone Tire & Rubber	85
Do 6% preferred	80
Do 7% preferred	77
Fisher Ohio Body	20
Do preferred	66½
Goodrich Tire, common	38¾
Do preferred	71¾
Goodyear Tire & Rubber	22
Do preferred	42¾
Grant Motors	3¾
Grasselli Chemical	129
Interlake Steamship	215
Jordan Motors	90
Miller Rubber	83½
Murray Ohio	9
National Acme	24¼
Paragon Refining	25
Peerless	24
Portage Rubber	24
Do preferred	43
Products & Refining Corp.	5¼
Do preferred	1½
Standard Parts	6
Do preferred	22
Stearns Motor	20¼
Torbensen Axle	73
Victor Rubber	14
White Motors	39
Youngstown Sheet & Tube, pfd.	71½

McCRORY STORES SALES REPORT

For the 12 months ended December 31, sales of the McCrory Stores Corporation amounted to $14,369,327, an increase of $2,287,356 over 1919.

In any Export Emergency

Whether the grounds for refusal are justified or not, your export shipment needs special safeguards when your documentary draft on a foreign buyer is dishonored. It is in just such emergencies that the service departments of the Irving's Foreign Division demonstrate their capacity and initiative.

Not only is the refusal reported to you at once, but immediate provision for clearing, warehousing and insuring the merchandise is made through the Irving's local correspondent. Then the Foreign Division, consulting with you and acting under instructions, arranges for sale of the goods or for their disposal in some other approved way.

A collection anywhere over-seas is expedited by direct transmission of the draft and its accompanying documents to a carefully selected correspondent bank on the spot, familiar with local conditions and able to protect your interests at every stage of the transaction.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasur any bonds purchased and pay ¼% fee, ma ing them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. E. Dunham, Representative.

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT

Cleveland, New York, Cincinnati, Boston,
Columbus, Toledo, Denver, Youngs-
town, Akron, Colorado Springs

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Jan. 21, 1921	Jan. 14, 1921	Jan. 23, 1920
Total gold reserves	$2,095,769,000	$2,085,454,000	$2,026,650,000
Legal tender notes, silver, etc.	205,182,000	203,984,000	61,246,000
Total reserves	$2,301,251,000	2,288,538,000	$2,087,896,000
Bills discounted—Secured by Gov't war obligations	1,056,137,000	1,024,607,000	1,286,245,000
All other	1,426,942,000	1,424,923,000	767,110,000
Bills bought in open market	167,950,000	203,412,000	575,799,000
Total bills on hand	$2,650,978,000	2,652,952,000	$2,729,247,000
U. S. Government bonds	25,339,000	25,337,000	27,036,000
U. S. Victory notes	19,000	19,000	64,000
U. S. Certificates of indebtedness	264,631,000	289,684,000	276,765,000
Total earning assets	$2,941,528,000	2,968,544,000	$3,033,112,000
Bank premises	18,218,000	17,955,000	10,492,000
Uncollected items, other deductions gr. deposits	667,141,000	706,765,000	1,022,633,000
5% Redemption fund against F. R. Bank notes	12,680,000	12,799,000	12,120,000
All other resources	6,184,000	9,112,000	5,483,000
Total resources	$5,946,999,000	6,000,713,000	$6,171,747,000
LIABILITIES			
Capital paid in	99,962,000	99,815,000	87,589,000
Surplus	202,036,000	202,036,000	120,120,000
Government deposits	32,603,000	3,970,000	30,448,000
Due to members—Reserve account	1,785,225,000	1,756,225,000	1,859,349,000
Deferred availability items	472,416,000	509,452,000	795,782,000
Other deposits, including foreign gov't credits	25,240,000	27,464,000	95,697,000
Total gross deposits	$2,295,448,000	2,302,211,000	$2,840,476,000
F. R. notes in actual circulation	3,115,316,000	3,159,491,000	2,844,227,000
F. R. Bank notes in circulation—net liability	207,265,000	210,127,000	254,843,000
All other liabilities	24,675,000	23,982,000	24,492,000
Total liabilities	$5,946,999,000	6,000,713,000	$6,171,747,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	48.5%	48.1%	44.8%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	55.6%	54.8%	51.0%

Safeguarding Your Affairs

Entrusting your affairs to the Grand Rapids Trust Company as financial agent, trustee or executor assures the able, conscientious management of successful business men who compose our board of directors:

MELVILLE R. BISSELL, Vice-Pres. Bissell Carpet Sweeper Co.
ADOLPH H. BRANDT, Vice-Pres. Grand Rapids Savings Bank.
JOS. H. BREWER, Pres. Am. Public Utilities Co.
THOS. F. CARROLL, Director Com. Savings Bank.
HAROLD C. CORNELIUS, Treasurer Wolverine Brass Works.
GERRIT J. DIEKEMA, Attorney, Holland, Mich.
JAMES K. FLOOD, Pres. First National Bank, Detroit.
THERON H. GOODSPEED, Pres. American Box Board Company.
ROBERT D. GRAHAM, President.
ALEX. W. HOMPE, Furniture Manufacturer and Director Kent State Bank.
LEE M. HUTCHINS, Treas. Hazeltone & Perkins Drug Company.
WILLIAM H. LOUTIT, Capitalist, Grand Haven
WILLIAM H. MANN, Vice-Pres. National Lumberman's Bank, Muskegon.
JOHN B. MARTIN, Capitalist.
JOSEPH MURPHY, Lumber and Timber, Cadillac.
FRED R. RANNEY, Pres. Renney Refrigerator Co., Greenville.
CHARLES R. SLIGH, Pres. Sligh Furniture Co.
HARRY WIDDICOMB, Pres. John Widdicomb Co.
LEWIS T. WILMARTH, Pres. Wilmarth & Morman Co.
DAVID WOLF, Lumber and Timber.
SAMUEL D. YOUNG, Pres. Grand Rapids Show Case Company.

GRAND RAPIDS
TRUST COMPANY
GRAND RAPIDS, MICH

$3,000,000 Sales Reported By Kawneer Co. for 1920

The Kawneer Company, Niles, reports an unusually good year for 1920, with sales in excess of $3,000,000. This company manufactures store fronts and allied metal moldings. At the annual election January 13 the following were elected for 1921: President, Francis Plym; vice-president, E. E. Barber; treasurer, H. H. Heimann; secretary, F. R. Eagleshaft. There was no change in either the board of directors or the officers. Balance sheet figures for December 31, 1920, and December 31, 1919, are given below:

ASSETS

	Dec. 31, '20	Dec. 31, '19
Cash	211,471.78	106,656.16
Notes Receivable	42,217.74	12,742.12
Notes Rec. Av. Stock Purchasers	16,290.74	.....
Trade Acceptances	2,167.20	.....
Accounts Receivable	396,031.73	235,309.05
Misc. Receivable	3,492.84	11,412.86
Raw Material	286,818.62	264,460.50
Goods in Process and Finished	181,747.02	146,230.41
Supplies	9,564.65	10,701.27
Deferred Assets	15,034.19	.....
Liberty Bonds	.....	7,178.79
Real Estate	16,624.52	16,721.46
Buildings less Reserve	211,114.32	181,537.32
Equipment less Reserve	149,226.84	164,897.47
Furniture & Fixtures less Reserve	11,726.40	8,776.70
Stock in other corporations	.....	150,000.00
Patents	138,612.36	129,181.96
Total Assets	$1,709,134.37	$1,467,815.15

LIABILITIES

Accounts Payable	6,631.30	10,859.29
Wages Payable	14,694.27	18,423.81
Misc. Payable	118.58	122.76
Reserve for Taxes	166,000.00	25,470.23
Reserve for Doubtful Accounts	20,119.29	13,500.00
Reserve for Comp. Ins.	16,520.11	11,423.52
Reserve for Contingencies, etc.	4,972.24	1,500.00
Reserve for Trade Discount	5,000.00	.....
Capital Stock, common outstanding	871,000.00	450,300.00
Capital Stock, preferred outstanding	322,700.00	433,600.00
Surplus	323,157.08	646,921.69
Total Liabilities	$1,709,134.37	$1,567,815.15

During the year the authorized common stock was increased from $500,000 to $875,000, par value. The increase of $435,299.67 in outstanding common was created by a stock dividend. The authorized preferred was decreased to $325,000 from $610,000 and $100,000 of preferred stock retired.

BOWER ROLLER BEARING

Below is given a comparative statement of the Bower Roller Bearing Company as of December 31, 1920, and December 31, 1919:

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Cash on hand and in bank	$ 39,126.02	$ 266,820.91
Liberty bonds and U. S. certificates	.....	58,450.00
Accounts receivable, less reserve	69,870.68	106,837.13
Notes receivable	246.59	253.19
Trade acceptances	16,278.39	.....
Inventories	318,490.96	263,237.10
Land	20,000.00	20,000.00
Buildings	125,368.17	121,119.83
Machine tools and equipment	304,763.71	282,067.83
	$430,131.88	$ 404,187.36
Less depreciation reserve	166,558.03	136,470.71
	$263,573.85	$ 267,716.65
Patents	53,028.82	52,720.03
Invested in other corporations	113.00	113.00
Deferred items	400.00	400.00
Total assets	$852,578.84	$1,036,608.00

LIABILITIES

Accounts payable	None	$ 50,358.84
Accrued payroll	None	12,744.71
Capital stock	600,000.00	600,000.00
Surplus	252,578.84	373,504.75
Total liabilities	$852,578.84	$1,036,608.00

Note—Federal taxes for current year's earnings not considered in above statement.

STOCK EXCHANGE APPLICATION

W. J. Peoples & Company, brokers and investment dealers, with offices in the Penobscot building, Detroit, have made application for membership in the Detroit Stock Exchange. W. J. Peoples formerly was associated with A. W. Wallace & Company, and recently started in business for himself.

STAR MACHINE ADDS TO CAPITAL

The Star Machine & Tool Company, Jackson, has increased its capital stock to $30,000.

Digitized by Google

Investment Hints

GOOD INVESTMENTS NOW

To the Financial Editor:

I would thank you to furnish me with information as to what you think is a good investment of high grade securities. I wish to invest in same and desire your assistance.

C. B.—Grand Rapids.

You do not state what amount of money you have for investment, so we are taking for sake of the illustration a fund of $20,000. In order to obtain maximum yield and a maximum average of safety without putting all your money in one investment, it is a good plan to split up the fund into five or six classes, ranging from government or municipal bonds down to stocks. With a fund of $20,000 a suitable division would be about as follows:

Government or municipals, $5,000, present yield safely about	7½ %
Public utilities, $5,000, present yield safely about	7½ %
Railroad bonds, $4,000, present yield safely about	7 %
Industrial bonds, $3,000, present yield safely about	8 %
Divided-paying stocks, $3,000, present yield safely about	7 % up

We cannot suggest particular issues but will be glad to appraise any such bonds that you may inquire about. With a split-up of the fund in about the relation shown, an investor may obtain a good return on his investment without having "all his eggs in one basket," and the chance of increase in value of part of the list is a good offset to the chance of depreciation which might occur in others. There never was a time when sound securities could be bought as cheaply as now, but of course the times demand a more careful consideration of the future of the company whose stocks one purchases.—P. S. H.

New Publications

"INDUSTRY" FOR JANUARY

The Frank D. Chase, Inc., Chicago, publication "Industry," for January, 1921, contains a number of interesting articles, among which there is one by Frank D. Chase, "The Employer's Analysis of an Engineer." Mr. Chase places loyalty first, with personality as a second classification, experience third, and education fourth, all of which are essential.

"The method of getting the education," he says, "is of little account, but it must be gotten some way."

L. M. Hansen's article, "How to Get a Foundry That Fits," includes valuable information, typical layouts for malleable, gray iron and steel foundries, with dimension of yards, melting equipment, molding area and core rooms. Other interesting articles are included in the 32 pages of this house organ, a copy of which we are sure may be had if desired.

COWAN "TRANSVEYOR PICTURE BOOK"

A few of the many uses to which the Cowan Transveyor, manufactured by the Cowan Truck Company, Holyoke, Mass., may be put to are illustrated by the "Transveyor Picture Book," recently issued by the company. This handling truck designed for use in plants, warehouses and anywhere materials have to be moved about was originated by a factory superintendent and his master mechanic in an effort to devise some way to move materials and product about the plant with as little damage and loss of time as possible.

The first conveyor was a crude, simple affair manufactured from odds and ends. Since that first machine many improvements have been made and the present truck is in general use. Platforms are provided upon which work can be piled. The truck is made so that it can be slipped under these platforms, the handle depressed, which action lifts the load from the floor, and the burden may then be moved easily and quickly.

Copies of the "Picture Book" may be obtained by writing the company.

NULYNE CO. STOCK INCREASE

The Nulyne Laboratories, Jackson, manufacturer of private formula products and tooth paste, has increased its capital stock to $2,500,000, of which $1,000,000 is in 8 per cent cumulative, participating preferred stock, and $1,500,000 in common. The business was established in 1904 and included the production of physicians' supplies, which department since has been discontinued. The plant capacity is 5,000,000 tablets and 300,000 tubes of tooth paste daily.

Permanent, Dependable, Responsible

These qualities, plus our experience, make our specialized service of value in the successful handling of Trusteeships, Re-organizations, Receiverships and the Transfers and Registration of Stock.

Consultations, without obligation, invited.

SECURITY TRUST COMPANY
FORT AND GRISWOLD ST. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Painting the Lily—

There are no comparative degrees of safety. An investment is safe—or it isn't.

Our First Mortgage Bonds would be safe even were they converted into notes or debentures. They are the obligations of responsible people.

But we fortify their safety by making them direct obligations secured by Detroit property worth at least double the amount of the mortgage.

And then you have the guaranty of this corporation whose resources exceed seven millions of dollars.

Yet, they pay

6%

DETROIT MORTGAGE CORPORATION
Real Estate Exchange Bldg.
Third Floor

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JANUARY 25TH

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend: Cash	Stk	Wheo Payable	Last Dividend: When Paid	Cash	Stock	Dividends Total This Year: Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com. XD	82½	84	100	92 - 69	204 - 55	4%	4%	Quarterly	Nov. 1, 1920	1%	1¾%			$24,271,900
Do., pfd. XD			100			6%		Quarterly	Nov. 1, 1920	1½	1½%			$14,236,200
Auto Body Co.	4	5	10		12½ - 5½				Jan. 20, 1917		25%			$1,074,000
Do., pfd.	7¼	8½	10		10¼ - 10¼	6%		Semi-Ann	Aug. 1, 1920	3%				$527,000
Bower Roller Bearing Co.	15		10		29¼ - 16	Varies		As Decl'd	July 1, 1920	10%				$600,000
Chemical Iron Co. of America, com.	2½	2¾	10	2¾ - 2	5¾ - 1¾				Apr. 1, 1919	2%				$2,839,850
Do., pfd.	3½	4	10	3½ - 3¼	5¾ - 3¼				July 1, 1919	3%				$5,217,250
Cities Service Co., com. XD	261	266	100		335 - 230½	*8%		Monthly	Jan. 1, 1921	2%	1¼%	1¾%	1¼%	$40,039,245
Do., pfd. XD	68¼	68¾	100		70 - 60	6%		Monthly	Jan. 1, 1921	1%		1%		$75,463,604
Coahuila Lead & Zinc Co.		4	10	4 - 6	23 - 6	Varies		As Decl'd	Nov. 15, 1917	25%				$600,000
Columbia Sugar Co.	12¾	13½	10	14½ - 13	20 - 11½	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co.	7½		10	7¼ - 7¼	18¾ - 6¾	12%		Quarterly	July 1, 1920	3%				$900,000
Com. Pw. Ry. & Light Co., com.	14	16¾	100	16 - 10	30¼ - 10½	4%		Quarterly	Nov. 1, 1920	1%				$18,500,000
Do., pfd. XD	35	37	100		38 - 23	10%		Quarterly	Nov. 1, 1920	11½%				$17,853,000
Continental Motor Co., com.	6¼	7	10	7¼ - 5¾	14¾ - 2¾	4%		Quarterly	Dec. 24, 1920					$9,447,069
Do., pfd., XD	90	95	100		100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,151,700
Detroit & Cleveland Navigation Co.	72	74	50	72 - 71	100 - 70	8%		Quarterly	Jan. 1, 1921	2¼%		2¼%		$1,829,600
Detroit Creamery Co.	24	25	10	24½ - 22½	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,800,000
Detroit Edison Co., XD	96¾	97	100	98 - 96¼	114 - 92¾	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,585,200
Detroit Brass & Malleable Works, XD			100	98 - 98	96 - 93	6%		Monthly	Jan. 1, 1921	½%		1½%		
Detroit United			100			8%		Quarterly	Dec. 1, 1920	2%				$15,000,000
Edmunds & Jones, com.	14	15	None	14 - 14	34 - 9¾	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,980 abs.
Do., pfd.	78	85	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾		1¾		$800,000
General Motors, XD	14½		10	16 - 14¾	42 - 12½	2%		Quarterly	Feb. 1, 1921	25c				20,562,358 shs.
Federal Truck	20		10	20 - 18½	82 - 16½	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	250	254	100	260 -220	680 -210	Varies		As Decl'd	Oct. 1, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.	13½	15½	10		11½ - 11	Varies		As Decl'd	Oct. 1, 1920					$1,062,750
Gladys-Belle, com., XD	52	54	10	73 - 58	1 42 - 56	16%		Quarterly	Jan. 1, 1921	4%		4%		$6,402,000
Do., pfd.	72	75	1.00	80 - 63	1 48 - 61	16%		Quarterly	Jan 15, 1921	4%		4%		$2,000,000
Goodnear Rubber Co.	19	21	None		80¾ - 30½									1,70,0 shs.
Do., pfd.	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$2,500,000
Hanna Furnace, com.	26		10											$1,805,000
Do., pfd.	96	99	100											$750,000
Hall Lamp Co.	14½	15	10	15 - 15	32½ - 16	Varies		As Decl'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	3¾	3¾	10	3¾ - 3¾	8¾ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1½%				$1,500,000
Holland-St. Louis Sugar Co.	8¾	8½	10		10 - 7¾	12%		Quarterly	Jan. 1, 1921	3%				$2,000,000
Iron Silver Mining Co.	25	46	20		42 - 42	20%		Semi-Ann	July 1, 1919	10%				$2,500,000
S. S. Kresge, com.	129	132	100	96¾ - 96¾	151 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	97	102	100			7%		Quarterly	Jan. 2, 1921	1¾		1¾%		$2,000,000
Lindenmun Steel, com.	12	15	10		24½ - 13½	6%		Quarterly	Jan. 1, 1921	1½		1½%		$1,000,000
Lincoln Motors Class A	19¾	19¾	10	21½ - 17¾	50½ - 13¾	$5.00		Quarterly	July 30, 1920	$1.25		$1.25		$8,000,000
Mexican Crude Rubber Co.			10		13½ - 8¾				Dec. 1, 1916	3%				$750,000
Michigan Drop Forge, com. XD		60	None		80 - 50¾	$3.00		Monthly	Dec. 1, 1920	25c		25c		$ 12,500 abs.
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾				$250,000
Michigan Stamping Co., com. XD	17		10	17¾ - 17¾	30 - 16½	9%		Monthly	Jan. 1, 1921	¾%		¾%		$1,200,000
Michigan Sugar Co., com.	8¾	8¾	10	9 - 7¾	13¾ - 7½	12%		Quarterly	Dec. 1, 1920	3%				$7,471,100
Do., pfd.	8¾		10	9¼ - 9¼	9¾ - 8¾	6%		Quarterly	Dec. 1, 1920	1½				$2,000,000
Niles-Detroit Theater Co	15½		10		21 - 15½	*6%		Quarterly	Jan. 10, 1921	1½				$350,000
Motor Products	42		None	43 - 43	60¾ - 37				Oct. 1, 1917	$1.00				1 100,000 shs.
Motor Wheel	10½	10¾	10	10¾ - 8½	13¾ - 8½	*8%		Quarterly	Nov. 20, 1920	2%				$4,500,340
Murray Mfg.		10	10		33 - 10	*12%		Monthly	Jan. 15, 1921	1%				$750,000
National Grocer Co.	8½	9	100	9¼ - 9	156 - 156	*8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.	88	92	100		107 - 90	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	121	124	1.00	1.24-1 10	2.00-1 05	*18%		Quarterly	Jan. 1, 1921	4½		4½		$1,000,000
Packard Motor Co., com.	10½	10¾	10	11 - 9¾	28¾ - 9½	10%		Quarterly	Oct. 31, 1920	2½				$13,885,100
Do., pfd.	76½	76¾	100	79 - 70½	96¼ - 67	7%		Quarterly	Dec. 15, 1920	1¾				$15,225,500
Paige-Detroit Motor Car Co.	18	18¼	10	18¼ - 13¾	45½ - 12	*12%		Monthly	Dec. 10, 1920	3%				$2,000,000
Parke, Davis & Co.	93½	96½	25	97 - 92	115 - 93	*16%		Quarterly	Jan. 3, 1921	4%		4%		$11,870,850
Penberthy Injector, pfd.			100			8%		Quarterly	Jan. 1, 1921	2%		2%		$500,000
Reo Motor Co.	22¼	22½	10	23 - 17½	29¼ - 10¾	10%		Quarterly	Jan. 3, 1921	2½		2½		$6,507,000
Scotten-Dillon Co.		32	10		35 - 29	8%		Quarterly	Jan. 3, 1921	2%		2%		$1,500,000
Timken Axle, com., XD	32¾		10	33 - 20¾	46¾ - 26	12%		Bi-Month	Jan. 15, 1921	2%		2%		$5,000,000
Do., pfd.			100		93¾ - 84	7%			Dec. 1, 1920	1¾%				$5,000,000
Tru-Con. Steel Co., com., XD	26½	29	10		29¼ - 29¼	16%		Quarterly	Dec. 1, 1920	4%		4%		$1,450,250
Do., pfd.		9¾	10		9¾ - 9¾	7%			Dec. 1, 1920	1¾				$1,852,200
U. S. Radiator, com.	15	17½	100		31½ - 20									$4,000,000
Do., pfd. XD	83½		100		95¾ - 80	7%			Jan. 25, 1921	1¾%		7%		$2,800,000
Waring Hat Co., com.			25	None										
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		
Western Knitting Mills	10	11½	None	11 - 8½	30¾ - 8½	$2.00		Quarterly	Nov. 15, 1920	50c				$ 140,050 abs.
White Star Line	45	60	50		51½ - 50½	7%		Aug. & Nov.	Aug. 22, 1920	3½				$750,000
Wolverine Portland Cement Co.	3	4	10	2½ - 2	3¼ - 2½				Dec. 13, 1917					$1,000,000

*Sold 500-570; new 631/2 27. $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip. §Increase to $600,000 authorized. ‖ Book value, $1,016,997, Ed. & J. ¶ Book value, $3,219,327, Godchaux Book value, $2,622,795.60. Western Knitting Mills ‡ Book value $5,084,450. Motor Products. ¶Old. ‡Taken from other exchanges.

Foreign Exchange

Country	Par	Nov. 10 1919	Jan. 5 1921	Jan. 26 1921
Canada	1.0000	.95938	.85	.8906
London	4.8665	4.14	3.6275	3.8250
Switzerland	.1930	.1739	.1529	.1590
Paris	.1930	.1105	.0599	.07155
Belgium	.1930	.11736	.0625	.0782
Holland	.40196	.3775	.3162	.3330
Italy	.1930	.08787	.03468	.02685
Greece	.1930	.18	.0763	.0752
Spain	.1930	.1940	.1328	.1350
Vienna	.28262	.0165	.0023	.0030
Berlin	.23821	.0280	.00134	.0182
Denmark	.26759	.2020	.1595	.2000
Norway	.2682	.2100	.1585	.1900
Sweden	.2680	.1590	.2045	.2190

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Jan. 25, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	92.10	93.50	90.00	91.06	99.20	99.76	99.56	99.62
U. S. Liberty 1st 4s	88.30	85.50	85.32	85.00	93.00	94.90	92.00	94.12
U. S. Liberty 2nd 4s	88.00	86.20	84.10	85.00	91.58	93.84	92.04	94.10
U. S. Liberty 1st 4½s	88.00	86.35	85.50	85.18	92.46	95.14	96.50	....
U. S. Liberty 2nd 4½s	88.60	86.30	84.34	85.00	92.20	94.06	95.70	....
U. S. Liberty 3rd 4½s	91.04	90.04	87.20	85.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	88.46	86.46	84.96	85.56	99.75	100.10	....	....
Victory Bonds 4¾s	97.28	96.48	94.90	88.50	94.00	95.04	95.32	99.32

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement			Dividends		Detroit Stock Exchange						
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Last Sale	Jan. 25, 1921 Bid	Jan. 25, 1921 Ask
American State	150	$1,000,000	$15,989,348	10%	J-A-J-O 1st	221	215	226	200	121	221	225
Detroit Savings	257	1,500,000	23,862,200	13%	2 Jan-Jul 1st 2 Et Jan	250	258	259	250	259	250	300
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly 1 Jan-Jul							
First and Old Detroit National	194	5,000,000	69,889,082	†12%	J-A-J-O 1st	271	271	275	268	271	270	275
Central Savings Bank	142	1,000,000	17,615,136									
First State	169	1,000,000	12,789,501	10%	J-A-J-O 1st	....	....	....	....	....	187	195
Highland Park State	198	1,000,000	14,287,348	20%	J-A-J-O 1st	....	....	298	295	295	....	....
Merchants National	167	2,000,000	9,789,667	8%	J-A-J-O 1st	....	....	163	142	142	145	300
National Bank of Commerce	231	1,500,000	32,274,497	10%	J-A-J-O 1st	....	....	210	190	210	205	215
Peninsular State	158	2,500,000	31,525,787	12%	J-A-J-O 1st	....	....	220	215	215	220	240
Peoples State	282	5,000,000	100,783,995	12%	J-A-J-O 1st	360	360	335	306	360	360	....
United Savings	157	500,000	9,039,215	12%	Monthly	326	315	306	306	306	300	....
Wayne County Home	259	4,000,000	74,072,277	16%	Monthly	....	....	347	306	347	345	351
American Loan and Trust	134	300,000	.....	6%	J-A-J-O 1st	....	....	155	155	155	....	....
Bankers Trust	117	500,000	.....	8%	J-A-J-O 1st	....	....	....	....	....	....	....
Guaranty Trust	174	300,000	.....	8%	J-A-J-O 1st	....	....	148	148	....	160	....
Detroit Trust	417	1,000,000	.....	14%	J-A-J-O 1st	....	....	....	....	....	275	300
Security Trust	338	500,000	.....	12%	J-A-J-O 1st	....	....	....	....	....	280	....
Union Trust	190	1,000,000	.....	8%	J-A-J-O 1st	180	180	197	195	195	175	190
Commonwealth-Federal	124	750,000	10,328,127	10%	J-A-J-A 1st	....	....	130	....	....	105	112
Bank of Detroit	160	1,000,000	18,499,135			....	....	....	....	200	192	200
Continental Bank	120	700,000	.....			....	....	....	....	....	....	....
Michigan State	110	250,000	2,190,838	6%		....	....	....	....	....	120	125
American State, Dearborn	128	100,000	321,163	6%	Jan-Jul	....	....	....	....	....	....	....
American State, Highland Park	132	200,000	2,098,453	8%	J-A-J-O 1st	....	....	....	....	....	....	....
Peninsular State, Highland Park	220	100,000	1,264,556	12%	J-A-J-O 1st	....	....	122	122	122	118	122
Rouge State Bank	118	50,000	332,945			....	....	....	....	....	....	....
Industrial Morris Plan	119	500,000										

*Under one ownership-stock combined.

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1921	Last Sale 1921
Columbia Motors	4¾	5	14	4	5
Hoover Steel Ball	13	14¼	13	14½	
Great Lakes Eng	....	*133	133	110	
Liberty Motor (new)	4¾	5¾	160	35	50
Liberty Motor (old)	47	58	....	....	....
Noble Oil com	67	70	3.30	58	70
Invader Oil	11.46	1.85	1.33	1.75	1.50
Mich. Cop. & Brass	15¼	....	66	19½	16
Un. Mfg. 100% com.	10½	....	....	....	....
Un. Mfg. 30% com.	19	....	....	....	....
Federal Discount	8	9¼	....	....	....
Det. Mort., com	12½	4	....	....	....
Det. Mort., pfd	15½	3¾	6¼	5½	5¾
Det. Cop. & Brass	15	65	....	....	....
Wilson Truck	15½	3¾	....	....	5¾
McCord Mfg., com	13	14	....	....	....
McCord Mfg., pfd	170	180	....	....	....
Duplex Truck	15	3	....	....	....

* Old basis. †Nominal.

Lansing Stocks

G. N. Murchey & Co. report the following quotations at close, Tuesday, January 25th.

Auto Body	4¼ - 5¼
Duplex Truck	4¾ - 6¾
Bates and Edmunds offered	15
Reo Motor Co.	22½ -23½
Motor Wheel Corp.	109½ -110¾
First Bond and Mortgage Co.	*30 -65
Mich. Mortg. Co.	3¾ - 4¼
Mich. Screw	65 -40
Lansing Co.	35 -43
Atlas Drop Forge Co.	22¼ -23¼
Federal Force Co.	3 -10

* 6 shares pfd., 1 common.

Grand Rapids Stocks

The closing quotations on Public Utilities on Tuesday, January 25, 1921, are reported by the Corrigan Company as follows:

Cities Service, com	258	666
Cities Service, preferred	65	35½
Cities Service, Bankers	29¾	29¾
Cities Service, Debenture B	123	180
Cities Service, Debenture C	92	94
Cities Service, Debenture D	34	36
Commonwealth Power & Light, com.	14	16½
Do preferred	64	70
American Public Utilities, com	3	16
Do preferred	19	45
United Light & Railways, com	20	66
Do preferred	56	58
American Light & Traction, com	82	83
Do preferred	74	79

Financial Record Open Market

(This department has been established in order to bring together buyers and sellers of securities which are not listed or in which there is comparatively little trading. Brokers are invited to submit lists each Tuesday.)

Webb, Lee & Company, Penobscot building, Detroit, will buy, sell or quote: Detroit Mortgage Corporation 3 per cent common; Wayne County Loan & Realty Company; American State Bank of Dearborn; American State Bank of Highland Park; Michigan Mortgage & Investment; Bankers Land; Federal Discount; Michigan Finance; Union Mortgage; Detroit Mortgage; Little Wonder Glove; Koppin Realty; Keltivator Corporation; Palace Theatre; Columbia Theatre; De Luxe Theatre, J. C. Wilson Truck.

REVIVAL IN MUSKEGON

Activities in some of the factories of Muskegon have been resumed. As previously stated, the Continental Motors Corporation is adding men, but is still far from having its former normal force. The Stewart-Hartshorn Company is operating some of its departments, there being about 25 per cent of the usual force on hand, and the Central Paper Company has resumed operations with a normal force of 400 men.

MICHIGAN BRASS ELECTION

The Michigan Brass & Electric Company has declared 7 per cent cash and 6 per cent stock dividends. Officers and directors re-elected are: Claude Smith, president and treasurer; Leo G. Benson, vice-president; Harry R. Wight, secretary. The company is located in Lansing.

Detroit Bank Clearings

Week of Jan. 26, 1921	$ 79,015,207.01
Week of Jan. 19, 1921	$101,985,396.70
Week of Jan. 12, 1921	99,173,447.74
Week of Jan. 5, 1921	$107,666,994.93
Week of Jan. 26, 1920	$ 97,611,853.87
Week of Dec. 28, 1920	$ 77,936,441.37
Week of Dec. 21, 1920	$106,166,803.09
Week of Dec. 14, 1920	$107,314,269.91
Week of Dec. 6, 1920	$109,948,806.09
Week of Dec. 1, 1920	$ 91,143,143.66
Week of Jan. 19, 1920	$121,641,037.36
Week of Jan. 12, 1920	$86,467,909.81

Active Bonds and Notes

Security—Maturity	Bid	Ask
Am. T. & T. 6s, Oct. 1, 1926	97⅜	97⅝
Anaconda 6s, Jan. 1, 1929	87	88½
Anglo-Am. Oil 7½s, Apr. 1, 1925	100⅝	101½
Balt. & Ohio 6s, July, 1929	91⅜	92¼
Bel. Govt. S. F. 7½s, June 1, 1945	96¾	97
Beth. Steel 7s, July 15, 1926	98⅜	99½
British 5½s, Nov., 1921	98⅜	99¼
British 5½s, Oct. 1, 1923	99	99⅛
Canadian 5s, Apr. 1, 1925	91⅜	91½
C. G. C. & St. L. 6s, July 1, 1969	90	91
Rock. Valley 6s, Mar. 1, 1924	93¼	94
Il. Cent. 4½s, Jan. 1, 1944	90½	92
Jap. Govt. 4s, Jan. 1, 1931	60	21½
Jap Govt. 1st, 4½s, Feb. 15, 1925	80	80½
N. Y. Central 7s, Sept. 1, 1930	102⅝	103½
Norway 8s, 1940	99⅝	100¼
Penna. Ry. 7s, Apr. 1, 1930	104⅜	105¼
Sp. Govt. 4½s, Jan. 1, 2014	64⅝	64⅞
Solvay 8s, 1927	100	101
Swedish Govt. 8s, June 15, 1939	80	62
Swiss Govt. 8s, July 1, 1940	101⅝	104¼
U. S Rubber 7½s, Aug. 1, 1930	99	99⅝
Virginian Ry. 5s, May 1, 1962	84	85
Western Elec. 7s, Apr. 1, 1925	99½	100

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Briscoe Motor	13	16
Chalmers Motor	1	2
Curtis Aeroplane	7	10
Goodrich, com	40⅛	40⅝
Harroun	....	....
Lee Tire	19⅜	20¼
Nash	300	325
Pierce	25½	35⅝
Republic Truck	33⅜	64⅜
Saxon	4⅜	7½
Stromberg Carb.	38½	89
White Motors	39	65¼

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks
Investment Houses
Trade Associations

IRENE WILLIAMS
104 South Michigan Avenue
CHICAGO

Digitized by Google

Public Utilities

Lansing—The Michigan Public Utilities Commission has again increased the cost of gas for Lansing consumers in response to the petition of the Lansing Fuel & Gas Company. The present rate of $1.35 for 1,000 cubic feet, with 10 cents discount for prompt payment, remains the same, but the Commission has allowed an additional service charge of 45 cents monthly for each meter, starting February 1. The company has asked for a rate of $1.70 net. The industrial net rates are fixed as follows: For first 100,000 feet, $1.25 a thousand; next 100,000 feet, $1.10; next 800,000, $1.00, and for all over 1,000,000 feet, 90 cents a thousand.

Detroit—The D. U. R. has established through service from Detroit to Battle Creek and Kalamazoo, and Detroit to Saginaw and Bay City, thus eliminating the changes at Jackson or Flint.

Lansing—The city council has indorsed the report of the committee on the municipal electric light and water equipment, approving proposed extensions and a new power plant.

Grand Rapids—The Grand Rapids Railway Company in its report covering December shows that the year 1920 ended with a deficit of $147,070, an increase of $93,342 over the deficit at the end of the year 1919. Number of passengers carried last year was 27,813,220, or 1,506,188 more than for the previous year. There were also carried 6,827,389 transfer passengers, or 153,223 more than in 1919. Operating expenses increased $4.432 during the last month of 1920, with the total expense set at $177,607, of which amount the city received the company $150,000, says the Grand Rapids News. There remains thus a difference of $27,607 which the railway company has to meet. The only decrease in operating expenses was power, which fell off $646, and general expenditures, which dropped $1,055.

Whitehall—Officers elected by the White River Power & Lighting Company are as follows: President, John O. Reed; vice-president, Edward T. Rogers; treasurer, George E. Covell.

Adrian—It was decided by the board of directors of the Adrian Street Railway Company at its annual meeting a few days ago, to engage the services of an efficiency engineer to make weekly inspections of the system with a view to improving the service, says the Telegram. No discussion as to the sale of the railway was taken up, but it was decided to operate the Adrian line as long as possible, according to Clarke E. Baldwin, attorney for the company. Those who attended the meeting are Frank R. Coates, president of the company; Directors Van Dreesen, Nicolai, Leidbetter and Wheaton, and J. Frank Johnson, one of the receivers of the Toledo & Western road.

Lansing—The Michigan Public Utilities Commission has directed 100 telephone companies in the state to report on supplies and materials purchased, where purchased and the prices of paid, statements to be made within the next 30 days. This order is part of the commission's investigation of the alleged existence of a telephone trust in the state. The order, in part, follows: "Thirty days after service on it of a copy of this order, the telephone company shall file with this commission a report showing a detailed list of all materials, supplies and equipment purchased by it, of whom purchased and the price paid therefor, and any discount or rebate received or allowed from such listed prices, and a copy of any specific contract or agreement which exists in relation to the use or disuse of any of said materials, supplies and equipment between it and any other person, firm or corporation, for the years 1918, 1919 and 1920."

Detroit—The Detroit United Railway has filed with the city council initiative petitions bearing 8,000 signatures, asking for an ordinance authorizing the service-at-cost plan of railway operation. The petitions prepare the way for a referendum.

Tecumseh—The Tecumseh Telephone Company has elected the following officers: C. F. Patterson, president; Dr. L. G. North, vice-president; C. A. Wright, secretary; F. D. Turner, treasurer; A. C. Aylesworth, manager. The same make up the board of directors.

Charlotte—The Consumers Power Company is erecting a sub-station which will increase the line voltage to a total of 140,000, as compared with 40,000 at present. This will be used to care for the local business in Charlotte, Eaton Rapids and Olivet. It was expected that the new building will be completed within a couple of months. There will be three new transformers, three lightning arresters and three oil switches.

Grand Ledge—The Grand Ledge Telephone Company now operates the local lines of the Michigan State Telephone Company, the Michigan Public Utilities Commission having granted permission to the latter company to close its plant and turn over its toll business and local subscribers.

Lansing—According to Chester Grey, manager and secretary of the Lansing Fuel & Gas Company, the high freight rates are responsible for the excessive gas rates. He declared that the freight now alone exceeds the cost of both coal and transportation five years ago. The cost of coal, coke and oil represents the chief expenses in production of gas, and the rates of the latter cannot well decline so long as the freight remains up, he declares, even though prices on commodities generally are coming down.

Detroit—The first car over the four miles of municipally owned car line on the St. Jean-Charlevoix route was operated January 16, power being supplied by the Detroit Edison Company. Regular operation will be started February 1, it is said.

Port Huron—Mayor John V. French has ordered the City Electric Railway Company not to put its one-man cars into operation until official permission is granted. He alleges that operation of such equipment violates terms of the franchise.

Cadillac—The city commission has passed the ordinance granting the optional metered water rates to the Consumer's Power Company. This ordinance is designed to give water consumers their choice of the basis of payment for service. It is effective January 24. Any consumer who elects to be served by meter instead of the monthly flat rate may notify the company and a meter will be installed at his expense. The company will refund to the consumers 40 per cent of the consumer's annual water bill until the meter is paid for, after which the measuring instrument becomes the property of the company.

LANSING CO. BUSINESS GOOD

H. E. Moore, vice-president and general manager of the Lansing Company, Lansing, maker of warehouse trucks, industrial trucks, wheelbarrows, concrete mixers and allied lines, writes under date of January 24 that the business of his company is running along in first-class shape and he has no cause for complaint whatever.

GROWTH OF STATE BANK CONTROL

Illinois will soon take second place among the states in point of number of banks under state supervision. With the recent addition of 574 private banks to the ranks of state chartered institutions, the total is 1,371. Only 24 private banks were without charters January 3, 1921, according to the state auditor. Missouri will head the list with 1,516; Illinois, 1,371; Iowa, 1,246; Minnesota, 1,184; Kansas, 1,109; Nebraska, 1,069; Texas, 892, and Wisconsin, 825. If Michigan were to add its 250 private banks to the 550 chartered banks it would rank eighth, with 800 state institutions.

Banks and Bankers

CONTINENTAL & COMMERCIAL BANK

At the annual meeting of directors of the Continental and Commercial National Bank of Chicago, January 11, Arthur Reynolds was elected president, succeeding his brother, George M. Reynolds, who becomes chairman of the board, a position created at the same meeting.

George M. Reynolds has been president of the Continental and Commercial National Bank since its organization in 1910. Arthur Reynolds has been first vice-president for the last six years. Under the new arrangement Arthur Reynolds is president and George M. Reynolds is chairman of the boards of the three banking units comprising the Continental and Commercial Banks.

In addition to the changes affecting George M. and Arthur Reynolds, the directors have announced the election of Dan Norman as vice-president. Mr. Norman served for many years as assistant cashier. The directors also added W. F. Denny and H. R. Castles to the list of assistant cashiers.

CHARLEVOIX STATE GROWS $100,000

The annual meeting of the Charlevoix State Savings Bank was held at the banking office, January 11. J. L. Crane, H. S. Harsha, A. A. Swinton, A. D. Crimins and John Burns were elected directors. The directors met immediately after the stockholders' meeting and the following officers were chosen: President, J. L. Crane; vice-president, H. S. Harsha; vice-president, A. A. Swinton; cashier, A. D. Crimins; assistant cashier, Archie Livingston.

The year just closed was the most satisfactory in the history of the bank, a growth of nearly $100,000 in deposits being shown.

NEW BANK AT CASS CITY

The Pinney State Bank has been organized to do a commercial and savings business at Cass City. The capital is $50,000 and the principal incorporators Elizabeth E. and Henry L. Pinney and Joana C. McRae, all of Cass City.

GARDINER OUT OF HOSPITAL

H. G. Gardiner, Detroit manager for Imbrie & Company, investment bankers, and who was operated on for appendicitis recently, is out of the hospital and convalescing.

BROADWAY MARKET EARNINGS

Gross income of the Broadway Market, Detroit, for 1920 was $143,680.93 and net profit $21,823.43 compared with $113,819 gross and $12,587.48 net for 1918 and $123,978.43 gross and $15,437.56 net for 1919. Stockholders re-elected Philip Breitmeyer, president; Thomas Glynn, vice-president; William A. Sanders, second vice-president; Walter G. Toepel, treasurer, and Henry S. Warren, secretary. These with Ward Lockwood, Louis Loewenstein, Louis A. Peters and Roy S. White comprise the board of directors.

ALLIS-CHALMERS' POSITION

The Allis-Chalmers Manufacturing Company, Milwaukee, reports that it has started the new year with about $17,000,000 of orders booked, as compared with $15,500,000 for January 1, 1920. All things considered, the last month of 1920 was a good one, new business having been booked at the rate of 75 per cent of capacity.

COLLEGE OF MINES HONORED

A group of mining engineers meeting in Ballarat, Australia, have selected the College of Mines, Houghton, as one of the five greatest mining schools in the world. The Houghton institution is the only American mining school selected. Two were picked from England, one from Germany and one from Australia.

Digitized by Google

Who's Who In Michigan Finance

Coorge H. Kirchner, President, First State Bank, Detroit.

George H. Kirchner, president of the First State Bank, Detroit, is another native son, having been born January 1, 1866, in a house on Congress street East, near St. Aubin avenue. His father, Sebastain Kirchner, was a dry goods merchant on Gratiot avenue between Orleans and Riopelle streets.



GEO. H. KIRCHNER

After attending St. Joseph's school from 1871 to 1880, Mr. Kirchner entered the law office of Alfred E. Hawes as an office boy and early in 1881 he got a similar job with Cleveland Hunt. However, the banking business was too much of a lure, and on December 10, 1881, he entered the employ of Vincent J. Scott, a private banker at 91 Griswold street, as a messenger. This connection was continued until the private bank failed in August, 1885. During his employment Mr. Kirchner rose from messenger to bookkeeper.

After the bank failed he obtained a situation as office man for Jeynes & Son, contractors, with offices in the old Walker block, which stood where the Dime Bank building is now, and remained with them until the City Savings Bank was organized in 1889, when he was made savings teller of that institution. On January 6, 1894, he was elected assistant cashier of the German American Bank, now the First State Bank, and rose successfully to director in 1897, cashier in 1901 and president in January 1912.

George H. Kirchner occupies a private office which can be made private when it needs to be, but the door is usually wide open and prince or pauper may obtain an audience without the use of calling cards or having credentials validated by a secretary. He is genial and frank, yet he deals direct from the shoulder and his customers in all ordinary matters get either a ready "Yes" or a deliberate and carefully contemplated "No." In foreign credits he is counted as an authority and ranks generally as one of the best money lenders in Detroit. He is interested in sixteen business enterprises either as an officer or director, principal of which are the Guaranty Trust Company, Detroit; Rouge State Bank, River Rouge; Ecorse State Bank, Ecorse; Union Mortgage Company, Detroit; Halfway State Bank, Halfway, and the United States Mortgage Bond Company. He is also a trustee of Mt. Elliott Cemetery Association. He has five children and lives at 618 Boston boulevard.

U. OF M. RETAINS WIGHTMAN

Earl C. Wightman, actuary of the Detroit Life Insurance Company, has been notified of his re-appointment as instructor of insurance at the University of Michigan. Mr. Wightman was first associated with Michigan State Life in 1913 and that year he accepted a position as actuary for the Detroit Life. Mr. Wightman has given this course in insurance accounting at the University of Michigan for four years.

DU PONT ELECTS NEW TREASURER

E. I. du Pont de Nemours & Company have elected Walter S. Carpenter treasurer to succeed Donaldson Brown, who is now associated with the General Motors Corporation.

DIME SAVINGS BANK
FORT AND GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison
Sherman & Chene
Dix & Artillery

Your Inquiry

regarding the service rendered by the Dime Savings Bank to out-of-town banks will be appreciated by us—we welcome any opportunity of setting forth the complete facilities which are the result of our 36 years' continuous service in Michigan to business houses and financial institutions.

Capital and Surplus, $3,750,000

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Troy Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

Michigan Bank Elections

DETROIT

Bank of Detroit—James Cousens was re-elected president; James T. Whitehead, Edmund D. Fisher and G. R. Judson, vice-presidents, and R. B. Gripman, cashier.

First State—President, George H. Kirchner; vice-presidents, Paul R. Gray, Charles W. Kotcher, Abner E. Larned, Cyrenius A. Newcomb, Jr., Edward Ventasch, John Koch; vice-president and cashier, H. J. Koch; assistant cashiers, Emil Jacoth, Julius Ruhiner; assistant cashier and supervisor of branches, R. T. Kirchner; assistant cashier and manager of Gratiot avenue branch, E. C. Bloss.

Michigan State—President, Frank Schmidt; vice-president, Stanley C. Krusewiski; cashier, Frederick A. Smith.

Peoples National, Hamtramck—President, Harry J. Fox; vice-presidents, George J. Haas, John Schultheis; cashier, Charles G. Munn; assistant cashier, Joseph Carl Leszynski. Directors: Harry J. Fox, Charles A. Fields, George J. Haas, Richard L. Lawson, Neal Olson and John Schultheis.

Society for Savings—President, Fred R. Still; vice-president, Robert M. Grindley; secretary, E. R. Townsend; treasurer, Ralph W. Swanson. Directors: Robert M. Grindley, M. J. Murphy, Ralph H. Wilkinson, David W. Simons, A. A. Templeton, Henry A. Barbinowski, M. A. Moynihan, J. M. Easton, C. C. Boone, A. L. McMeans, L. B. Robertson, Tracy W. McGregor, William B. Campbell, E. B. Tyrrell, Gustavus D. Pope, Fred R. Still, Frank W. Blair, Leo M. Franklin, David M. Gray and Anthony Stefanowski.

ECORSE

Ecorse State Bank, Ecorse—James H. Means, president; Jos. Sailliotte, vice-president. Geo. H. Kirchner, vice-president; Otto Bauer, cashier. Directors, Chas. Bahlow, Elmer Labadie, H. Bourassa, H. F. Furgason, A. L. Montie, Geo. H. Kirchner, James H. Means, John S. Harry, Ignatius Sailliotte, Howard C. Wade, Jos. Sailliotte.

FLINT

Citizens Commercial & Savings—Seven new members added to directorate: Otto P. Graff, William E. Martin, cashier of the bank; Fred B. Elliott, William A. Paterson, Jr., manager; Homer J. McBride and Herbert N. Bush. Re-elected: Robert A. Whaley, Irving W. Hubbard, Alex McFarlan, Harry Winegarden, Frank D. Buekingham, Charles L. Bartlett, J. B. Burroughs, Charles H. Miller, Eugene G. Watson and Thomas Doyle.

Genesee County Savings—Directors: W. W. Crapo, H. C. Spencer, J. D. Dort, Geo. C. Wilson, E. W. Atwood, F. A. Aldrich, J. H. Crawford, C. S. Mott, J. L. Pierce, H. H. Bishop, W. S. Norton, W. O. Smith, W. C. Wells, W. R. Hubbard, C. B. Burr, M. Begole, W. Abbott Smith, Sherl Champion and A. G. Bishop.

First National—Directors: E. W. Atwood, F. A. Aldrich, J. J. Carton, Albert Champion, A. J. Bishop and James Martin.

Union Trust & Savings—Directors: C. T. Bridgman, George W. Cook, W. H. Edwards, F. H. Rankin, A. M. Davison, J. G. Windiate, C. H. Bonbright, S. S. Stewart, Belle Cox, A. A. Cummings, W. O. Smith and L. H. Bridgman.

Industrial Savings—Directors: Walter J. Schlinger, an addition; all 1920 members re-elected.

FRANKENMUTH

Frankenmuth Savings Bank—Directors: Benton Hanchett, Otto Schupp, Carl Gugel, G. H. Hannum, Arnold Boutell, W. C. Cornwell, Fred J. Fox, Louis Goetzinger, Theodore Hinkel, Julius Eidlich, Louis Mautner, E. A. Robertson, G. M. Stark, W. J. Wickes and Otto Finkbiner.

FREELAND

Freeland State—Directors: H. T. Robinson, Charles Wolcha, Herman Gross, H. J. Hesseneberg, Louis H. Sarle, G. F. Barbarin and T. J. Reavey.

GRAND LEDGE

Loan & Deposit Bank—G. N. Borry was elected chairman, and Jas. Fred L. Berry, president; E. M. Briggs, Lansing, vice-president; Martin M. Maier, second vice-president; E. F. Mills, cashier; Francis M. Hoag, assistant cashier. The other directors are D. D. Shane, R. C. Holaday, J. D. Bumpus, Charles Stranahan and E. M. Lawson. The latter two men are new members of the board.

A new bank building was arranged for. The Loan & Deposit Bank has purchased of Isaac Pierce the building and another store now stands. This will be used as a site.

Grand Ledge State—The directors re-elected the former staff: President, A. R. Gillies; vice-president, W. R. Granger; cashier, Henry D. Towne; directors, J. D. Huise, F. A. Taber, R. A. Latting and W. T. Clarke.

GREENVILLE

Greenville State—Directors: Frank S. Gibson, Charles J. Gibson, Joseph S. Gibson, Ray S. Cowin, Delmer H. Moore, Herbert J. Belknap, William H. Browne. Officers: President, Frank S. Gibson; vice-president, Charles J. Gibson; second vice-president, Joseph S. Gibson; cashier, W. H. Browne; assistant cashier, W. H. Angell.

HEMLOCK

Hemlock State—Directors: William Pahl, John C. Rauchholz, Henry Alwart, William J. Turner, J. H. Hudson, R. T. Maynard and R. B. Beaver. Officers: President, William Pahl; vice-president, John C. Rauchholz; cashier, R. B. Beaver; assistant cashier, E. B. Beaver.

HILLSDALE

Hillsdale Savings—Directors: H. S. Walworth, L. D. Wainbrith, Edwin Robins, F. M. Cook, O. J. Cornell. Edwin Robins is the new director, succeeding the late J. T. Crune. Officers: President, O. J. Cornell; vice-president, H. S. Walworth; cashier, F. M. Cook; assistant cashier, M. H. Marsh; tellers, G. H. Morgan and H. L. Van Dusen.

JACKSON

National Union—Directors: C. C. Bloomfield, A. B. Robinson, F. D. Bennett, Z. C. Eldred, A. C. Bloomfield, W. B. Field, C. B. Hayes, M. Daniels, A. D. McBurney, H. H. Stiles, R. W. Smith, Robert L. Kennedy and W. S. Cohn.

Peoples National—Officers: President, B. M. DeLamatter; vice-presidents, H. S. Reynolds and J. C. Blackman; cashier, J. F. Clary, assistant cashiers, C. H. Edgar and A. J. Whitney. Directors: E. W. Barber, H. C. Blackman, E. B. Clarkson, L. B. Cowley, B. M. DeLamatter, H. E. Edwards, H. S. Reynolds, W. R. Reynolds, Watson R. Smith, William Sparks and Mark Merriman.

Central State—Officers: President, F. E. Palmer; first vice-president, H. J. Smith; second vice-president, C. C. Loeser; third vice-president, L. R. Welcome; cashier, L. H. Ludy; assistant cashier, Leo Zeltler; secretary, Richard Prior. Directors: F. E. Palmer, L. R. Welcome, H. C. Loeser, Richard Prior, James J. Crary, W. W. Wright, R. S. Lockhart, J. O. Gilbert and Joseph W. Marks.

Jackson State Savings—Officers: President, William H. Palmer; vice-presidents, Charles M. Norris, C. C. Townsend; cashier, F. H. Newkirk; assistant cashiers, John W. Knight and D. E. Haefner. Directors: W. M. Palmer, C. M. Norris, C. C. Townsend, John J. Peek, H. H. Nessley, R. E. Ward, H. H. Corwin, H. J. Davis, A. Lockwood, J. Calkowski, W. C. Morray, W. S. Kessler, C. E. Noyes, H. T. Woodfield and P. H. Williams.

Jackson City—Officers: President, N. S. Potter; vice-presidents, W. M. Thompson, Peter B. Loomis, Edward G. Larraway and R. E. Potter; cashier, Roland B. Walker; assistant cashiers, A. H. Lathrop and W. D. Thompson. Directors: N. S. Potter, W. M. Thompson, Peter B. Loomis, W. M. Eaton, John W. Miner, H. C. Towsley, W. A. Bucknall, Edward G. Carter, R. E. Larraway, K. L. Potter, D. G. Kimball and R. J. Glasgow.

KALAMAZOO

First National—President, C. S. Campbell; vice-presidents, J. H. Dewing and F. S. Parsons; cashier, E. H. Shepard; assistant cashiers, S. A. Pratt and R. G. Rye; directors: Dr. Edward Amea, C. S. Campbell, A. E. Curtenius, James H. Dewing, B. C. Dickinson, F. M. Hodge, H. S. Humphrey, Felix Pagenstecher, F. S. Parsons, A. L. Pratt, Woodbury Rhodes, F. W. Nichols, Claire H. Stearns and A. E. Kettle.

Kalamazoo National—President, E. J. Phelps; vice-presidents, M. J. Bigelow and W. L. Otis; cashier, F. R. Eaton; assistant cashiers, L. M. Phelps, G. B. Reazor and H. Bronkhorst. Directors: M. J. Bigelow, W. L. Otis, H. A. Crawford, W. B. Milham, E. J. Phelps, F. R. Deerberger, G. G. Bard, W. E. Upjohn, F. H. Milham, H. L. Vandenberg and E. V. Brigham.

Kalamazoo-City Savings—President, Herbert E. Johnson; vice-presidents, Alfred B. Connable, Herbert W. Parker and Fred G. Dewey; cashier, Milford G. Davis; assistant cashiers, John F. Tuberty and Clarence H. Hall; auditor, Roland J. Barnard. Directors: George E. Bardeen, Charles A. Blakey, Alfred B. Connable, Charles Charnes, Charles A. Dowing, Herbert E. Johnson, William O. Jones, Lewis H. Kirby, Herbert W. Parker, Charles Locke, John J. Peck, Arthur J. Todd and George P. Wingleton.

Home Savings Bank—President, Vernon T. Barker; vice-president, Frank H. Milham; cashier, Abe Van Bochove; assistant cashiers, N. S. Pond and William F. Vanderwerp. Directors: V. T. Barker, Jos. E. Brown, C. M. Bush, Chas. Clarage, H. C. Dunbar, Frank H. Milham, Abe Lefter, W. E. Kidder, Frank H. Milham, John McKinnon, W. B. Milham, R. B. Orcutt, W. N. Pomeroy and L. Rosenbaum.

RIVER ROUGE

Rouge State Bank, River Rouge—Howard C. Wade, president; John Cassidy, Jr., vice-president; Geo. H. Kirchner, vice-president; Edward McLachlan, cashier. Directors, John Cassidy, Jr., Daniel D. Barron, Herman Goldnitz, Alger R. Reno, Howard C. Wade, James H. Means, John S. Haggerty, Geo. H. Kirchner, Wm. Chalmers.

Additional Bank Elections Will Be Published Next Week

The
Public Accounting Department
of
THE MICHIGAN TRUST COMPANY
PREPARES Income and Excess Profits Tax and other Federal Tax Returns;
INSTALLS General and Cost Accounting Systems;
MAKES Audits and investigations for any purpose desired.
Pearl St. and Ottawa Ave., Grand Rapids, Michigan.

MATTHEW FINN
High Grade Municipal and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

O'SHEA & CUMMINS
Formerly with U. S. Internal Revenue Office
INCOME TAX REPORTS
Main 6188
408 Burns Building
524 Griswold Street

Digitized by Google

Detroit Rock Salt Co. Nets $120,386 in 1920

The annual report of the Detroit Rock Salt Company was submitted to stockholders January 10. Earnings for the year, less depreciation and depletion, were $188,992.96, from which $55,500 bond interest and $13,106.80 reserve for taxes were deducted, leaving a net of $120,386.16. Salt produced and shipped amounted to 163,748 tons, as compared with 176,683 in 1919, the decrease being due to falling-off in orders during the last quarter. There were practically no unfilled orders on hand at the close of the year, demand being light.

The total of $55,167.45 was added to plant account during the year, being payments for new hoisting machinery, heating plant equipment, motors, crushing machinery and mine cars. Seventy-five thousand dollars was deposited with the Security Trust Company, Detroit, for redemption of bonds at par on January 1, 1921, in accordance with the sinking fund clause of the mortgage. Eight hundred fifty thousand dollars of bonds remain outstanding. A dividend of 5 per cent was paid December 31, 1920, being the second dividend of like amount paid on the common stock. The balance sheet follows:

RESOURCES	
Cash	$ 117,238.21
Liberty bonds	10,000.00
Sinking fund	75,000.00
Accounts receivable	36,757.99
Inventories	25,141.93
Plant accounts	2,584,814.37
	$2,848,962.49

LIABILITIES		
Capital stock (common)		$1,500,000.00
Bonds		825,000.00
Accounts payable		18,276.96
Reserve for 1920 government taxes		13,106.80
Surplus, Jan. 1, 1920	$352,198.62	
Earnings, 1920	120,386.16	
	$472,584.79	
Less dividend	75,000.00	
		397,584.79
		$2,848,962.49

Michigan Bond Items

The voters of Ecorse shortly will be asked to vote on the question of bonding the school district for $200,000 for a building and $60,000 for an addition to the present school.

If the voters of Ferndale approve the proposed bond issue of $150,000, which is to be decided at an election the latter part of this month, two new parks will be provided.

On April 4 the voters of Genesee county will be asked to pass on a bond issue of $3,400,000, the proceeds to be used for the construction of 150 miles of hard surface roads.

In April the people of Charlotte will be asked to decide the question of issuing $45,000 of bonds for paving purposes.

The proposition to bond Grand Blanc for $135,000 for a school building was lost at last week's election by 10 votes.

The First National Bank of Marshall has purchased the $37,500 bond issue for the Covert road to be constructed between Marengo and Sheridan townships. The bonds, which are in $1,050 denominations, will bear 6 per cent interest.

There will shortly be held an election in Ecorse concerning the issuance of $200,000 of bonds for a school building and $60,000 for an addition to a school.

The Benton Harbor board of public works is preparing an announcement to the effect that a bond issue will be required for the purpose of obtaining the money needed for the construction of a filtration plant at the water pumping station.

Gross earnings of the Detroit, Toledo & Ironton Railroad for November are reported as $481,031, as compared with $322,773 for the same month in 1919. The net operating deficit was $212,135 after taxes, as against $114,795 in 1919.

Over 8% Still Obtainable

Although the yield of good bonds is gradually decreasing it is still possible to invest in the more conservative type of mortgage obligation at prices which provide 8% and better.

For an example ask for our Circular No. F-4.

Bonbright & Company

UNION TRUST BUILDING, DETROIT

Telephone Cherry 4320

New York Boston Philadelphia Chicago

ESTABLISHED 1906

Bookkeeping Appraisals and Cost Systems

Audits Income Tax Reports

THE WALTER S. GURD CO.

Public Accountants

708-9 Hammond Bldg. Detroit, Mich.

Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F.C.A.

A Bank with a Reputation, 70 Years of Service.

THE DETROIT SAVINGS BANK

OLDEST BANK IN MICHIGAN

45-47 Fort St. West. 14 Branches

Penobscot Building

SAFE INVESTMENT BONDS FOR SAVINGS

JOEL STOCKARD & CO.

Members Detroit Stock Exchange

Main Floor, Penobscot Bldg.

CHERRY 5000

Digitized by Google

The Needs of the U. of M.

(*Continued from Page 9*)

of this discussion. The point it is intended to convey is that University Hospital is dirty beyond necessity, despite the fact that it is overcrowded, that many things are tolerated by its administration which would cause the officers in any private institution to do a lot of explaining. One of the sections exhibited to visitors is the building where expectant mothers are cared for and where their little ones are first brought to see the light of day. It is an old cottage, full of creepy stairs and small rooms and dingy corners, with too many women in each room. The kitchen has an old table on which is a badly worn and stained covering of white oilcloth. It is hard for anyone to conceive that the need for space is so tremendous on the campus that this old building is the only one of the university's properties that can be dedicated to this purpose. A regular hospital wing may not be necessary, but surely there must be something better than what has been set aside for these young women of the state, who cannot afford to pay for medical care. The University Hospital limits is better cared for than these patients. There is one case of a girl who walked across a railroad track on the way to the hospital to be delivered, and who stumbled and broke her leg. It leads one naturally to question whether or not a girl in that condition might not have been able to receive a helping hand which might have avoided that accident. She is exhibited to visitors as if it were the taxpayers' fault that she was injured.

Other Unsighly Spots

There are other parts of the University hospital that are not pointed to with pride. One is the dermatology ward, where social diseases are treated and studied. The state of Michigan has asked the University to install this department and many cases are cared for there, as well as cases that come to the campus. Little advantage seems to be taken of the fact that the frankness and violence with which social diseases have first attacked has proved almost the only blessing to mankind that came out of the war. Not only the state, but the United States Public Health service as well, is conducting a vigorous warfare against man's greatest scourge. The University of Michigan hospital should be one of the strongest forts in defense of humanity against this plague. Its attainments, except for one or two conspicuous instances, are negligible.

The medical profession has taken the position that the University Hospital belongs in Detroit or some other large city where there are better clinical opportunities. It also has informed Dr. Burton with regrettable frankness that the institution should care for indigent patients, leaving the profitable ones to the finished members of the profession, so that campus doctors might not earn too much money. These are some of the opinions which Dr. Burton's demands have brought into the fresh air for the first time in a long while. The fact of the matter is that there is only a small percentage of the taxpayers of the state who would send their sick to the University Hospital if they could afford to pay. They might desire the services of some physician identified with the University, and there are many whose attainments have traveled far, but they would scarcely come to the University hospital for that attention, but would seek one of the many private institutions maintained in the city for just that purpose.

Another question which Dr. Burton will have to answer many times has to do with student fees. Many persons, particularly farmers, object to the large percentage of students from outside of Michigan and the United States who seek our university for their study. Non-resident students now pay $140 a school year in tuition, which is considered too low. Dr. Burton is authority for the statement that this could be raised if desired and the tuition for state students lowered if necessary. He is firm, however, in the attitude that nothing should be done to discourage outside students, because of the opportunity they give the others to rub shoulders with the children of the whole world. There is not a nation or continent but has boys and girls at Ann Arbor.

Aside from the fact that these young people contribute to the general congested condition, this can have little to do with the University building program. There are more Michigan students attending colleges outside the state than there are other young people at Michigan. This is probably true of every large institution. The most important factor in the selection of a university for many young people is that the subject or science in which they desire to specialize has an authority somewhere whose fame has reached them. Family reasons also make a difference and causes many fathers and mothers who are no longer residents of Michigan to send their sons and daughters to Ann Arbor. These considerations will be followed regardless of what rates are established. Further, no matter what fees are assessed, the state cannot expect to receive the full expense of education from its students, anyway. Perhaps much of this cost is returned to the University in after years in the form of gifts and scholarships from its sons and daughters who become successful in business and professional life.

We have said that the University is down at the head. Taking the $500,000 appropriation for buildings, here are some facts: The first item is for $900,000 for the first section of a general building for the Literary College, which, when finished, will be the largest unit in work. This study is now pursued in the old main building, entirely inadequate, and in West Hall, an old structure condemned and rickety. The proposed building would front on State street, starting on a line with Alumni Memorial Hall, take part of the ground now occupied by the Museum and end on the line of the main building. It is planned to be sufficiently adequate so that it would not need to be enlarged for several years. It would be six stories high, the upper two of which would be for storage purposes which would give them some privacy, now denied them.

The museum has a priceless collection in a structure perhaps the most unsuitable on the campus since the removal of the old dental buildings. The building is a firetrap and the exhibits are crowded so that they are difficult of access to students. Another $900,000 is asked for this structure.

Engineering shops and laboratories, costing $1,500,000, are required. These Dr. Burton would build on a site owned mostly by the University of Michigan Athletic Board. Plain factory type units are proposed. The present engineering building was constructed to accommodate 1,000 students and now cares for more than 3,000, with some 900 alone in the old boiler room and in a low frame building erected by the Student Army Training Corps.

Eight hundred thousand dollars is asked for a new physics laboratory, the present building having been outgrown, both as to facilities and the development in the science demanding new apparatus and equipment. The medical building necessities are set at $900,000. This is badly needed by the great medical school developed by that department, and which now is crowded by beginners in medicine. It is here that most of the intensive work in medicine is done. Dental students need this department in addition to their own, although the dental building is one of the very well equipped recent structures on North University avenue. Then $350,000 is wanted for completion of a model high school for training high school teachers. This probably is intended to supplement the appropriation made in 1919, which now may not become available. The present enrollment of students desiring to train for teaching high school subjects is negligible. Dr. Burton is authority for the statement that the University is asked by the normal colleges to train high school teachers and leave to them the business of preparing teachers for primary grades and special subjects.

An addition costing $200,000 is asked for the College of Dentistry, which, probably is wanted merely to increase the facilities, as this department is now well housed. Four hundred thousand dollars for a chemical laboratory would increase the facilities which are used by several departments, and $40,000 for a biological station at Douglas Lake, which speaks for itself.

State Has Not Been Niggardly

The University asks, further, $1,200,000 to purchase land. This would provide funds for condemnation purposes of small parcels mostly, as much ground already has been absorbed from time to time by the school and will be used for the structures proposed. It would be necessary to open a street for a short distance to make the proposed engineering units and the new hospital wings more accessible, and there are other plots needed which, Dr. Burton says, can be procured at reasonable figures.

Contrary to many views, the state of Michigan has not been niggardly with the University in the past. The taxes set aside for maintaining the school, exclusive of buildings, increased 53.4 per cent from 1909 to 1918, inclusive, jumping from $863,237 in the former year to $1,241,500 in the latter. Aside from the revenue raised by the mill tax last year, the Legislature by making immediate appropriations made the following appropriations in 1919:

To complete the new library.....	$200,000
For the new hospital, 1919-20.....	150,000
For the new hospital, 1920-21.....	150,000
Teachers' high school, 1919-20.....	100,000
Teachers' high school, 1920-21.....	200,000
To cover deficit in running expenses..	360,000

Just what the Legislature will do is problematical. Our guess is that the University rather will receive about $5,000,000 for buildings this session or else about $15,000,000. A bond issue would not be beyond expectations and discovery of new sources of revenue may have some effect on the situation. The Legislature will not act until the requirements of all the other state institutions—educational, penal, corrective, etc.—have been placed before it, and then the problem will have to be considered in its entirety. No reliable suppositions can be drawn until then. The decision to be given by the Legislature to determine, according to its wisdom. Meanwhile Dr. Burton is mustering all his strength and with commendable energy and frankness is telling the people of Michigan what they have to do if they want to keep their university first class.

Dr. Burton probably will be made to realize that the taxpayers are not interested in having this university the greatest in the country nor the largest, nor will they concern themselves particularly with the relative standing of public institutions supported by tax money as against highly endowed centers of learning, such as Yale and Harvard. That is a question for educators which will not be a part of this discussion to any great degree. He can trade on the pride which the state feels in its great school. Whatever this Legislature does, whatever Dr. Burton says, there will be a university at Ann Arbor for many years. Eventually it will be built up as it should be. Let us hope that a good start is made this year.

Digitized by Google

How Michigan Casts Its Metal

(*Continued from Page 12*)

begins to flow, this is plugged and the charging continued, the molten metal accumulating in the hearth until it is tapped for use. Coke is practically always used for fuel, and the air blast is supplied by either one of two devices, i. e., a centrifugal fan or a blower.

When the molds are ready and a sufficient amount of iron has been melted, the plug is removed from the tap hole and a flow of iron started. Ladles are placed under the hole to catch the white-hot metal, and as soon as they are filled they are carried away and the iron poured into the molds. In the larger foundries the iron from the cupola runs into huge pots which are picked up by overhead cranes or trolleys and carried to the several sections of the shop where the iron is poured into hand ladles and thence distributed to the molds.

It sometimes becomes necessary to make a casting which shall be very hard, for the purpose of resisting friction or for some similar reason. As a rule it is only the external portion of the casting which has to be chilled, so that the problem is to cool that part of the casting as rapidly as possible. This is done by using a mold which is made either wholly or partly of iron, which carries the heat off rapidly.

For some purposes, particularly for small parts of machinery which have to bear considerable stress, ordinary cast iron is too brittle and has too little tensile strength. In such cases malleable iron castings are often used. The iron from which these castings are made is known as white iron and contains chemical elements which make it very hard and brittle. The castings are packed in an iron box, the packing consisting of sand, fire clay, hematite ore, magnetite (which is another form of iron ore), or some similar substance, and are then placed in an annealing oven, where they are heated until certain chemical changes have taken place. After annealing, the casting can be twisted, bent and hammered, and its strength is more than doubled. The resistance to shock of the average malleable casting is about eight times that of gray cast iron and half that of steel. For frequently repeated light shocks, a malleable casting is superior to one made of steel.

Some Michigan Foundries

One of the largest gray iron foundries in Michigan is that of the Saginaw Products Company, at Saginaw. The foundry building, which is divided into four bays, is 490 feet long and 164 feet wide. Four cupolas are provided for melting the metal, three of which are alike, with 90-inch shells lined to 65 inches at the bottom, and one which is 56 inches in diameter lined to 40 inches. It is calculated that when fully charged each cupola weighs 130 tons. The blast is supplied by three No. 6½ positive pressure blowers. Each blower is driven by an individual 75-h. p. motor, and runs at a speed of 175 R. P. M., delivering 8,300 cubic feet of air a minute. The large castings are cleaned by using two sand blast units. The plant employs 900 men when operating at normal capacity, producing more than 200 tons of castings daily. Thirty-two core ovens are required for baking the cores. These ovens are arranged back to back with eight in a row, making two batteries of 16 each. Each oven is 12 feet by 6 feet 6 inches by 7 feet high. The firebox for the ovens is located in the basement. A pyrometer is attached to each oven in order that they may be maintained at the proper temperature and a record kept.

The Ford Motor Company recently has completed the erection of equipment whereby the hot metal can be poured direct from the fur-

(*Continued on Page 38*)

WINTON SIX



Has Everything

A winner in getting away, smooth as silk from start to 60 miles an hour, masterful on any hill where highways lead, an abundance of power, and the easiest of comfort—these are your delightful advantages when you have one of these amazing new Winton Six motor cars. The car that has everything. May we show you? Simply telephone.

GEORGE H. ZUVER COMPANY
4005 Cass Avenue Telephone Glendale 4605

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Port St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

A. D. Shelbourne PHOTOGRAPHER
STUDIO BUILDING
4038 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

Digitized by Google

(*Continued from Page 37*)

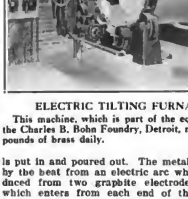
naces into the molds without first having to be run into "pigs." Cupolas have not been eliminated entirely, but the metal from the blast furnaces is mixed with metal from the cupolas in the correct proportions for the production of high grade castings. The foundry building is 1,188 feet long by 660 feet wide, and is equipped with 18 cupolas arranged in three batteries of six each.

Metal from the blast furnaces will be taken to the foundry in ladle cars and poured outside the foundry in a 30-ton ladle, or hot metal container, one of which is provided for each battery of cupolas. From this ladle 1,500 to 2,000 pounds of the furnace metal will be poured into a foundry ladle and the ladle taken to the cupola, where the required amount of cupola metal will be added. The cupola metal will consist largely of scrapped castings and borings from the machine shop.

From the illustrations and meager descriptions available, it is evident that up to the last few years very little progress has been made in the methods of casting copper and its alloys. The type of brass furnace most generally in use is the "crucible furnace," of the square, natural-draft pit type, usually built so that the top of the furnace is at or near the level of the foundry floor. It consists of a sheet iron shell, lined with fire bricks, resting on a bed-plate and fitted with a cast iron cover. A hole is cut in near the top of the furnace, so that the gases of combustion are carried off at the side, and thence up a chimney. The grate bars usually are set from 12 to 18 inches above the bottom of the pit, thus leaving room for ashes in the bottom. The fire is started on the grate bars, and after it is well under way the crucible is set in on top of the fuel.

These crucibles ordinarily are made of clay and graphite and usually have a capacity of from 160 to 300 pounds of metal. A "charge" of metal is now put into the pot and heated to approximately 2,000 degrees F., after which it is pulled out of the pit and carried away to be poured. A crane or chain-fall is used to remove the pot from the furnace. The crucible must be removed from the pit at exactly the right moment, because if it remains too long in the fire, the metal will become overheated and the zinc portion of the alloy will be burned away. If the metal is poured before it has reached the proper temperature, the metals will not fuse well and a poor casting will result.

The last few years have seen the development of the electric furnace, several different types of which are now on the market. These are rapidly displacing the pit furnaces in the larger foundries. In the Chas. B. Bohn foundries a battery of six electric rocking furnaces is employed, each of which melts 2,000 pounds of brass at one heat. This furnace is similar in appearance to a large drum, and consists of a steel cylinder 68 inches in diameter and 60 inches long, lined with fire brick, and having an opening in the side through which the metal



ELECTRIC TILTING FURNACE

This machine, which is part of the equipment of the Charles B. Bohn Foundry, Detroit, melts 12,000 pounds of brass daily.

is put in and poured out. The metal is melted by the heat from an electric arc which is produced from two graphite electrodes, one of which enters from each end of the furnace. The electrodes are four inches in diameter and are set so that the points are from one to one and one-half inches apart. The current is 115 volt A. C.

Around each end of the furnace is a steel band which acts as a track for the rollers upon which the furnace rests. The furnace is also encircled by a ring gear at each end which is meshed with a small gear. Power is supplied from a 2 h. p. motor through a worm gear and wheel to the small gear, which as it revolves, also slowly revolves the furnace, rolling it around until the opening in the side comes down nearly to the level of the molten metal. At this point a contact breaker reverses the motor, rolling the furnace in the opposite direction, and the operation is repeated. The ring gears are eccentric with the circumference of the furnace, the eccentric coming on opposite sides, so that as the furnace rocks, it also tilts endwise, completely stirring the metal. Thus the constituents of the charge are thoroughly mixed, the metal is heated rapidly without danger of oxidising and volatilising, and absolute uniformity of temperature is insured. The average net metallic loss is one per cent with yellow brass and one-half of one per cent with red brass.

The metal is poured from the furnace into a crucible, or pot, which has been heated to a high temperature. It is obvious that if the molten metal were to be poured into a cold pot, not only would the temperature of the metal be lowered thereby, but the pot might be cracked and ruined. So while the metal is melting, the pots are being heated. This is done by means of a "pot heater," which is a gas fired oven with an open opening downward, through which gas is forced. This gas is lighted and the pot placed nader it, so that the flame will strike downward into the bottom of the pot. The pot is heated in a very short time, and then when the metal is poured into it, the heat is retained.

Another form of furnace has been designed to melt either copper, brass or aluminum, and is becoming very popular in aluminum foundries. The furnace consists of a steel shell, lined with bricks or fire clay, with room in the center for the crucible. The crucible is not removed from the furnace when the metal is to be poured; instead, the furnace is tilted and the metal poured into another crucible, in which it is carried to the mold. The furnace is supported by trunnions in a steel framework and is tilted by means of a hand wheel which operates a set of gears. Furnaces of this type burn either oil or gas, the burner being placed so that the flame enters through a hole at one side near the bottom of the furnace, practically enveloping the crucible.

Rules to Follow in Filing Tax Returns

(*Continued from Page 13*)

taking into consideration the inventory at the beginning and end of the year. Other items that may be included as business expenses are reasonable compensation for the services of officials and employes, advertising and other selling expenses, together with insurance premiums against fire, storm, theft, accident or other similar losses, and rental for the use of business property.

A taxpayer may deduct the necessary expenses paid in carrying on his business from his gross income from whatever source. In computing net income upon which the tax is assessed, a deduction for business expense or a disbursement or charge must have certain qualities in order to be allowed. It must relate to a trade, business, profession or vocation, "carried on" by the taxpayer in which he has invested time and money for the purpose of a livelihood or profit. A business is being carried on by its owner, even though all its activities may be conducted by employes.

The deduction must be a "business expense" and not an "investment of capital." Amounts expended for the erection of new buildings, installation of machinery and the purchase of tools or implements of permanent value do not constitute business expenses, being merely a change in the form of capital and not a reduction of wealth. Expenditure for property which is used up in the course of the year may be deducted as a business expense.

Many representatives of business houses will be benefited by a recent Treasury decision relative to traveling expenses. Reasonable and necessary traveling expenses include railroad fares and meals and lodging. A traveling man, working on a salary without reimbursement for traveling expenses, or employed on a commission basis with no expense allowance, may deduct his expenses for railroad fare and also his expenses for meals and lodging in an amount in excess of the ordinary cost for such living expense when at home.

If he receives a salary and is repaid his actual traveling expenses, he must include as gross income an amount equal to the ordinary expense for meals and lodging when at home, as such amount is held to be additional compensation to the taxpayer.

Numerous errors relative to claims for deductions for losses have been discovered in returns of prior years. To be allowed, deductions for losses must be confined to the following classes: Losses suffered in trade or business; losses in transactions entered into for profit though not connected with a trade or business losses of property not connected with trade or business if arising from fires, shipwreck, storms or other casualty, or from theft. To the extent any of these losses are compensated for by insurance or otherwise, they are not deductible.

A common loss of a person engaged in business is the destruction or theft of merchandise. A merchant who uses inventories to ascertain his profit should not make on his books entries for any of his stock in trade that is destroyed or stolen, for the reason that such loss will be reflected in his closing inventory. If his books are kept on a cash basis which properly shows his correct profits, he may deduct specifically the amount of his loss. In either event, if the merchant receives insurance for such losses he must include in his gross income the amount of such insurance.

Loss of cash by burglary or embezzlement may be deducted by entry debiting profit and loss and crediting cash. The amount of such loss should be reduced by the amount of insurance covering it and by the reasonable value of any claim against the embezzler or his sureties which have an ascertainable value such as a claim against the surety company. A loss incurred through embezzlement is an allowable deduction from gross income only for the year in which the embezzlement occurred.

Bad debts form an important item in the returns of many business men. Claims for

(*Continued on Page 40*)

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354



ELECTROTYPES ARE THE WORKING PLATES

In the last analysis, the Engineer must answer for the safety of passengers and crew. Heavy responsibility rides with him. When the Printing Press stage of your advertising program is reached, it is the Electrotypes that must answer for success or failure in reproduction. As the *working plates*, they must prove their mettle!

Michigan Electrotype & Stereotype Co.
Fort Street at Second — Main 1972

MICHIGAN

ELECTROTYPES STEREOTYPES

DETROIT

DAVENPORT 5 SPINDLE AUTO SCREW MACHINE

Remarkable Speed. Unusual Accuracy.



AS the gas buggy of the one lung vintage is a rarity these days on account of its limited performance, so must the various types of automatic screw machines give way to

THE DAVENPORT

Capacity ½ in. diameter. 2 in. long.

THE MOTCH AND MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

(Continued from Page 38)

such deductions must have certain qualities. The debt must have been charged off within the year in which its worthlessness was discovered; the return must show evidence of the manner in which discovery was made; a statement should be made that the debtor has been discharged in bankruptcy or has disappeared, leaving no trace, or that the ordinary means of collection have been exhausted.

Where the creditor continues to extend credit, a debt may not be claimed as worthless. A debt may not be charged off or deducted in part, but must be wholly worthless before any part can be deducted, though it may be clearly worth less than the face amount. If a debt is forgiven, it cannot be deducted because it is then regarded as a gift.

The Revenue Act provides in relation to deductions that a reasonable allowance may be made for the exhaustions, wear and tear of business property. This applies to buildings and equipment, such as motor trucks, horses, delivery wagons or machinery.

Return of individual income if the net income was $5,000 or less must be made on Form 1040A. If the individual net income exceeded $5,000 the return must be made on Form 1040. If the business is operated by a partnership a return must be made. From 1965, even though the firm had no net income for the year.

Partnerships as such are not subject to the income tax, but individual members are taxed on the distributive shares of net income from the business, whether distributed or not, and are required to include such shares in their individual return, even though they may not have been actually received. Similarly, if a business is incorporated a return must be made on Form 1120, regardless of its net income.

Forms for making corporation, partnership and individual tax returns are now available at offices of collectors of internal revenue. Copies will be mailed by collectors to persons who filed these returns last year. Failure to receive a copy however, does not relieve a taxpayer of his obligation to file a return on time. The period for filing is from January 1 to March 15, 1921. This year, at last, the tax may be paid in full at the time of filing the return or in four equal installments due on or before March 15, June 15, September 15 and December 15. The return must be filed with the collector of internal revenue for the district in which the taxpayer resides or has his principal place of business. Heavy penalties are provided by the revenue act for failure or willful refusal to file a return and pay the tax on time.

Michigan and the Open Shop

(Continued from Page 14)

man could lay 2,025 bricks a day, and he was a master at straight wall, corner or any other branch of his trade.

"He gloried in his reputation as a workman. He was not the type of man whose ambition prohibited him, or whose education classified him for self-development to industrial or business leadership, but he was a darn good bricklayer. He had a son who viewed bricklaying with the same enthusiasm as the father. The boy wanted to learn to lay brick like his father. The father determined to give the boy the proper training. To this end he had the brick and mortar and set the boy to work in the back yard.

"The boy took to the job like most boys take to marbles. He built walls which his father kicked over as poor work, but in time the youngster learned the trick and when 17 years old went out to earn his living as a bricklayer. With the training he had from the same love of his trade as his father had, the boy soon equaled his dad's record. Then the union began to notice him and before long the business agent visited him on the job and informed him that 600 bricks a day was the union limit, and he must hold to it or quit the trade.

"The boy told his father of the warning and the father said this: 'My son, when an organization or any person tells you how many bricks to lay, it is time to quit the trade.' And the boy quit the trade. The building trade lost a good bricklayer just as industry has lost many a good mechanic through this new union-bred theory of limited production and limitless wages.

"The manufacturer cannot go before the public and say to the worker: 'You must not organize,' any more than the worker can say to the manufacturer: 'You must not organize.' Capital has organized; therefore labor has the same right. The union worker, once he has become an employer, immediately becomes identified with the organization which represents his business. The mistake labor organizations have made and are making is that they have devoted too much time to dictating to the member how and where he shall work and not enough time to making him a good workman.

"Had as much time been given to training their members for their chosen trade as has been directed toward setting their wages, hours of labor and their conduct while at work, the unionized workman would be no much superior to the unorganized man that the closed shop would have become the accepted rule in industry. Industry goes to the best technical schools to get its technical workers. By the same token it would go to the union to get the best workmen if high grade mechanics were the basic union principle.

"Unfortunately, labor organizations have operated as leaders, promoting the indifferent workman against the ambitious, skilled comrade, and setting a low scale of achievement to create the largest organization possible and gain the greatest political power.

"We are entering an industrial era which will call for high production. There also will be a reduction in wages. Michigan manufacturers view with disfavor the wholesale slashing of wages by some employers. They likewise condemn an attitude such as was reflected in a statement made recently by an employer when he said: 'We have labor in our power now and it will take what we give it.'

"Such a statement or such an attitude if mind is as serious a menace to industry as the most radical utterances from the I. W. W. or the anarchists. It is such mental conditions on the part of employers that have fanned the flame of radicalism among the misdirected workers. The prominence of manufacturers in this state has satisfied them that the open shop is not only true Americanism, but is likewise the best for the welfare of worker and employer alike.

"Years ago the foundry business in this city was a closed shop proposition, and it is the report of the men then in the harness, and some of whom are still at their desks, that there never were as many strikes before or since. If freedom of contract, freedom of movement and the right to work where, when and how they pleased were not the desire of the workingmen of this state, Michigan would today be as widely recognized as a closed shop state as it is as a good state to work in, to live in and to build industries in."

Making Steel In Four Hours

(Continued from Page 8)

and grades of steel, the machines with which the parts are made are built of steel, as are sewing machines, typewriters, office furniture—practically everything one touches is made of steel or has steel in it. And if by Dr. Robert's process huge quantities of ore which hitherto have been "scrapped" can be utilized and the whole process of making steel made easier, quicker and much cheaper, another great step forward will have been made in the development of industry and civilization.

The Robert company is planning to develop its plant on a large scale. F. P. White, who is acting as special representative, arrived in Detroit last week for the purpose of interviewing some of Michigan's greater industrial leaders. His plan is to enlist co-operation of some one of the larger industrial enterprises of the state, one which uses steel of all kinds and in sufficient quantities, so that the entire output of the proposed plant could be absorbed or handled by it. Mr. White says that this is not a stock-selling proposition; all that his company wants is the assistance of an organization or an individual who will supply the machinery necessary for the enlarging of the plant and take the entire output or a large part of it.

Mr. White is making his headquarters at the Henry Clay Hotel, Detroit, where he has samples and results of tests of the different kinds and grades of steel produced by the Robert process, together with photographs of the present plant and equipment. He hears credentials from Seattle business men and from some of the foremost metallurgists and manufacturers of the country.

MEAD JOINS AUTO SCHOOL

John H. Mead, formerly advertising manager of the Detroit Garage Equipment Company, has become associated with the Michigan State Auto School as manager of its student's service and supply department. Mr. Mead has had a long experience in buying and selling auto motive equipment, tools and materials.

TO MOVE OFFICES TO WISCONSIN

At the annual meeting of the Turtle Lake Lumber Company, Grand Rapids, it was announced that the company would move its general offices to Winchester, Wis., retaining, however, legal offices in the Michigan Trust building, Grand Rapids. The officers elected for the year are: William E. Vogelsang, president; Henry Idema, vice-president; George B. Dennis, secretary-treasurer and head of the legal department, and Edna M. Butler, assistant secretary.

FOURTH DUDLEY PAPER BRANCH

The Dudley Paper Company, Lansing, will open an office in Jackson, making four branches in Michigan. The company has selected the following officers: President, W. C. Dudley; vice-presidents, C. C. Woodruff and R. Guy Bronson; secretary, F. J. Weissinger; treasurer, C. M. Howland. These men and C. A. Willemin, R. A. Reed, L. C. Wonch, I. M. Buck and J. A. Church comprise the directors. The board authorized a 10 per cent cash dividend to be paid quarterly. Reports of officers showed increases in sales of 55 per cent.

FURNITURE PAYROLL INCREASE

The Furniture Mutual Insurance Company, Grand Rapids, announces that the 52 member factories paid premiums in 1920 based upon a total payroll of $14,697,070, in 1919 the premiums were paid on a total payroll of $10,418,815.

Digitized by Google



Caustic Soda, Soda Ash and Linseed Oil for immediate shipment from Chicago stock.

If you do not now receive our monthly market letter, write us at once. It is worth your while.

Permanence of Prestige

ONLY a business organization based on integrity and service can hope to build permanently.

We regard each transaction as a brick in our business structure and we are concerned that every brick be sound lest the entire building be endangered.

On the basis of continuing and increasing satisfaction to our clientele we seek your petroleum business.

JOHNSON OIL REFINING CO.

DETROIT, Dime Bank Bldg. CHICAGO, 208 So. La Salle St. PITTSBURGH, Union Arcade Bldg. TULSA, OKLA., Daniel Bldg.

JOHNSON OILS

SOLVAY COKE

Best for Your Needs: the Name Guarantees the Highest Quality

SEMET-SOLVAY CO.
DETROIT, MICH.

Winter's Here

BEEN here some little time. In fact just twenty years. And we've spread ourselves some in this time, both at home and abroad. Ten additions have been made to the Winter Bros. plant since its first chimney started to smoke. What's the significance? Nothing more nor less than that we have succeeded in making the kind of taps and dies that manufacturers are looking for—high speed taps and dies that will stand the wear and strain of modern manufacturing.

Our new catalog is ready for you.

WINTER BROS. CO.
Wrentham, Mass.

Detroit Office
THE H. B. KENDAL COMPANY
Real Estate Exchange Bldg.
Telephone Main 1657-8-9

Digitized by Google

Ford's Campaign for New Money

(*Continued from Page 8*)

believe that the motor king could ever find himself short of money. And yet that appears to be the situation. Financial men say that he has "spread his cash assets out so thin" that it is no small wonder that, with the business depression which has cut motor car sales to the minimum, he should be short of working capital. His present difficulties are said to be due not to the fact that he is any less wealthy than he ever was, but that his assets have become non-liquid—tied up in plants and real estate, cars made or in process of manufacture, but unsold, and in other investments on which it is impossible to realize immediately. The money he is seeking in New York is to meet maturing obligations and as funds with which to resume manufacturing operations, so the story goes.

How It Started

The Ford troubles are said to have started when Mr. Ford bought out the minority stockholders. In so doing he over-reached himself, bankers say. Consider the amount of money he found necessary to acquire the holdings of his associates. James Couzens is reported to have received $37,000,000 for his stock; John F. and Horace E. Dodge, $27,000,000; the Gray family $27,000,000, and Horace H. Rackham and the other smaller stockholders $1,500,000, making a total of $92,500,000. As part of the money with which to complete this transaction, the Ford Motor Company was said to have had at the time $42,000,000 of cash assets, leaving $50,500,000 to be obtained elsewhere.

The company went into the eastern financial market and got a loan of $60,000,000, of which about $10,000,000 would have remained, had $50,000,000 gone to help pay off Mr. Ford's former partners.

Not long afterward came the Ford purchase of the Detroit, Toledo & Ironton Railroad, for which approximately $5,000,000 was paid, and of the timber and mine lands in the Upper Peninsular of Michigan, which required $3,600,000. So that the total of disbursements was $101,100,000, as against the total of $102,000,000 of cash assets and the loan.

Financial men who have been figuring on Mr. Ford's investments in this direction say he counted on his usual turnover from sales to provide him with enough working capital, and they put forth the theory that partially all of the earnings of his organization from the time of the purchases mentioned until the time when sales began to fall off, went to reduce the Eastern loan and back into the business, particularly into plant construction in the River Rouge district. Ford's conversion of raw materials into cars has always been so rapid that the motor king has been enabled to make investments in permanent improvements out of his bank balance rather than by the usual methods of long-term loans. Always having been his own banker, and having been told by the press that his business was different from everybody else's, it is fair to assume that he went into the depression figuring that the gods would spare him and that the cut in prices of his cars would maintain that steady stream of cash income which he had always enjoyed.

When, however, the market for all makes of motor cars dried up, the Ford along with the rest, all of Mr. Ford's calculations were upset. Today, if reports are to be believed, he has reached the point where he must call for help upon the Wall Street which he has so vigorously attacked in other days.

Mr. Ford, as was said in an earlier paragraph, is reported to be maintaining that he needs only $75,000,000, while Mr. Stettinius, of the House of Morgan, is declared to have put the figure at $116,000,000. In what way may Mr. Ford have arrived at his total, and how Mr. Stettinius at his? A conservative Detroit banker took his pencil in hand.

"It is reasonable to suppose," he said, as he wrote down the figure $30,000,000, "that the Ford Motor Company has that much in short-term liabilities, and by that I mean acceptances and obligations it has given for materials received. The balance on the former loan is $25,000,000, and while that was renewed on January 16, for three months, there is the probability that Mr. Ford is making provision in the new loan to pay that balance off at maturity. Then possibly $20,000,000 is represented in purchase contracts, by which I mean contracts the company has with suppliers of materials and which must be carried out within the next few weeks or months. That makes the total $75,000,000, the one Mr. Ford is reported to have fixed.

"But the chances are that Mr. Stettinius added another item of some $40,000,000 which Mr. Ford had left out. This total, which represents cars completed or partially completed, but not sold, is a non-liquid asset, which Mr. Ford probably will need when he resumes manufacturing. He will have to throw it into the pot right away, so to speak. In normal times, of course, when cars are being sold as fast as they leave the factory, there is no such amount tied up. Thus the difference between Mr. Ford's estimate and Mr. Stettinius' probably lies in their divergence of views as to how soon sales will pick up, or it may be that Ford's cash assets are greater than might be supposed, although I have been reliably informed that whereas he usually carries in the neighborhood of $150,000,000 in bank, he has drawn down to $2,000,000 now."

Just who is acting as the Ford agent in the loan negotiations has not been disclosed, although it is reported that E. G. Liebold, general secretary to Henry Ford, was the first on the ground. On his failure to conclude satisfactory arrangements, it is said that Frank L. Klingensmith, until recently vice-president and treasurer of the company, was sent to New York. His failure, so one report has it, resulted in his leaving the fold.

The terms set up by the New York bankers are said to include the selection of a new treasurer for the Ford Motor Company, a man of the banks' own choosing. In this connection the name of Mr. Bower, of the Liberty National Bank, is most often mentioned. Mr. Bower, incidentally, was in Detroit two or three weeks recently, but whether he was here in connection with the loan negotiations has not been announced.

If it eventuates that the bankers put their own representative in the Ford organization, the question arises as to how Mr. Ford will accept the restraint on his own free action which such a situation would impose. In the early days of the Ford Motor Company, so far as public knowledge goes, Mr. Ford and the men associated with him in the management of the business got along peaceably enough together. It was in those days first that the foundation was being laid for one of the most phenomenal commercial successes ever recorded, and, latterly, things which previously unheard-of profits were being made. Later on, however, when the enterprise had succeeded beyond the fondest dreams of its owners, dissension arose, which resulted, eventually, in the withdrawal of the Dodges and then Mr. Couzens, and, finally, in Mr. Ford's outright purchase of the holdings of his associates, so that he would not be opposed at any stage of the game. How he will get along with outside interests remains to be seen, if indeed the necessity arises.

A man who is credited with having been in good measure responsible for the success of the Ford Motor Company, but who some time ago withdrew because of differences with others associated in the management, has tendered Mr. Ford his services for one year, without charge, to help put one of the important ends of the business "back on its feet," so he expressed it. Recently this man wrote Mr. Ford a letter, making such an offer. Up to a short time ago he had not received an answer.

"Henry Ford made me a millionaire several times over," this man told a friend, "and now when I believe he needs help I think I owe it to him and to the city of Detroit and the automotive industry in general to do what I can to assist him. I explained in my letter that I didn't want any more of his money. I have enough."

"Bad Advice"

In the course of this conversation the man expressed the opinion that Mr. Ford had made a mistake in allowing the "old guard" who came up the ladder with him to leave his organization. He had reference, no doubt, to C. Harold Wills, John R. Lee, Norval A. Hawkins and one or two others who had been with the Ford Motor Company almost from the days of its infancy. He said he believed Mr. Ford had been listening to bad advice from the men who now stand high in his favor, two of whom he mentioned by name, and he said he thought the company would get back into its stride much more quickly if these men were displaced.

In view of the fact that it is from the House of Morgan that Mr. Ford is said to be about to obtain the loan, the question has arisen based no doubt on the General Interest in the General Motors Corporation, whether the Ford company may eventually become a subsidiary to GMC. Men who recently have been in touch with some of the higher officials of General Motors say nothing of the sort is to be expected. They profess to have been assured that the GMC has no desire to add the Ford to its string, inasmuch as the latter does not fit into General Motors' scheme of manufacture. They say that if Morgan makes the loan to Ford he will make it as Morgan, Banker, and not as Morgan, Power in General Motors.

Another House Reported In Goodyear Financing

The Cleveland Plain Dealer has the following to say about the refinancing of the Goodyear Tire & Rubber Company:

"The rumor concerning the Goodyear financing carried by brokers wires out of New York says: 'A banking house whose name heretofore has not been identified with Goodyear affairs is known to have entered the situation and is about to underwrite an issue of first mortgage bonds which it is proposed to put out for the purpose of caring for secured creditors.

"'The plan also calls for an issue of junior securities which will take the form of 20-year debentures and another security which probably will take the form of first preferred stock which will be offered to the unsecured creditors.

"'According to the provisions of the plan, these three issues will aggregate $80,000,000. According to those who are familiar with the details, the banking house which has become identified with the Goodyear situation is willing to underwrite the issue of first mortgage bonds, if the unsecured creditors are willing to accept, in lieu of their obligations, from the company part debenture bonds and part first preferred stock which it is proposed to issue.'"

Digitized by Google

New Corporations

FOR WEEK ENDED JANUARY 22, 1921

Detroit Service-at-Cost Railway, Detroit, Highland Park and Hamtramck; to acquire, own and operate street railways in city of Detroit; Frank W. Brooks, 1906 E. Jefferson Ave., Allen F. Ewards, Detroit; Albert E. Peters, Birmingham ..... $ 25,000

Muste-Dykstra Co., Grand Rapids; manufacturing and sale of stone, marble and granite; Anna Muste, Henry J. Bouwkamp, Josiah Tasclaar, Grand Rapids 10,000

Consolidated Expanded Metal Co.'s (F.), Braddock, Pa.; H. K. Baker, 1235 Ilume Bank Bldg., Detroit 450,000

Foley & Riley Co. (F.), Chicago, Ill.; W. A. Riley, Pontiac 50,000

John H. Davis Co. (F.), Wilmington, Del.; John H. Davis, president; Homer H. Freeland, secretary, Grand Rapids 50,000

Columbia Steel & Shafting Co. (F.), Rankin, Pa.; Thomas H. Booth, 240 Fort St. W., Detroit 300,000

C. & J. Gregory Co., Bay City; printing, publishing, distributing, buying and selling and dealing in stationery; bookmaking; Chauncey, John and Lawrence C. Gregory, Bay City..... 100,000

Farmington Enterprise Co., Farmington; printing, publishing and bookbinding; Wales C. Martindale, George C. and Allan H. F. Martindale, Farmington 11,000

Champion Porcelain Co., Detroit; to manufacture, sell, deal in and otherwise handle and dispose of porcelain and its products; Robert E. Des Roches, 5023 Oregon Ave.; Arthur W. Dickey, S. DuBoff, Detroit 750,000

David J. Joseph Co. (F.), Cincinnati, O.; Charles D. Jacobson, 2037 Dime Bank Bldg., Detroit 500,000

Automotive Appliance Co., Benton Harbor; to manufacture, sell and distribute appliances, accessories, parts and devices for automotive engines; Verle D. Conklin, Forrest Woodley, Chester F. O'Hara, St. Joseph 1,500

Port Huron Sausage & Provision Co., Port Huron; to manufacture, buy, sell and deal in sausage and provisions of all kinds; Percy S. Stacey, Henry H. Woodward, Gus Hill, Port Huron..... 5,000

Monarch Stamping Co., Detroit; general manufacturing of and machine work on automobile parts and tools; Russell E. Anger, otto H. Anger, 354 Ferdinand Ave.; Hugo Stange, Detroit

Dan L. Dyer Co., Detroit; purchasing, holding and dealing in real estate; Dan L. Dyer, 2663 Grand Blvd.; Hannibal G. Coburn, Jr., Detroit; Harry A. Myers, Ypsilanti 25,000

Frank Manufacturing Co., Grand Rapids; manufacture and sale of spark plugs and other automobile accessories; Irving and Richard R. Frank, Arthur J. Stillwell, Grand Rapids 100,000

Pinney State Bank, Cass City; commercial and savings bank; Elizabeth E. and Henry L. Pinney, Joana C. McRae, Cass City 50,000

Fruit Growers Package Co., Paw Paw; to manufacture, handle, buy and sell fruit packages; James Marcellett, Paw Paw; Nathan Amater, Hamilton Ewing, Lawton 50,000

Kaye Manufacturing Co., Detroit; manufacturing and selling toys and all things incidental thereto; George J. Kaye, 1151 Moore Place; Herbert C. Kaye, Sid A. Erwin, Detroit..... 15,000

Rosebush Ranch Co., Amana; to buy, sell and breed all kinds of live stock; Charles H. Schutz, Amana; Barbara J. McN. Rosebush; Judson G. Rosebush, Appleton, Wis. 100,000

Campus Inn Co., Hamtramek; owning and operating of restaurants and eating houses; Henry Glass, Frank Moy, John Schwartz, Hamtramck 10,000

General Refining Co. (F.), Tulsa, Okla.; H. G. Beebe, Jackson 2,000,000

Mount Clemens Realty Co., Mount Clemens; to purchase, sell, rent, plat and subdivide real estate in Michigan; Robert J. Stewart, Spencer J. Dalby, John C. Bannow 50,000

Traders Warehouses, Inc., Detroit; public warehouse and storage distributing business; Robert L. Rosen, 2360 W. Grand Blvd.; David E. Hakin, Detroit; Barney E. Hakin, Chicago, Ill.

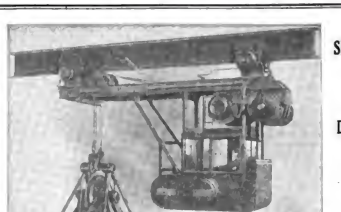
Schmidt Auction Rooms, Detroit; buying, selling and auctioneering merchandise; Alfred S., Blanche E. and Robert A. Schmidt, 3286 Euclid Ave., Detroit 25,000

Continental Discount Corp., Saginaw; to deal in bonds, notes, mortgages, land contracts, etc.; Felix Brucker, Thomas F. Beiberovick, L. W. Flack, Saginaw 100,000

Newaygo Ranch Co., Detroit; to deal in real estate securities; Ben B. Jacob, Charles J. Higgins and Leon H. Hamburger, 300 Real Estate Exchange Bldg., Detroit 10,000

Dawn Candy Co., Detroit; wholesale and retail candies and pastries; Charles D. and Edna A. Hamilton, 5818 Iroquois Ave., Frederick J. Mil-

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

STEERE ENGINEERING CO.
Machine Shops — Structural Steel and Plate Shops
Detroit, - Mich.

C. C. COREY
COAL COKE
1303-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

RED CROWN Gasoline is made especially for automobiles. It will deliver all the power your engine is capable of developing. It starts quickly, it accelerates smoothly, it will run your car at the least cost per mile, and it is easily procurable everywhere you go.

Standard Oil Company (Indiana) Chicago, Ill.

lerson, Detroit .....
Detroit Millinery Co., Detroit; to buy, sell and manufacture millinery goods and merchandise; David and Tillie Jacobs, Muskegon; R. M. Zollenka, 1932 Clairmont Ave., Detroit .....
E. M. Gaslay Manufacturing Co. (F.), Indiana; E. M. Gaslay, president; J. W. Kirtland, treasurer, Sidnaw, Mich. .....
Welfare Loan Society, Derby; to lend money and do everything necessary thereto; G. Powell Beardsley, Mich.; August Emich, William Wolff, Chicago, Ill. .....
Wagner-Taylor-Edson Co., Inc., Detroit; to do a general insurance agency business; A. McM. Creed, 60 Blaine Ave.; John C. Taylor, Henry Edson, Detroit .....
Lowell Sand & Gravel Co., operations in Rutland and Irving, office at Lowell; to manufacture, buy, sell, export and deal in and with artificial stone; Fred A. Godfrey, John O. Harrow, Lowell; R. C. Jackson, Detroit .....
Boulevard Cafeteria Co., Detroit; to buy and sell foods at wholesale and retail; Samuel J. Patrequin, 9328 Livernois Ave.; Lucien Lawshe, Leonard Chendzion, Detroit .....
Hannah Agency, Inc., Detroit; to do a general insurance agency business, except life insurance; Guy S. Greene, Sydney B. Roberts, No. 1 McGraw Bldg.; John D. McKay, Detroit .....
Autoneed Exhaust Heater Corp., Detroit; to manufacture, buy and sell, wholesale or retail, exhaust heaters, heating systems, etc.; Leonard F. Cleve, 3025 Hogarth Ave.; Wilfred H. Shiek, John W. Thompson, Detroit..
Campbell Dairy Products Co., Detroit; manufacturing, purchasing and selling of cream eggs, butter and food products; Edgar F. Campbell, Sarah E. Campbell, Frank C. Stem, Homer, Mich. .....

CHANGES OF NAME

Realty Assurance Corporation (name changed to Realty Development Corporation), Detroit .....
Sterling Furnace Co. (name changed to Tapiin Furnace Company), Grand Rapids .....
Fruit Package Machinery Co. (name changed to Package Machinery Company), St. Joseph.....

9,000	**INCREASES**	
	Whitney Company, Detroit, from $2,500,000 to	4,150,000
	Alloy Steel Forge Co., Detroit, from $35,000 to	50,000
3,000	John Bunker & Co., Sebewaing, from $20,000 to	40,000
	Great Lakes Silver Black Fox Co., Muskegon, from $35,000 to	70,000
50,000	Muskegon Athletic Assn., Muskegon, from $5,000 to	25,000
	Summit Park Land Co., Pontiac, from $36,000 to	50,000
	Barnard Music Co., Jackson, from $15,000 to	25,000
1,000	Barton-O'Borman Co. (name changed to F. D. Barton & Company), Saginaw-Thorice, from $50,000 to	150,000
	Edgar R. Somes Furniture Co., Grand Rapids, from $100,000 to	170,000
5,000	C. R. Brewster Lumber Co., Battle Creek, from $10,000 to	20,000
	DECREASES	
	American Gear & Mfg. Co., Jackson, from $70,000 to	60,000
125,000	Peninsular Fish Co., Detroit, from $10,000 to	1,000
	NOTICES OF CHANGES OF ATTITUDE	
	Grills Land Co., Detroit	40,000
	Crystal Lakeside Shop, Bay City	5,000
10,000	A. D. Mfg. Co., Detroit	50,000
	Tanenholz Realty Co., Detroit	25,000
	Marshall-Huggett Co., Grand Ledge	10,000
	A. Carnarelli Co., Detroit	3,000
	Public Drug Co., Benton Harbor	10,000
1,000	Central Loose Leaf Co., Benton Harbor	10,000
	"Merkey" Realty Co., Detroit	30,000
	Frankenmuth Valley Leasing Co., Frankenmuth	20,000
	Crossman Lumber Co., Grand Rapids..	20,000
	Ann Arbor Greenhouse Co., Ann Arbor.	25,000
2,000	Hubinger Brothers, Frankenmuth..	35,000
	Hardened Steel Products Co., Detroit...	50,000
	Patterson-Barrow Co., Detroit	15,000
	NOTICES OF DISSOLUTION	
	R. J. Tousignant Co., Outerngon	25,000
100,000	O. C. Kimball & Co., Hillsdale	4,000
	NOTICES OF WITHDRAWAL	
	Caldwell Shipping Co. (F.) (Ill.), Chicago, Ill., Detroit	15,000

BASLE'S FIFTH SAMPLE FAIR

The fifth Swiss Sample Fair will take place at Basle, its permanently allotted domicile, between April 16 and 26. The chief object of this trade exhibition is to stimulate already existing business relations; to afford opportunities for the making of new connections and to give the public in general a better idea of the nature, extent and progress of home manufactures.

Only Swiss firms and products manufactured in Switzerland are eligible for this Fair. In case of corporations, the majority of the management and at least half of the capital must be of Swiss origin and their chief seat must be located in Switzerland.

Among the goods featured in the exhibition are the following: Articles of food and luxuries, drugs and chemicals; house and kitchen utensils, household goods, glass and china; fittings for apartments; furniture and basket goods, heating, light and sanitary fittings; technical articles in metal, wood, glass, cork, leather, india rubber, etc.; office and shop fittings; drawing and painting utensils; paper manufactures and graphic arts; musical instruments, articles of sport and toys; artistic industrial articles; clocks, watches and jewelry; textile goods, clothing and outfitting; machinery and tools; fine mechanical instruments, instruments and apparatus; electrical industry; raw materials and building materials, agriculture and horticulture; sundries.

The first sample exhibition was held in 1917 and had 300,000 visitors and sales were effected for between $3,860,000 and $4,825,000. The second Fair closed with sales amounting to more than $7,720,000. The third exhibition in 1919 realized $9,650,000 in sales, and the fourth, in 1920, proved equally successful.

BEET GROWERS MEET FEB. 2

The Michigan Sugar Beet Growers' Association will hold its annual meeting in East Lansing, February 2, Farmers' Week. Owing to the unsettled condition of the sugar industry, growers are advised by the officers to defer consideration of contracts until after this meeting.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Detroit, February 5, 1921

FARM STRIKE MYTH MORE OR LESS

(Financial Section Page 27)

Vol. 27. No. 6 *Price Fifteen Cents*

Aladdin



Employees of Bertha Coal Co. Get Aladdin Read-Cut Houses

Many firms are confronted by problems of Industrial Housing such as were satisfactorily solved by the Bertha Coal Company, of Pittsburgh, Pennsylvania, when they decided to provide a number of Aladdin Readi-Cut Houses for their employees.

This is but one of the many instances where the Aladdin service has solved the housing problem. Better houses, lower in price, more quickly erected, these are the expressions of satisfaction we hear from every customer. Many firms will find it advantageous to take similar interest in housing their employees. For obtaining quick service, guaranteed complete delivery, best quality material and all-around satisfaction, bring that housing problem to *Aladdin*.

When you are ready to consider your housing problem bear these facts in mind.

Aladdin—

—expedites your building project—
—houses your men well and quickly—
—saves 18% of the cost of lumber—
—save 30% of the labor cost—
—reduces the skilled labor required—
—guarantees complete shipment of material—
—guarantees the quality—
—carries material for 1,000 houses in stock—
—ships from the nearest timber region—

—quotes definite prices on any order from one house up to a city of 3,000, including churches, schools, offices, water and sewage systems, electric plants, street and house lights, heating plants, street parks, trees, lawns, etc., complete.

Write, wire or phone for Aladdin catalog No. 207S

The Aladdin Co. *Offices and Mills at* Bay City, Michigan; Wilmington, N. C.; Hattiesburg, Miss.; Portland, Oregon; Toronto, Ontario

ALADDIN Ready Cut Houses GOLDEN RULE

Industrial Housing

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Established 1907

CONTENTS

February 5, 1921

	Page
Farm Strike Myth, More or Less — Phil S. Hanna, financial editor of the Manufacturer, writes from Valley City, N. D., about the banking situation in the Northwest.	7
Motor Car Exports and the Tariff — A review of the brief filed in Congress by the National Automobile Chamber of Commerce in support of a 30 per cent flat impost.	8
Successor to the Village Smithy — Drop forge methods in this state. Another article in the "Romance of Michigan Industry" series. By Howard Campbell.	9
Information From the Utilities	11
How Industry Is "Coming Back"	12
News of the Legislature	13
Automotive	14-15
Transportation Matters	16
Tire Price Outlook	16
The Week's Building	18
The 1921 Detroit Motor Show.	19
Editorial	20-21
Financial Section — The Business Outlook—Michigan Stock Quotations—Federal Reserve Statement—Bank Clearings—Foreign Exchange—Banks and Bankers—Corporate Earnings—Who's Who in Michigan Finance—General Financial News.	22-31
New Corporations	32-34

Vol. 27 **Detroit, Mich.** **No. 6**

Published Every Saturday by the Manufacturer Publishing Company
Suite 611 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google

Still Curtailment

That's what is happening throughout the manufacturing world today! And that's what is likely to knock into a proverbial cocked hat the business prognostications of some of our so-called economists.

On January 11th, 1921, of the 47 blast furnaces in the Birmingham district 15 stacks were in blast (some of these likely to blow out soon), 9 furnaces are obsolete and 23 were reported idle.

This statement is not published for the purpose of urging you to buy heavily now and for a long time into the future. We don't believe that would be displaying good judgment.

We do earnestly desire, however, to impress upon the buying public the danger lurking in these wholesale curtailments because of the possibility of the natural law of supply and demand boosting prices to a ruinously high point.

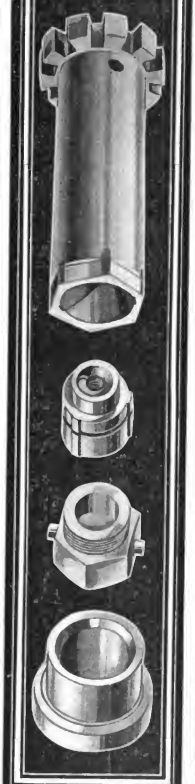
As pig iron producers we much prefer an even, steady market productive of moderate profit over a continued period, to a condition which must, of its own weight, produce demoralizing fluctuations.

Buy now in moderation for a short period, not to exceed 90 days, and let's put a stop to further curtailment.

OUR CHARCOAL IRON

Charcoal Iron Company of America
DETROIT

Digitized by Google



MUELLER SCREW MACHINE PRODUCTS

MUELLER makes anything in automatic screw machine work—in any desired quantity—from raw material to finished product.

Manufacturing our own brass rod enables us to guarantee prompt deliveries and to quote close prices on very close tolerances.

MUELLER BRASS PRODUCTS

have been recognized as the standard of excellence for more than half a century. *MUELLER* mechanics have been trained for years to produce only the finest grade of work.

Send us samples of screw machine parts desired and let us quote you prices, and give you the benefit of our years of experience.

MUELLER METALS CO., Port Huron, Mich.

Makers of "Red-Tip" Brass Rod; Brass and Copper Tubing; Forgings and Castings in Brass, Bronze and Aluminum; Die Castings in White Metal and Aluminum; also Screw Machined Products.

H. Mueller Manufacturing Co., Decatur, Ill. and Sarnia, Ont. Makers of Water, Plumbing and Gas Brass Goods and Tools.

Digitized by Google

Why Automobile Craftsmanship Is Improved

THE new-day automobile, whatever its price, represents the finest piece of transportation machinery ever conceived.

The very rapid improvement in automobile craftsmanship has brought this about.

The signing of the armistice marked an abnormal period in automobile building. There was a shortage of labor. Prices soared. Therefore workingmen very naturally sought highest wages to meet the pyramiding costs.

This caused constant shifting of labor. Lack of competition in labor caused inferior workmanship. Jobs were easy to get and easy to hold. Consequently the craftsmanship of fine building of motor cars was difficult to maintain.

Today the lathe is operated by an expert lathe hand; tools and dies are built by craftsman in this particular line; assemblers are doing their work so perfectly that the assembler waiting in the line at the employment office cannot come in and do it better; inspectors are passing nothing but absolutely perfect workmanship, because their job, their livelihood depends upon their thoroughness.

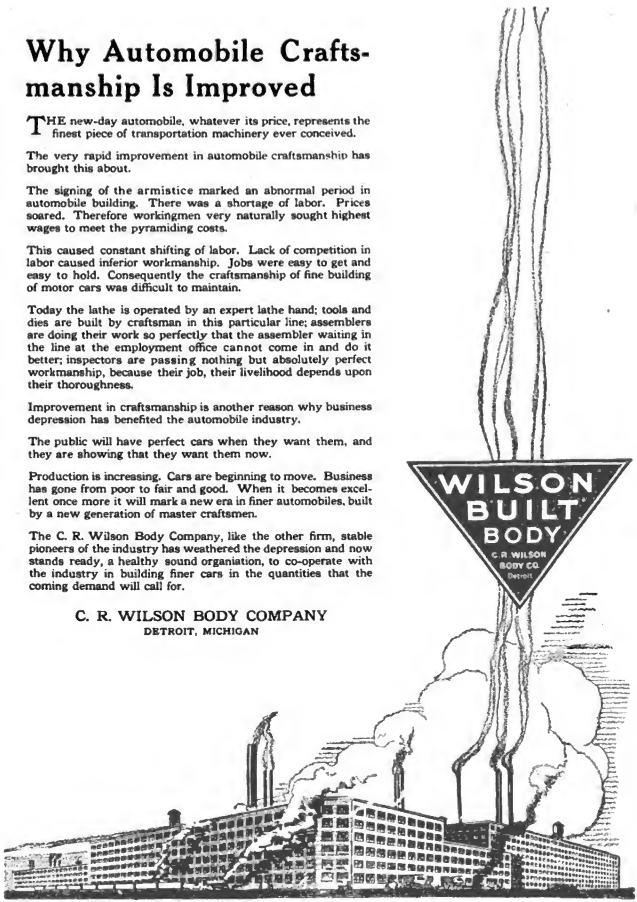
Improvement in craftsmanship is another reason why business depression has benefited the automobile industry.

The public will have perfect cars when they want them, and they are showing that they want them now.

Production is increasing. Cars are beginning to move. Business has gone from poor to fair and good. When it becomes excellent once more it will mark a new era in finer automobiles, built by a new generation of master craftsmen.

The C. R. Wilson Body Company, like the other firm, stable pioneers of the industry has weathered the depression and now stands ready, a healthy sound organiation, to co-operate with the industry in building finer cars in the quantities that the coming demand will call for.

C. R. WILSON BODY COMPANY
DETROIT, MICHIGAN



Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

Farm Strike Myth, More or Less

Marketing of Grain, in North Dakota, at Least, Is Going On About the Same As in Other Years

IN VIEW of the somewhat unsettled conditions in the Northwest, which so far have resulted in the failure of more than 30 banks, the Michigan Manufacturer and Financial Record has sent its financial editor, Mr. Hanna, into that part of the country on a personal investigation. The accompanying article, written at Valley City, N. D., about 60 miles west of Fargo, is his first. He probably will discuss conditions further on his return to Detroit.

By PHIL S. HANNA

VALLEY CITY, N. D., January 30.—One of the big surprises encountered on this trip is the claim everywhere that there is less wheat remaining in the hands of the farmers that at the same time a year ago. The agent of the Northern Pacific at Sanborn, a town of 300 people, says that he is billing out two to four cars of wheat each day. The local bankers says that only the well-to-do farmers have been holding their crops and that many of these have contracts for future delivery. Thus the marketing of crops in this section seems to have gone ahead about the same as in former years and one begins to wonder whether the much discussed farmers' strike is responsible for all the business ills or not.

The Non-Partisan wave of "reform" apparently has about spent itself and the taxpayers stand to lose in the neighborhood of $5,000,000 by the experiment, not to mention other millions probably spent trying to find a cure for Townleyism. The co-operative packing plant at Fargo has run behind $700,000 and the original $700,000 put into start it off is also gone.

Still Savage

The increased freight rates have made a difference of 6 cents a bushel from this city to Minneapolis—the former rate was 11 cents and is now 17 cents. The average farmer is still in a savage frame of mind towards the middleman and the grain speculators. He feels that he was limited to $2.26 a bushel when demand would have brought him $3.50 or $4 during the war, and figure the loss of possible profits during that period when other business men were getting the limit as a fair reason why he should be given an artificial price now.

There has been a temporary lull in the closing of small banks in the western part of this state, but the outlook is not very promising, except for one factor. If the wealthy farmers, who are not borrowers, get the selling bug, the day will be saved. And there is a fair chance of this. An elevator man said yesterday that every time wheat goes down a cent, the farmers bring in a full load, but when it goes up, they quit coming. The writer talked to a physician who owns some 5,000 bushels of 1920 wheat and he said that by spring there wouldn't be more than enough for seed left in his county.

Outwardly the farmers look much more prosperous than they did in 1915 when the writer left here. New houses and barns are evident in every direction and the man who still drives a Ford is a second rater. Many of the boys who were renters five years ago are driving larger cars with all the abandon of a Detroit automobile worker when the latter was getting $10 for four hours' work spread out over eight hours on duty.

The man who has suffered here is the small banker, and in fact any banker who spread himself out during the last three or four years trying to get all the business is now wearing crepe.

Perhaps the telephone company has been one of the chief beneficiaries. For example, a man deposits a draft in A-ville drawn on the First National of Minneapolis by the Bank of B-ville. The cashier at A-ville is in doubt about the value of B-ville drafts, so he says to the depositor: "We will take this for collection, or if you want immediate credit we will phone Minneapolis at your expense." The depositor complains, but wants the money immediately, so he says: "Go ahead." Minneapolis replies that they will have to call up the B-ville bank and that they will phone back to A-ville shortly. After half an hour or so, Minneapolis phones back, that they cannot certify the draft by phone. Result, the A-ville bank takes the draft for collection, depositor waits and the telephone company does a flourishing business.

According to one banker who has been in the Northwest many years and who has weathered several financial storms, one of the principal contributing causes of bank closings in this section has been the ease with which a small bank has been able to get accommodations at the Minneapolis Federal Reserve Bank. In his opinion, many of the small banks, especially the national banks, obtained more credit at Minneapolis than was good for them. Instead of refusing their customers last spring, they called on Minneapolis and apparently the latter yielded. I saw a statement of a national bank, situated not more than a thousand miles from here, which disclosed that the borrowed money obligations were about twice the total deposits. And the surprising feature of this case is that three directors have undertaken to pull the bank out by pledging their personal fortunes. The scheme arrived at probably will provide that the bank will transfer without recourse enough assets to cover the liabilities assumed by the three directors.

It should not be hastily concluded that this is the general condition. On the other hand, there are two banks in this city whose credit and standing is so good that they have sold their excess lines in the East without recourse. But both were exceedingly busy last spring saying "NO," and saying it in on uncertain language.

A New Bank Official

I saw a letter-head of one solid little bank which has added a new kind of official to its staff. At first it struck me as funny, but upon inquiry I found that the official really confines himself to the duties his title describes, namely, "collector." He has a nice little closed Ford and carries a full line of note blanks, mortgages, etc., and is himself a notary public and a deputy sheriff.

A statement of condition just issued by the Bank of North Dakota, the state depositary, shows a reduction of $11,880,000 in assets since June 4, 1920. Profits for 1920 are given as $121,883.17, but as there is no paid-in capital, it is hard to figure out whether the enterprise is ahead or behind on the year's operations. The capital is indicated as $2,000,000 and surplus $40,000, but it will be recalled that the state issued its own bonds which were intended to be sold to provide capital. So far as I can ascertain, the bonds were not sold but the bank did obtain a loan of $1,000,000 from a Chicago bank, with $1,200,000 of the bonds as collateral, this loan being shown in the statement, which is appended, as bills payable. I understand all

Digitized by Google

state banks may deposit all or part of their reserves in the bank and all public funds must be deposited in the central institution, which turns around and redeposits funds in the state banks. It is said on good authority that the state bank had more than $900,000 deposited in the 32 banks which have been closed. A firm of public accountants is making an audit of the Bank of North Dakota and the anti-Non-Partisan claim is made that the audit will reveal wide discrepancies between the bank's own statement and the condition to be made public by the accountants. Conservative opinion seems to be that the state bank is solvent but that it represents a piece of very expensive foolishness.

The ground is frozen down more than two feet and the mild weather, which prevailed up to yesterday, has resulted in more fall plowing being done than for 25 years past. All signs point to early spring activity and the planting of large acreages. You hear a man explode loudly in one breath about restricting production and in the next he is telling about his large plans for spring planting.

There's one thing a farmer won't talk about, and that is his winnings. The attempted misconduct of the middleman, grain gambler or profiteer cannot keep the farmer from trying to make money, whether he is conscious of it or not.

The Bank of North Dakota statement, referred to above, is as follows:

ASSETS	
Bonds, United States, state and county	$ 1,962,756.25
Loans to banks	2,687,418.02
Loans on warehouse receipts	94,000.14
Loans to public bodies	993,239.98
Loans on real estate	2,845,864.57
Interest earned, uncorrected	282,752.65
Furniture and fixtures	52,902.26
Due from banks in state	6,204,526.67
Due from banks outside state	68,416.37
Cash items due from banks	253,667.27
Cash items due from corporations	106,151.88
Cash on hand and cash items	23,276.37
Total resources	$15,926,725.24

LIABILITIES	
Capital	$ 2,000,000.00
Surplus	49,000.00
Reserve to repay appropriations	24,108.87
Reserve for depreciation	9,846.66
Net profits for 1920	121,883.14
Net profits for 1921 to date	4,237.72
Appraisal fees	5,713.43
Individual deposits	229,039.10
Public deposits, sinking funds	3,678,256.10
Public deposits (state treasurer)	2,958,148.54
Public deposits (county, school, etc.)	4,849,804.32
Due to banks (reserves)	955,866.20
Collections, items	1,195.12
Bills payable	1,000,000.90
Total liabilities	$15,926,725.24

DETROITERS ADDRESS ENGINEERS

Three Detroiters spoke at the February meeting of the Detroit Chapter, Society of Industrial Engineers, Thursday evening at the Detroit Board of Commerce. The subject was factors in management for 1921. Chester M. Culver, general manager of the Employers' Association of Detroit, talked on "Labor"; Edgar R. Allen, treasurer of the Detroit Steel Products Company, on "Credits," and Elwood Brown, chairman of the public relations committee of the National Association of Purchasing Agents, discussed "Purchasing."

Mr. Cathro, managing director, disputes the reasons which have been assigned by eastern interests for the decline in grain prices. He said that the European situation had no part in declining prices.

"The average farm price was around $1.70 a bushel in November, 1919," he said, "while the average November 1920 price was probably not above $1. That is, the farmer received 70 cents a bushel less for wheat in 1920 than in 1919, and the European buyers paid 30 cents a bushel more than they did in 1919. The spread between the farm price and the export price was 61 cents a bushel in 1919 and $1.61 a bushel in 1920. The difference in railroad charges would not account for more than 20 cents."

Motor Car Exports and the Tariff

AUTOMOTIVE manufacturers throughout the country believe a reduction in the rate in the duty on motor cars selling for $2,000 or more and a provision for reciprocal relations as a national policy to be imperative as an immediate factor in restoring foreign trade in motor vehicles. The desire is for a uniform tariff of 30 per cent ad valorem.

In making this decision the manufacturers realize that such a reduction will be an favorable to foreign automotive manufacturers as to themselves, but the balance in horsepower and selling price between foreign and domestic vehicles is in favor of the American manufacturer, therefore he has no great fear of dangerous competition.

The National Automobile Chamber of Commerce has filed with the ways and means committee of the House of Representatives a brief bearing upon the subject of tariffs. Under Schedule C, paragraph 119, Tariff Act of 1913, the following duties are laid:

"Automobiles valued at $2,000 or more and automobile bodies, 45 per cent ad valorem; automobiles, automobile chassis and finished parts of automobiles, not including tires, 20 per cent ad valorem."

The National Automobile Chamber of Commerce would amend this paragraph to provide the 30 per cent tariff and a national policy of reciprocal relations, thus furnishing protection for American industries requiring it, producing revenue and preventing discrimination by foreign nations. It is explained in the brief that this opinion has to do with present conditions and does not prevent future advocacy of such changes in the tariff as may be called for by improvements in the national and world situation.

In maintaining that increased revenue will result from tariff revision, the brief says:

"The imports of high-priced cars during 1920 amounted to 6 per cent and those of lower-priced motor vehicles to 94 per cent of total automobile imports. According to numbers, there were 59 high priced and 654 low-priced cars. The revenue from the former was $99,305 anl $153,986 from the latter. The smaller number consisted of automobiles selling in country at origin at more than $2,000."

"The smaller imports of that type of vehicle may be due to the higher U. S. duty," the brief continues. "With a uniform duty of 30 per cent, however, the imports of higher priced cars will proportionately increase, and consequently result in higher revenue. Despite the fact that this measure may directly affect interests, American manufacturers of high-priced cars are adherents to this policy, believing that it will be of general benefit to the industry.

"Because of large scale production and consequently minute division of labor, American manufacturers are making automobiles which embody the highest value for every dollar of cost. This point is brought out more clearly in the following table:

Name of Vehicle—Nationality	Horse-Power	Price at Current Rate of Exchange	Horse-Power	Difference Favoring American Cars Price
*Daimler (chassis), German	43.2	$3,300		
*Lanchester (chassis), English	40	7,700	3.2	$2,400
*King (touring), American	28	4,462		1,862
*De Dion (touring), French	25	6,335	3	1,873
Marmon (touring), American	35	6,000		
*Maxwell (touring), English	35	5,867		867
*Peerless (chassis), American	33.8	4,060		
*Minerva (chassis), Belgian	30	1,147	3.8	83
*Chevrolet (touring), American	24.75	1,575		
*Citroen (touring), French	10	1,725	11.75	157
*Maxwell (touring), American	21.03	1,870		
*Chiribiri (touring), Italian	16	2,437	5.03	612

*Prices in England
†Prices in United States

This table shows that the American motor car manufacturer can readily compete in the foreign market. Then there is the fact that the automotive industry in this country ranks second in size. It employs 200,000 persons, or 48,000 more than the United States Steel Corporation. In the United States there are approximately 8,000,000 cars in use, 90 per cent of all those in use in the world, which indicates the extent of the foreign market and the limitations in the United States, for it has been said that where there are 12,000,000 cars in use in this country it will be time to curtail motor car production so far as domestic consumption is concerned.

Relative to change on one hand and foreign resentment on the other, the brief says:

"During 1920 the exports of American motor vehicles to all countries, including non-contiguous U. S. territories, amounted closely to 180,000 in number and approximately $200,000,000 in value. All possible efforts should be made to stimulate foreign trade so as to enable American manufacturers to find markets for increasing number of cars abroad, thus tending to stabilize the industry.

"At present time, the export trade is considerably hampered by great depreciation in the foreign exchanges. To afford manufacturers in countries with depreciated currency opportunity to sell their products in the United States will tend to right this condition. Although it is fully realized that the increased imports of automobiles, even if the duty on high-priced cars is reduced, will not be such as materially to improve the exchanges, still even minor influences of this kind if multiplied in other trades that will not be greatly affected thereby are certain to bring about improvement in international finances.

"Besides the depreciation of money exchanges, the greatest obstacle confronting American exporters of automobiles is the tariff wall being built up abroad in retaliation because of the high duty on foreign automobiles imported into the U. S. Resenting the American duty of 45 per cent on high-priced cars, foreign interests in Great Britain have already urged the assessment of duty higher than 33 1-3 per cent on all kinds of motor vehicles, whereas up to now that duty is applied to passenger cars only. France has already imposed a duty of 45 per cent on the kind of automobiles exported by American firms; an action which is directly traceable to the belief that the U. S. automobile duty is discriminating against high-priced cars of French manufacture. Similar action has also been taken by Italy and Belgium; Spain is about to follow.

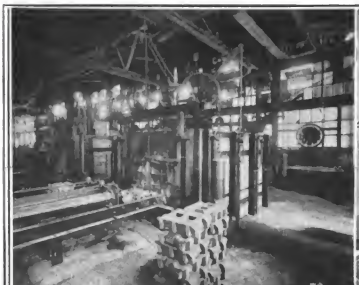
"That favorable results from a uniform U. S. duty may be expected is shown in the action of the French automobile manufacturers, who informed their government that the English, Belgian, Italian and French syndicates had

(Continued on Page 30)

Digitized by Google

Successor to the Village Smithy

Modern Forge Shop, Largely Developed in Michigan, Does Work That Would Make Forbear Stand Aghast









DROP FORGE PRODUCTION

Above at the left is shown a die-hardening furnace in the plant of the Studebaker Corporation, Detroit. In this furnace the dies are heated to 1,500 degrees, F., and then dipped in oil to harden them. The photograph at the right, above, shows how a crankshaft is forged. Note the shape of the crankshaft cut into the dies.

At the left (lower picture) is shown a 12,000-pound drop hammer in the Central Forge Company's plant, Detroit. This hammer strikes a 6-ton blow. At the right is a 7,000-pound hammer in the Timken Axle Company's factory in Detroit.

By HOWARD CAMPBELL

THE VILLAGE BLACKSMITH, who labored long hours to produce a set of iron shoes for a horse, probably would stand speechless in amazement were he to happen into a modern forge shop and see crankshafts, connecting rods, wheel hubs and even heavy truck axles produced "while he waited," by machines which tower higher than the spreading chestnut tree.

Just as the ancient mare has been largely replaced by the modern automobile, so the blacksmith's hammer has been superseded by the modern drop hammer, which, with the aid of steam, strikes a blow of such force as to make the surrounding earth tremble.

The first steam hammer was built in the Schneider & Company steel works, at Creuzot, France, in 1841, although the credit for the invention generally is awarded to an Englishman, Nasmyth by name, who was engaged in the business of building machinery.

The idea of making dies was a natural sequence of the use of the steam hammer, and the first drop forgings were made about 1860 at Birmingham, England, since which date this method of making steel parts has developed until today there probably are more parts produced in this manner than by any other. The truth of this statement is evidenced by the fact that proximately 150 different parts in the construction of an automobile are made from drop-forged steel.

In the old days the quality of the piece depended, insofar as size and shape were concerned, on the blacksmith. With the drop hammer, forgings can not only be made quicker but in greater variety; and forgings that were most difficult or even impossible over the anvil are made with apparent ease. There seems to be no limit to design, and the best feature of all is that all pieces produced are absolutely accurate and alike to the smallest detail.

The first steam hammers used in Michigan were set up in the plant of what was then the Wyandotte Rolling Mills, at Wyandotte, where they were used in the manufacture of boiler plates. Incidentally, these boiler plates were made from charcoal iron, and the assertion recently was made by a man who has spent a lifetime in the machinery business that these plates were the best ever produced. However, the development of steelmaking on a big scale put the Wyandotte Rolling Mills out of business many years ago. The Timken-Detroit Axle Company is said to have built the first drop forge plant in the state, which was for the manufacture of parts necessary to the manufacture of axles.

The ever-increasing demand for better and stronger machinery, including the automobile, has developed a need for parts of the clean, workable steel which is characteristic of the drop forging. Besides being free from sand, sand holes and blowholes, which are found more or less in steel castings, the steel is of even quality and can be machined at a much higher rate of speed than castings. Consequently many of the larger automobile and machinery-building plants have their own drop forging departments and the smaller establishments are supplied by independent drop forging concerns. It is estimated that 5,000 men are employed in the forge shops of Michigan, operating somewhere in the neighborhood of 400 hammers. These men draw an aggregate wage of approximately $52,000 a day, or $15,600,000 a year.

The production of a drop forging requires a set of two square steel "die blocks," half the

Digitized by Google

thickness of the piece desired being cut or carved into the face of one block, and half into the other. One die block is securely fastened to the base or anvil of the machine, the other half being fastened to a ram which travels vertically between guides. The ram is fastened to a piston rod which slides smoothly in and out of a vertical cylinder at the top of the machine. The bars of steel from which the forgings are to be made are heated in a furnace until they are nearly white hot. The operator of the hammer then pulls a bar out of the fire, lays the end of it on the lower half of the die, steps on a lever which lets a charge of steam into the cylinder above, and the ram shoots down, striking the steel a blow which forces it into the recesses in the die block and forming it instantly to the desired shape.

In order better to withstand the punishment which they have been put to, the dies are hardened by heating them to a dull red and then melting as much cyanide of potassium on the surface of the blocks as they will absorb, or by hardening in oil. The cyanide process has been the one most used, and is still used for dies which do not have to be replaced often. Cyanide hardens the surface of the block for a depth only of from six to ten thousandths of an inch, however, and this method is being discarded for processes which harden the block to a much greater depth.

The latest and most improved method is to heat the die blocks to about 1500 degrees F., in a furnace where they will be heated evenly on all sides, then dip them in oil or water. Oil is better than water because it takes the heat off more slowly and reduces the risk of cracking the die. This treatment makes the steel hard and brittle—about as brittle to use as it has to be heated again to approximately 700 degrees, which is just enough to relieve the strains which were set up in the hardening process and impart a quality of toughness to the steel.

The machines vary in size according to the work for which they are required, and the capacity of a machine is known by the force of the blow it delivers. Thus a hammer which strikes a blow equal to 7,000 pounds is known as a 7,000-pound hammer, one striking a 12,000-pound blow is known as a 12,000-pound hammer, and so on. Drop forged steel axles and crankshafts are made on the larger hammers, and smaller parts, such as connecting rods, axle shafts, steering knuckles, gears and similar parts are made on hammers ranging down to the 800-pound size.

In order to be sure of having enough stock to produce the forging, an extra amount is allowed in the bar. Consequently, when the ram comes down and the two die blocks come together with the steel between them, a certain amount of steel is forced out into a sort of "fin" around the forging. This is called the "flash" and is removed by forcing the forging through a trimmer die which is just the shape of the piece and of the correct size. Large pieces are trimmed while hot, but the smaller ones usually are sent to a trimmer press room, where they are trimmed cold.

Central Forge Company's Equipment

One of the largest forge shops in Michigan is that of the Central Forge Company, Detroit, which makes the forgings for most of the General Motors Corporation plants. The equipment consists of 41 steam hammers, 19 "board" hammers, 8 horizontal forging machines and 3 bull-dozers, or upsetting machines. Five hydraulic straightening presses are also used to straighten camshafts and other shafts and rods which may have warped in cooling off. Two of the hammers are of the 12,000-pound size, the only other hammer of this size in the state being located at the Buick Motor Company's plant, in Flint. A machine of this capacity is approximately 8 feet wide and 25 feet high, and weighs between 85 and 90 tons. Undoubtedly the force of the hammer would drive the machine itself into the ground were it not for the fact that the machine has an iron base extending about 6 feet into the ground, where it rests on a concrete foundation from 11 to 15 feet deep. The steam pressure in a 12,000-pound hammer is about 90 pounds to the square inch.

These big machines are used to forge crankshafts for automobiles, trucks and tractors, shaping a crankshaft from a bar of steel with two or three blows. Two men are required to operate the hammer, one holding the work (with the aid of an auxiliary crane) while the other operates the levers which control the hammer. A bar of steel of the size required to make a crankshaft for a Samson tractor weighs 65 pounds, obviously too heavy and awkward for one man to handle alone. Axles are made on the 6,000-pound hammers, camshafts and small crankshafts on the 3,500-pound machines. The smaller work is graduated to the machine accordingly. The pipes which carry the steam to the hammers are all overhead, where they can be easily reached by the repair men. Electric trucks are used to transport stock to and from the machines, and a 10-ton electric crane is always at hand to carry dies and machine repair parts.

Furnaces Burn Crude Oil

The furnaces in which the bars of steel are heated for forging burn crude oil and are arranged so that one furnace heats the steel for two hammers. The supply of oil is kept in tanks, each having a capacity of 20,000 gallons. There are 14 tanks, the aggregate capacity amounting to 280,000 gallons. Under normal conditions, however, the plant uses 18,000 gallons a day.

The die-sinking equipment of the Central Forge plant includes four die-sinking machines which perform mechanically the operations of machining a die, in a manner which is almost uncanny. These four machines are used to machine all dies up to and including 10 inches high by 12 inches square, using one machine for machining the top half of the die and another for the bottom half. Thus a set of dies is completely finished before they are taken from the machine. The die blocks are planed, of course, before placing in the machine, but no part of the impression is "sunk" by hand.

It Runs, That's the Point

BRIGHT new motor car models with streamline bodies, six, eight and 12-cylinder motors, sedan, coupe, landaulet, brougham and cabriolet bodies, self-starters, electric lighting systems, gas-saving carburetors, tire pumps, cigar lighters, bouquet vases and all the rest of the jim-cracks hold no charms for George Holden, of Olivet.

George chug-chugs through the streets of his native town serene and wholly satisfied in his one-cylinder Cadillac, which he has driven 17 years. It was the second car the Cadillac Motor Car Company built, and George has it. It may not purr like the present-day Cadillac, but it runs, and George doesn't mind a little noise.

He has just obtained his usual license, for which he paid $7.05, the lowest fee paid in the state of Michigan.

One man operates the four machines. Up to the time die-sinking machines were invented, a large part of the work of die-sinking was hand work, requiring the services of highly-trained mechanics. The advent of die-sinking machinery not only made possible greater production, but the grade of help used in the operation of these machines can more easily be replaced.

The Central Forge Company's plant is of the most modern type for this phase of manufacturing, and consists of two buildings each 600 feet long, in which the entire machine equipment is housed. At one side of the plant and extending the full length of the buildings is the steel yard, or stock of raw material, each size being piled separately. A series of concrete foundations serve to keep the steel even and off the ground. An average of 20,000,000 pounds of steel is carried in stock, worth approximately $490,000.

At equal distance from each other along the side of the forge shop nearest the steel yard are three shear sheds, where the stock is cut into required lengths for forging. The shearing equipment consists of two shears and one "alligator," which will sever a bar of 3¼-inch square steel with the same ease of a pair of scissors cutting a piece of cloth. The steel stock is carried to the machines by either one of two overhead electric cranes, each of which carries five tons at a load. As the steel is cut to the required length, it is passed to the forge shop and distributed to the machines, and as fast as it is made into forgings these are passed on to the next building, where they are inspected. A battery of five hydraulic presses is used to straighten such pieces as are bent or warped, and then they are sent to the annealing floor.

When production is normal this plant turns out approximately 2,500 crankshafts, 2,500 camshafts and 8,000 connecting rods a day, the aggregate weight of which is in the neighborhood of 4,263,000 pounds. This production requires a force of 800 men, whose wages and salaries amount to $8,500 a day, or more than $260,000 a month. Eighty-seven of these men are kept busy repairing the old dies and making new ones, and a force of 25 men is required to keep the machines in first-class working condition.

Other Installations

The Timken-Detroit Axle Company, with whose product every automobile fan is familiar, has two giant 7,000-pound hammers which it uses for forging front axles of the larger size, these axles weighing 180 pounds each. One hammer is used for "roughing out" the piece, the other for giving it the final shaping, or "finish." Practically as many axles are produced by this method as by finishing a piece complete on each hammer, and the dies last much longer. One hundred and sixty finished axles are made in eight hours on these two hammers. Smaller axles are made on a battery of eight 5,000-pound hammers, a number of smaller machines bringing the total up to 30, which make all the drop forged steel parts used in Timken axles. A trimmer press is provided for each hammer, so that as the forgings are made they can be trimmed immediately and thus be ready for production.

The furnaces in which the steel is heated are made of steel and lined with fire brick. Crude oil is used for fuel, from 8,000 to 10,000 gallons being used daily. A 40-ton electric crane is always at hand to carry stock, dies and repair parts for the machines.

Another large drop forge plant is that of the Studebaker Corporation, in Detroit. Equipment includes 35 drop hammers ranging in size from 500 to 7,000 pounds. There are three of the 7,000-pound hammers, all of which are used for making front axles and crankshafts. The production of a crankshaft requires a bar of steel 2¾ inches square and 51 inches long, weighing 110 pounds. The power of modern

(*Continued on Page* 34)

Digitized by Google

Michigan Utilities Form Information Committee

Michigan's gas and electric companies have organized a committee and established headquarters in Ann Arbor for disseminating information covering every phase of the business of producing and distributing light, heat and power. It will be known as the Michigan Committee on Public Utility Information.

The committee explains that it is divorced from all political and legislative interests and will have no part in controversial matters whether local or state-wide in scope. It will be financed through the Michigan Gas Association and Michigan Electric Light Association. Henry Douglas, head of the Washtenaw Gas Company, who serves as chairman, says that the plan is predicated upon the theory that the success of the gas and electric business requires only that the public shall have an intelligent understanding of the facts concerning these industries.

Henry H. Tinkham, who has been with the Grand Rapids Press 20 years, has been named director of the committee. The committee will serve the industry at large rather than any individual company. Anyone seeking information, either for or against the gas and electric companies may turn to this committee with confidence that all the facts speedily will be forthcoming and without qualification or reservation.

PITTSBURG SHAFTING CHANGE

The Pittsburg Shafting Company, of Detroit, which for some years has been closely affiliated with the Columbia Steel & Shafting Company, Pittsburgh, Pa., has been purchased by the latter concern for economical reasons as well as promote greater efficiency and better service. Effective February 1, the Pittsburg Shafting Company is being conducted as a branch of the Columbia.

There will be no change in the business policy or personnel of the administration under the new name. W. C. Schrage, president of Pittsburg Shafting, will be associated with the Columbia as treasurer, with headquarters in Pittsburgh, while Thomas H. Booth, vice-president of Pittsburg Shafting, becomes district manager of sales in Detroit.

All accounts and obligations due the Pittsburg Shafting Company will become payable to the Columbia Steel & Shafting Company on and after February 1.

ROSEVILLE GOLF CLUB FORMED

John F. Keys, general passenger agent of the Detroit United Railways, and Paul R. Gray, moving spirits in the organization of the Roseville Heights Golf Club, have set the opening of the club for June 15, at which time the 9 and 18-hole courses will have been laid out and the clubhouse ready for use. The club has 137 acres located about 13½ miles from Detroit's business center. Ernest Way, who laid out the Detroit Golf Club, the Burch Hill, the Island and other golf courses, will design and build the Roseville courses. The club is practically a public affair, there being no initiation fee, but dues of $60 a year, or $65 on time payments. If desired a bus line will be established from the Rapid Railway line to the links, running on a half-hour schedule. Ernest I. Kennedy, 576 Griswold street, Detroit, is the club's secretary.

SLEEPER ENTERS GENERAL PRACTICE

Harold A. Sleeper, formerly general attorney for the Pere Marquette Railway Company, announces that he will be engaged in the general practice of law at 1560 Penobscot building, Detroit. Special attention will be given to practice before the interstate Commerce and Michigan Public Utilities Commissions.

WAYNE
COLOR PLATE COMPANY
DETROIT
PHOTO-ENGRAVERS

Why Do You Print A Catalog?

To show your products, accurately and clearly.

Good photographs, paper and print are necessary.

But good engravings are the heart of the catalog.

They are your best argument—your most successful salesmen.

They should be the best the market affords.

The Wayne Color Plate Company will bring to you the engraving skill and experience of years, combined with an intimate knowledge of your problem.

A call to Main 4138 will bring a Wayne sales-service man.

WAYNE COLORPLATE CO.
Photo-Engravers
1040 WAYNE. ST. DETROIT
"Right across from the Board of Commerce"

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.

Name .....
Business Address .....
Home Address .....
Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

How Industry Is "Coming Back"

A Summary of a Week's Progress in Resumption Of Various Manufacturing Activities in Michigan

ALTHOUGH the resumption of industrial activity throughout the state during the last week has been moderate, it has been sufficient to indicate that the peak of the depression period has been reached and passed, and that there is taking place a gradual restoration of confidence throughout the industrial centers.

In Michigan the Ford Motor Company and its varied interests are regarded as important barometers of the business and industrial future, so that the resumption of activity in the huge Highland Park plant is recognized as the messenger of good tidings.

The Ford plant opened Monday with a reported force of 10,000 men at work, all summoned by postcard. It has been said that this number of men is the minimum at which production is possible in this plant, but on the other hand, it is stated that the men at work are not on car production, but on overhauling, preparatory to manufacture.

The very fact that the Ford organization goes to the expense of getting the plant into shape for future production, in view of the recent reports regarding Ford finances, is bound to be assuring. Judging from the stream of reported resignations from the official family of the company, not only must the concern prepare its physical properties for a return to production, but the administration staff must be augmented and reorganized.

The resignation of S. S. Marquis, director of the Ford sociological department, upon which Mr. Ford placed great store, gives rise to the question of whether this sociological work is to be continued. The general tendency of industry during its period of rehabilitation will be to give all attention to production and sales problems, leaving such factors as welfare to the future.

Another resignation, and one connected with the important division of sales, is that of Warren C. Anderson, general foreign representative of the company. Inasmuch as export business will have a greater significance in connection with the restoration of automotive production, the disruption of foreign sales organization does not improve the situation. The report that Louis Block, Philadelphia distributor, has vacated his Ford connections simply recalls Ford's unfortunate attack upon the Jewish race.

While Michigan's newspapers and periodicals, anxious and willing to keep the public informed and encouraged during this difficult period, are striving to gain information from the Ford interests, all channels of direct official importance are closed by the red tape and reticence that long have been the methods of concealment practiced by Ford's advisors.

As a result, all that the apparent resumption of activities in the Ford plants indicates is that Mr. Ford has the necessary cash and re-opened his plant with the minimum of workers, which has caused other establishments, particularly those furnishing supplies, materials and parts to him, to reopen.

One of these is that of the Briggs Manufacturing Company, Detroit, which makes bodies for Ford. This plant called back 1,250 men. Another is that of the Kelsey Wheel Company, which will operate at 25 per cent of normal. A part of this company's business is manufacturing wheels and rims for Ford cars. Mr. Kelsey's reported statement that his permanent force, when re-assembled, would not exceed 2,400 men, as against 3,300 previously employed, indicates that greater production with fewer men is expected.

Other signs of industrial activities forthcoming during the week may be summarized as follows:

The plant of the Cadillac Motor Car Company reopened with 2,500 men at work, and with the prospect of increasing this force gradually.

Walter P. Chrysler's report that the reorganizing and financing of the Maxwell-Chalmers Corporation had been completed, had additional capital of $15,000,000 and would develop sales and production on a larger scale, is not without its important significance.

Units of the Motor Wheel Corporation, Lansing, are at work on a part time schedule, the Auto Wheel, Gier Pressed Steel and Prudden Wheel plants being affected.

The high peak of optimism was reached by the Briscoe Motor Corporation, Jackson, when it reported that its 1921 schedule would call for 18,000 cars, or three times the 1920 volume. Affected by this promise are the Briscoe Body, Auto Body, Barker-Fowler Company, maker of electrical harness, and John Bohnet & Company, closed body builder.

The report that the Oldsmobile plant in Lansing had shipped 60 cars to the Chicago distributor indicates that there is sales life in evidence.

An order for 250,000 piston rings received by the No-Leak-Piston Ring Company, Muskegon, is reported.

Straying from the automotive field for a moment, we are encouraged by the fact that the foundry of the Novo Engine Company, Lansing, builder of gas engines, pumping and hoisting machinery, is working on full time.

In the realm of materials, the reopening of the Trumhull Steel Company's sheet and open hearth departments, at Warren, Ohio, on a 65 per cent schedule with a full force bespeaks confidence.

Battle Creek has witnessed with considerable pleasure the reopening of the cereal factories, although as yet only 50 per cent of the working forces have been employed.

In Kalamazoo the paper industry keeps humming on a 24-hour schedule, with three shifts.

Returning to the automotive business, the report that the Reo Motor Car Company, Lansing, has put between 5,000 and 6,000 workers on a six-hour, instead of a half-day schedule, restores confidence in that city.

The Monarch Specialties Company, Muskegon, reports orders just received, while the foundries in that city are receiving orders for railroad equipment.

From Ann Arbor comes the report that the manufacturing activities of the Paige-Detroit Motor Car Company, Detroit, have been delayed by the threatened resumption by the loss of certain patterns, claimed to have been in the possession of the Ann Arbor Metal Products Company. The case has been taken to court and Judge George W. Sample has been asked to decide upon the enforcement of a writ of replevin intended to recover the patterns.

The Acme Motor Truck Company, Cadillac, announces it will start production March 1.

CANN GOES TO TOLEDO

W. E. Cann, who has been assistant to the general manager of the Detroit United Railway, became street railway commissioner of Toledo, O., February 1, taking up his duties simultaneously with the inauguration of the service-at-cost plan in the operation of the city car lines. Fares are to be cut to 6 cents, with one cent for transfers.

Digitized by Google



Sure You Save Money With the "ATLAS" Car Mover

With its compound leverage, strength, ease of operation and low cost—$8.00—you cannot afford to be without it.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

"EVERYTHING FOR THE SHOP"

149-165 E. Larned St. DETROIT Cadillac 7080

Government Reorganization Task Before Legislature

The reorganization of the administrative government of Michigan, as proposed by Gov. Groesbeck, is among the most important matters awaiting action by the Legislature. The bills proposed to centralize the state government would abolish a number of departments, boards and commissions. Departments of agriculture and conservation, with a commissioner at the head of each, would be created, and these would combine 17 present departments. Another bill would abolish the state labor department, and industrial relations commission and create an industrial and labor department under the direction of a commission of three.

Several bills were introduced last week which would affect business, industry or finance. Rep. David H. Butler, Lapeer, proposed the repeal of an act passed by the 1919 legislature which provides that an employer who advances transportation to a laborer in a distant city and is not reimbursed may prefer criminal charges. Mr. Butler charges that this is in violation of the principle that no man may be arrested for the non-payment of a debt, and contends that the employer should recover his money through civil channels.

A bill of Rep. Hunter, St. Johns, would permit state banks to invest half of their capital and surplus in buildings. The present limitation is half the capital.

Senator Harvey A. Penney, Saginaw, has introduced a measure which provides that cities may assume a bonded indebtedness up to 5 per cent of their assessed valuation. Some cities now are restricted to 2 per cent, although others have gone as high as 5. The bill providing for the Colgrove highway was also introduced by Senator Penney.

A bill of Rep. Warner would limit the amounts which can be levied against land for highway purposes to 10 per cent of the assessed valuation. It also provides that 3 per cent of the assessed vaination is the limit which can be levied in any single county in one year.

The total budget estimates of the state for the next two years reach the sum of $72,504,103.11, or more than double the total for the present two-year period, and still the appropriation measures are pouring in for the various institutions.

U. OF M. READY TO AID PLANTS

Director A. E. White, department of engineering research, University of Michigan, has notified manufacturers of the state that the department is prepared to furnish originals or copies of technical works in the University library, the original books or papers to be lent for two weeks with extension privileges.

JACQUET DEFERS MOTOR PRODUCTION

The Jacquet Motor Corporation, Belding, is reported to have started last week the production of generators for the B. J. Steam Gas Generator Company, Grand Rapids. For the time being, it is said in Belding, the Jacquet concern will not make motor cars. Later, when the situation in the automobile industry is again normal, the company expects to produce the Jacquet cars, for which purpose it was originally organized.

COUPLE-GEAR WHEEL ELECTION

At the annual meeting of the Couple-Gear Freight Wheel Company, Grand Rapids, the stockholders elected the following directors: M. C. Church, A. B. Knowlson, N. H. Hopkins, Alexander Dodds, Fred Z. Pantlind, L. Z. Hudson, W. C. Hopson and James Leenhouts. Officers will be elected at a subsequent meeting of the directors.

They Buy Baby Carriages, Business or No Business

In all industries there are to be found optimists, no matter what the conditions. Even if an adverse business situation affects them more or less, they continue to have faith in tomorrow, and operate accordingly. The Lloyd Manufacturing Company, Menominee, is one of these. George W. Rowell, advertising manager of the company, writes the Manufacturer:

"I am glad to report to you that while all other American baby carriage factories are closed, we are still running with a full force. It is true that our shipments have been far below normal during the last three months, but we have continued manufacturing so as to get a good stock ahead before the contemplated spring rush.

"We are certain that 1921 is going to be a good year for us. Our business is one which depends upon nature. When nature sees to it that a great crop of human beings comes into the world, then we have an increased business. Such has been the case during 1920. The birth rate is far greater than ever before. Baby carriages are not bought during either fall or winter months because people do not take their babies out-of-doors in the winter time. When spring comes, people rush for the baby carriages, and since there are more babies than ever we look for a greater sale of baby carriages.

"You may counteract my argument by saying that people will not buy baby carriages when they are not earning big wages. My reply, based on investigation, proves that mothers and fathers will undergo great sacrifices in order to buy a baby carriage. For this reason we still insist that we are in store for a good business."

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

GRANDS RAPIDS' SHOW

The annual Grand Rapids automobile show will be held February 21 to 25 in the Kingman exhibition building. Practically all of the local dealers are reported to have obtained space. The cars to be on the floor include the following: Packard, Marmon, Lexington, Nash, Studebaker, Cadillac, Dort, GMC truck, Paige, Oakland, Overland, Willys-Knight, Crow-Elkhart, Auburn, Tower truck, Pierce-Arrow, Franklin, Oldsmobile, Ford, Scripps-Booth, Dodge, Jumbo truck, Chalmers, Maxwell, Moon, Cole, Cleveland, Chandler, Elcar, Kissel, Jackson, Hudson, Essex, Winton, Elgin, Monroe, Hupmobile, Case, Nash truck, United truck, Liberty and Indiana truck. A number of accessory and parts manufacturers, as well as half a dozen accessory dealers, have also contracted for exhibits.

BRISCOE'S 1921 SCHEDULE

Eighteen thousand cars will be made in 1921 by the Briscoe Motor Corporation, Jackson. The 1920 production was 6,000 cars. By March 1, a full force will be employed in the Briscoe plant. The factory has never fallen below a production of ten cars a day at any time during the depression, and today 35 cars a day are being turned out. Seven hundred men are employed.

The Jackson Motor Shaft Company, a subsidiary of the Briscoe, is expected to resume operations gradually until a full force of men will be at work by April. This is also true of the Briscoe corporation's other plant in Lansing, the John Bohnet Body Works.

THRONE JOINS REPUBLIC TRUCK

The appointment of Daniel G. Throne as national sales representative of the Republic Motor Truck Company, Alma, has been announced by the company. Mr. Throne comes from the Diamond T Motor Car Company, Chicago, where for the last year he was district manager and where he was associated with A. J. Whipple, then general sales manager of this company, and who since has also joined the Republic organization. Mr. Thorne is well known in various industries by reason of his success with such lines as fabricated steel, hardware and motor truck equipment.

J. A. PALMER JOINS NEVILLE

J. A. Palmer has become sales manager for the Neville More Room Steering Wheel Company, Wayne. Mr. Palmer goes to Neville from the Burroughs Adding Machine Company, where he was for three years. Previous to that he was with the Good Health Publishing Company, Battle Creek. Mr. Palmer will have charge of both sales and advertising in his new connection.

R. C. DURANT QUOTED

R. C. Durant, son of William C. Durant, is quoted as saying that his father will build a light four-cylinder car selling for less than $1,000, also six and eight-cylinder models when Durant Motors, Inc., is ready for production. It is believed the Pacific coast plant of the corporation will be located in Oakland, Cal.

NEW BLOCK SHOWROOMS OPENED

The new home of the W. D. Block Motor Car Company, 6940 Cass avenue, Detroit, was formally opened last week and new models of Marmon and Lexington cars exhibited to the public.

MURFEY JOINS STANDARD TRUCK

W. A. Murfey, sales manager of the King Trailer Company, Ann Arbor, has resigned to become promotion manager of the Standard Motor Truck Company, Detroit.

HUPP'S 1920 OUTPUT

The Hupp Motor Car Corporation, Detroit, made 19,225 Hupmobile cars during 1920, as compared with 17,442 in 1919. Officials say that general conditions are improving steadily.

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4518 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Need an Elevator?
Ask LEITELT
Modern Designs
Superior Construction
LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

PISTON PINS
Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production
MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
1085-7-9 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2333

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

SPRUNK
Engraving Co.
700 Marquette Bldg.
MAIN EXCEPTIONAL SERVICE IN ENGRAVINGS - AND - ART WORK 1491

CHERRY 8786
The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

PHOTOGRAPHER
STUDIO BUILDING
4638 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

Digitized by Google

ACME TRUCK SHOWS A PROFIT

Directors of the Acme Motor Truck Company, Cadillac have re-elected the officers, who are; W. A. Kysor, president; John P. Wilcox, vice-president; C. J. Heim, secretary, and Henry Knowiton, treasurer. In addition to these officials the board of directors includes Henry Ballon, D. B. McMullen, G. F. Williams, F. O. Gaffney and Frank Bowen.

In addition to announcing that the year ended with a good profit, President Kysor stated that the Acme operated practically on a normal basis all year, beginning to show up only during the last quarter. While October was the least favorable of the last three months, December showed a decided improvement over November, which month was better than October.

It was decided by the stockholders to sell the remaining 3,700 shares of common stock.

STATEMENT FROM McCORD

In a statement as to the reasons why the regular quarterly dividend of the McCord Manufacturing Company, Detroit, has not been declared at this time, President McCord says, according to the Wall Street Journal:

"Sales in 1920 were $15,257,672 and net earnings before federal taxes, but after inventory adjustments, above $902,000. The great bulk of our inventory stands as solid material, therefore writing down will be very small, but we have to carry a large volume of open accounts. General expectation seems to be for 75 per cent of last year's automobile production this year. We fett no shrinkage in our business until September and operated two-thirds in November, but only 40 per cent in December."

SHERIDAN'S PROGRESS

President S. Burke, of the Sheridan Motor Car Company, Muncie, Ind., a General Motors unit, stated a few days ago that while the closed car models of the Sheridan four and eight were not quite ready, the light-finder models were expected to be out this month. The company has been strengthening its dealer organization and the demand for cars is keeping well ahead of the possible production for some time to come. More than 2,000 vehicles have been ordered by dealers voluntarily thus far, Mr. Burke says.

BEMENT ON AUTO BODY BOARD

Clarence E. Bement, manager of the Novo Engine Company, was elected to the board of directors of the Auto Body Company at the annual meeting. Other directors who were re-elected are Frank N. Arbaugh, W. V. C. Jackson, Harris E. Thomas, E. S. Porter, Fred C. Ruch, Richard Price, John W. Haarer, J. Edward Roe and Arthur C. Siebbins. Officers were not named. The reports showed that the company had $2,000,000 of unfilled orders on its books. The plant has resumed production on a restricted scale.

TRACTOR SHOW IN COLUMBUS

The sixth national tractor show will be held in Columbus, O., February 7 to 12, at the Ohio State Fair grounds, where seven buildings and the Coliseum have been opened for the exhibits. The educational program has been arranged by 20 universities and the American Society of Agricultural Engineers. Motor trucks also will be exhibited.

REY WHEEL ADDS DIRECTORS

New directors elected by the Rey Wheel Company, Detroit, to enlarge the present board are as follows: James C. Kempton, Detroit Sales Company; William Roberts, Roberts Tube Works, and C. R. Aikman, Amherstburg, Ont.

PURCHASING AGENTS ELECTION

A. G. Schroeder, of the Grand Rapids Gas Light Company, has been elected president, and A. J. Mitchell, of the Grand Rapids Refrigerator Company, secretary of the Purchasing Agents' Association of Western Michigan.



"SERVICE"

Manufacturers of the Six-Spindle Automatic Screw Machine

IN the purchase of Screw Products service runs a close second to quality in making satisfaction complete. It may not involve extra cost, but the lack of it certainly does—by disorganizing your schedules from assembling room to shipping department. "New Britain" Service is backed by an ability to properly tool the work, born of long experience in tooling Six-Spindle Automatics for the trade; a well-rounded and rapidly expanding equipment for handling a wide range of bar work; a stock of several million pounds of materials to insure against interruptions, and a complete organization to plan, schedule and see that promises are lived up to.

If this character of service appeals to you, phone our Detroit representative to get in touch with you.

The New Britain Machine Co., New Britain, Conn. U.S.A.

4612 Woodward Ave. DETROIT Phone Glendale 1354

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 6:10 p. m. Sundays only, 11:00 p. m.

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910
Municipal Bonds.
CHICAGO.

Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

DAVIS-PUTNAM PLANT RESUMES

The Davis-Putnam Furniture Company, Grand Rapids, has re-opened its factory after a shutdown since the holidays.

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Washington—In the case of the Chevrolet Motor Company of California vs. the director general of railroads, as agent, the Chicago, Rock Island & Pacific Railway Company et al., the Interstate Commerce Commission has found that the Class A rates on auto body wood-work, knocked down, in carloads, from St. Louis, Mo., and Ionia, Mich., to Oakland, Calif., were and are unreasonable to the extent that they exceeded or exceed the Class B rates. Reparation is awarded. The case, which is No. 11210 on the Commission's docket, was submitted November 22, 1920, and decided December 31, 1920. The decision has just been published.

Detroit—The Pere Marquette Railway board of adjustment, which is created in compliance with the provision of the Transportation Act of 1920, met for organization purposes in the office of General Superintendent E. E. Cain, January 22. The representatives of the company are D. A. Klumph, examiner of rules, Grand Rapids, chairman; W. F. Crowder, assistant general car inspector, Detroit and J. H. Jordan, operating accountant. The circular issued by President Frank H. Alfred defining the duties of the board states that it will have jurisdiction in all disputes involving grievances, rules and working conditions which are provided for in the act and which it has not been possible to decide through a conference between the employe or his representative and an officer or representative of the railway. Disputes with reference to wages or salaries do not come under the purview of this board, as the act provides for these being heard by the Railroad Labor Board.

Port Huron—The formation of a steamship company to operate boats on Lake Huron on the line to Mackinac Island vacated by the Detroit & Cleveland Navigation Company, is under way.

Detroit—The White Star Line will shorten its summer schedule between Detroit and Toledo, opening the season between April 15 and May 1 instead of in March, and closing in September instead of October. The stringent requirements of the Seaman's Law are given as the reason. Like the D. & C. and the Ashley-Dustin interests, the White Star officials declare the law reduces earnings and makes steamship operation on lakes and rivers unprofitable.

Washington—P. H. Alfred, president of the Pere Marquette Railway, appearing at the hearings before the Interstate Commerce Commission on division of freight rates between railroads east and west of the Hudson river, said that Michigan railroads could not afford to give the New England roads part of their revenue. He said high coal prices had been the cause of the plight of the New England roads and Michigan roads had suffered from the same condition. Mr. Alfred criticised the action of the Railroad Administration in leaving railroads with contracts with 16 classes of labor, which contracts made wage scales on branch lines as high as on main lines.

Harbor Beach—The Board of Trade will renew its efforts to have the La Follette Seaman's Act provisions modified by the national legislature so that lake and river navigation will not be interrupted. The business interests here are vitally affected for the reason that the action of the Detroit & Cleveland Navigation Company in taking its boats off the Mackinac Island run deprives Harbor Beach of waterway shipping facilities for perishables.

Philadelphia—Stockholders of the Pennsylvania Railroad have been notified of a meeting in this city, March 8, at which they will be asked to approve an increase of $100,000,000 in the indebtedness of the road so that it can finance itself and aid subsidiaries, and also to vote on the ratification of long-term leases with 16 other railroad properties controlled by the system.

No Further Decrease In Tire Prices Seen

An Akron dispatch to the Wall Street Journal says in part:

"That reductions in tire prices have been greater than declines in cost of manufacturing is the contention of Akron rubber men, who say the public need not look for further reductions before making spring tire purchases.

"Tires today are selling for less than they did six years ago and the service given by them because of the use of additional cotton and the innovation of the cord tire has more than doubled mileage.

"Thus, in the opinion of Akron men, the tire companies are giving twice as much for less money than they did before the war.

"Regardless of the fact that the price of tires did not skyrocket as did other commodities during the war reductions in prices ranging from 3 to 20 per cent were announced within the last two months.

"Goodyear announced decreases ranging from 3 to 15 per cent on pneumatic tires and a straight reduction of 15 per cent on tubes. Goodrich followed within two days with reductions ranging generally up to 15 per cent, with some sizes being reduced as much as 20 per cent.

"Miller Rubber immediately thereafter announced a cut in prices averaging from 10 to 12½ per cent on fabric tires, 15 per cent on tubes and 12 per cent on cord tires.

"Announcements by these three large companies were followed by announcements from practically every company in the Akron district with the exception of Firestone Tire & Rubber Company, which has made no official announcement of a cut.

"In the face of these reductions it is pointed out that wages in the factories have been reduced in only one instance and the majority of the factories are using raw materials purchased on the old price basis.

"Practically half of the rubber used in Akron was purchased when the market was above 55 cents a pound and the fabric was brought in long before the mills in the East cut prices to their present levels.

"The rubber and fabric market is near its lowest point, and dealers who have asked for a further reduction of prices have been informed that the Akron companies will do all in their power to live up to the contracts for rubber and fabric made early last year to prevent wholesale cancellations."

AJAX PATTERN WORKS, Inc.

Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto

Cherry 4441
Main 6602

680 Fort St., E.
DETROIT

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

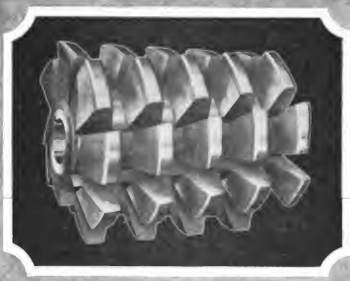
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON		CLEVELAND		DETROIT
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:		Atlanta	Denver	Portland
EUROPEAN:		Columbia Steel & Engineering Co., Ltd., London, Eng.		

Detroit Warehouse—1300 West Fort Street Cherry 6700

Digitized by Google



If it's hobs —

BROWN & SHARPE

Spur Gear - Worm Wheel - Special Purpose

HOBS

Speed up production, lower operating costs

Brown & Sharpe heat treatment, correct design and expert workmanship take the speculation out of hob buying.

BROWN & SHARPE MFG. CO.

Providence, R. I.

Industrial Building

Detroit—The week ended January 27 was not very active as far as letting of contracts is concerned. The list from the Detroit Builders & Traders' Exchange shows among the jobs awarded the following: Remodeling and alterations to a store building at Michigan and Military avenues, into a bank branch for the Dime Savings Bank; alterations to the three-story office building at 90 Griswold street, for the Federal Bond & Mortgage Company; a two-story ladder house for the city fire department, and a two-story store building. New projects coming from the offices of architects include a brick addition to the Gray Motors Company plant; a 15-apartment building; an addition to a factory, and a new police headquarters building.

Lansing—The Columbian National Fire Insurance Company will erect an addition to its present building, which will be 50 by 20 feet, two stories high, of fireproof construction and will be used for vaults and storage of records and files. Work will be started at once. The company moved to Lansing from Detroit last May.

Lansing—The Briggs Company sales department expects a building boom in the state this year. It reports that plans for 300 buildings of a public or semi-public character are in the hands of architects.

Mason—Progress is being made in the installation of equipment at the plant of the Telling-Belle-Vernon Company, and while no definite date for the opening of the plant has been fixed, it is hoped to start operations by

Jackson—The $250,000 power plant of the Jaxon Steel Products Company, considered the most modern unit of the kind in this city will be completed by April, according to present indications. Most of the materials used were obtained in Jackson and the labor was local also.

Grand Rapids—The Grand Rapids Chair Company plans the erection of two plant additions, one three stories high and the other one-story.

River Rouge—The Rouge State Bank has had plans drawn for a building at Linden and West Jefferson avenues.

Recent Dividends

Company	Rate	Payable	Stock of Record
Amer. Brake Shoe & Foun- dry, new, com.	$1.00 Q	March 31	March 18
Amer. Brake Shoe & Foun- dry, new, pfd.	1¾% Q	March 31	March 18
American Radiator, com.	$1.00 Q	March 31	March 15
American Radiator, pfd.	1¾% Q	Feb. 15	Feb. 1
Auto Body Company, pfd	2% s-a	Feb. 1	.....
Berkey & Gay Furniture, pfd	1¾% Q	Feb. 1	.....
Buckeye Pipe Line	$1.50 Q	March 15	Feb. 21
Columbia Gas & Electric	$1.50 Q	Feb. 15	Jan. 31
Commonwealth Power Rail- way & Light, pfd.	1¾% Q	Increp Feb. 1	.....
Consolidated Gas	$1.75 Q	March 15	Feb. 9
Dow Chemical, com.	1¾% Q	Feb. 15	Feb. 5
Dow Chemical, com., extra	1¾% Q	.....	.....
Dow Chemical, pfd.	1¾% Q	.....	.....
General Cigar, com.	$1.50 Q	Feb. 1	Jan. 24
B. F. Goodrich, pfd.	1¾% Q	April 1	March 22
B. F. Goodrich, pfd.	1¾% Q	July 1	June 21
Great Lakes Dredge & Dock	$2.00 Q	Feb. 15	Feb. 9
Hood Rubber, pfd.	1¾% Q	Feb. 1	.....
Kelsey Wheel, pfd.	1¾% Q	Feb. 1	Jan. 21
Lee Rubber & Tire	50 Q	March 1	Feb. 10
*Loose-Wiles Biscuit	1¾% Q	Feb. 1	Jan. 20
Nash Motors, com.	$10.00	Feb. 1	.....
Nash Motors, pfd.	$1.75 Q	Feb. 1	.....
Pere Marquette, pem. pfd.	1¾% Q	Feb. 1	Jan. 15
Pressed Steel Car, com.	$2.00 Q	Feb. 1	Jan. 20
Pressed Steel Car, pfd.	$1.75 Q	March 1	Feb. 8
Pennsylvania R. R.	1¼% Q	Feb. 28	Feb. 1
Pullman Company	$2.00 Q	Feb. 15	Jan. 31
Stewart-Warner Speedometer com.	$1.00	Feb. 15	Jan. 21
Studebaker Corp., com.	1¾% Q	March 1	Feb. 16
Studebaker Corp., pfd.	1¾% Q	March 1	Feb. 19
Wickwire-Spencer Steel, pfd	$2.00 Q	Feb. 1	.....

* Loose-Wiles dividend covers the period of February 1, 1926, to May 1, 1926.

Digitized by Google

1921 Detroit Motor Show Facilities Greatest Ever

Once more the problem of housing Detroit's annual automobile show has been solved, and the largest show in the history of the Detroit Auto Dealers' Association is promised for the new manufacturing building of Morgan & Wright, Jefferson avenue at Bellevue, from March 19 to 26. Through the desire of the officials of the United States Tire Company to see Detroit put on a show in keeping with her predominating position in the automotive field, the annual dilemma has again been conquered, but without the unselfish assistance of these tire manufacturers it is probable that the fourth city of the United States would have been forced to do without the big event.

All exhibits, as told in this paper last week, will be arranged on one floor, which contains 150,000 square feet of exhibition space. It is difficult to comprehend just what this means, but when it is stated that this is more room on one floor than the show occupied on five floors of the former Ford branch building at Woodward and the Boulevard, last year, the magnitude of this building will be realized. Having all exhibits together where they can be inspected easily without the necessity of going from one floor to another, is the ideal arrangement.

The officials of the United States Tire Company have put forth concerted efforts for some time past to make it possible to turn the new Morgan & Wright building over to the dealers, but on account of many delays in construction, they have not been able before definitely to promise anything. Even now it is necessary to push construction work to the limit in order to have everything in readiness by the middle of March. At a conference last week between officials of the United States Tire Company, Lockwood, Greene & Company, engineers; Stone & Webster, builders, and the D. A. D. A. the possibility of Detroit's going without a motor show were discussed. The engineers and contractors went into the matter at length and finally agreed that the building could be completed.

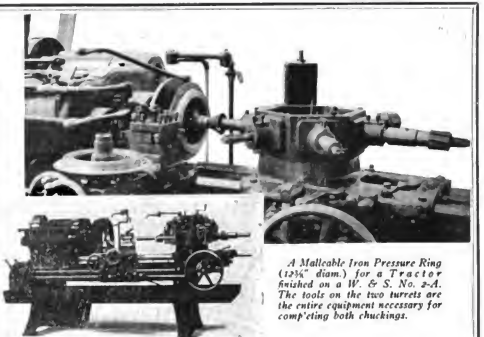
As in former years, the 1921 Detroit event will again be a leader from the standpoint of completeness, as it will be possible to exhibit passenger cars, commercial vehicles, accessories and equipment all in one show. But few cities are able to include commercial cars in their annual exhibits and the Detroit event has gained a reputation as being the most comprehensive of any held in the United States.

Adequate facilities for taking care of show crowds also are provided. It will be possible to accommodate at least 1,000 people in the lobby leading to the exhibition hall proper. This means that facilities for getting into the show without waiting in line will be far superior to any previous Detroit show.

Applications for space which have been placed on file awaiting the announcement of the show are much greater than ever before, so it is probable that even with the additional floor space which the Morgan & Wright building offers, it will be necessary to hold exhibitors down in the matter of space alloted in order to care for all who make application.

Grand Rapids—Announcement has been made that the Pere Marquette Railway will close its shops here, in Saginaw and in Ionia for 30 days. One thousand men will be laid off.

EVERYBODY HOPES TO OWN A MARMON
For Sale—The prettiest Marmon Coupe in Michigan; driven less than 12,000 miles; has a most excellent power plant and is fully equipped; everything in fine condition. Box W, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit.



A Malleable Iron Pressure Ring (12¾" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x 44"—21" Swing to ⅝"x 4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, FEBRUARY 5, 1920

Mr. Ford and the Gossips

DURING the past two or three months the public press of this country has carried and the public gabblers have rolled under their tongues, all manner of gossip concerning the Ford Motor Company organization, which is peculiarly a creature of Michigan and, to a very large extent, one of the objects of pride in this state. This gossip has been both original and interesting, has varied in its quality from the wildest imaginings to the most assured fact, and has been seasoned with deductions from the facts that may have been either warranted or unwarranted, depending on what percentage of the facts has reached the public and the people who made the deductions. The variety of conclusions drawn has, in its turn, been quite wide in its character, the swing of the particular pendulum including an arc starting from the mere statement that Mr. Ford is "housecleaning" to that of the Wall Street Journal that Mr. Ford is coming to the end of his rope, so far as the ability of one man to manage a great business single-handed is concerned.

Upon this basis of fact and fancy a great public interest in the future of Mr. Ford's industrial organization has been developed, which is at this stage merely in the state of a public interest, but which with the supply of a very little more of the propaganda which seems to be so readily available, could be turned into a public sentiment against the Ford organization, which would be a very bad and an equally undeserved thing. It is quite conceivable that in the hands of a few dexterous demagogues, the Ford industry could be made quite as reprehensible, in a popular sense, as the harvester's or the packer's industry has been made in the past. And it is not desirable that this should be the case.

It is always bad manners to discuss the private affairs of a private concern and this paper does not intend to do so in this case. But even private concerns become so much affected by the public interest that there are phases of their activities which may, properly and decently, become the subject matter of the public interest and discussion, and should, as in this case, become such a subject.

The first thing that is being lost sight of in the public discussion of the Ford Motor Company's affairs is that it is the biggest industry in Michigan of any kind today, that it has come up from nothing but Mr. Ford's dogged tenacity of purpose, that it has made millionaires of dozens of people besides Mr. Ford and has paid wages which have done a great deal to effect the redistribution of the immense income which it has come to enjoy among the largest possible number of people, from the common laborer to the ostentatious persons who have from time to time left its service, because they could not agree with the policies of its management. It is not going too far to say, either, that, despite some of the flagrant mistakes which he may take credit for, Mr. Ford is personally one of the most popular men in Michigan. The "Henry" which describes both himself and his product may be set down as an expression of popular affection. He is the first industrialist of Michigan who undertook to do very big things and succeeded, remaining in Michigan as his home and his base of operations.

The industrial history of this state is quite full of comparisons with Mr. Ford and his industrial achievements. Long before most of the active men of the present generation were born we had an industrial leader in the person of Eber B. Ward, whose vision was great, whose training was limited, and whose life was short. Capt. Ward, had he lived, would probably have anticipated the late Mr. Carnegie in the making of the East into a steel center, and would have established the center of steel making in the West. He had "the jump" on Mr. Carnegie by having possession of the process of steel making invented by William Kelly, which was identical with that later and independently developed in England by Sir Henry Bessemer. But poor basic training made Ward slow to grasp his advantage and a comparatively early death put an end to his adventures in the promotion of a country-wide industry.

Later on in our industrial history the city of Detroit had an opportunity to become the center of the constructive efforts of George M. Pullman. The older people say, although the history is a bit indistinct, that the industry later founded at Pullman, in Illinois, might have been developed at Detroit had the city seen its way to close some streets and given it a chance to develop a factory site. Be that as it may, the city didn't close the streets, the Pullman factory already established in Detroit was closed, and the parent industry was developed in the Chicago industrial district.

Still later the people of Detroit and Michigan came to look with much deserved respect and interest upon the industrial adventures of the late Senator McMillan and his associate, Mr. John S. Newberry. These men developed great things for their time, including the car-building industry, the charcoal iron industry and the iron foundry industry, and in connection with these had much to do with the development of the state's railroad system. But the car-building industry passed away with the timber supply, the charcoal iron industry became merged with other organizations and their great creators took up other interests of the capitalistic rather than the industrial type.

The first great Michigan industry to grow up to world magnitude was the motor car industry, in which Mr. Ford was a pioneer. Under his guidance and control, and later what seems to be his sole ownership, the industry has become great enough to compare with the steel industry, the agricultural implement industry and others of great public service. The individual plant of Mr. Ford's company is comparable with the Krupp plant at Essen, in Germany, before the world war. It is four times as great, from the standpoint of men employed, as Harlan & Wolff's shipyard at Belfast. The single Ford motor car plant employs more men the year around, and at better wages, than were ever employed in the greatest mining camp this continent has ever known. In terms of men employed and of value of product turned on the public market, it makes the De Beers diamond syndicate and its operations look like small change. It is, therefore, really and comparatively, one of the big industrial things of the world.

This industry belongs to Detroit and to Michigan. It is so firmly rooted therein that nothing but an industrial cataclysm could remove it therefrom. It is a creation to be valued for what it means to development. In its wake came scores of industries for whose products it forms an outlet. When Ford shuts down, for even so short a time, a lot of other factories marked with less widely known names must shut down, too. And when they shut down a hundred thousand men in Michigan are out of work.

Digitized by Google

It would, therefore, be a very great calamity to this city and state if anything serious happened to the Ford organization. Nor can we believe that anything serious will happen to it. To begin with, the motor industry in this country is not at an end, nor is it likely ever to be at an end. There are literally millions of people in the United States today who have never ridden in a motor car. The products of 16 years of production are wearing out annually and must be replaced. The Ford product is the primary one in demand for these replacements.

The Ford organization may be in the market for money. This is only strange in industry so far as it concerns this one organization. But it will get money if it wants it, just as every other industry has gotten money in the past and will in the future.

Mr. Ford may have made a mistake in running for senator, but that was corrected by his not getting it. At that, he almost got it, but it was good that he was not diverted from his industrial idealizations by the cares of a mighty humdrum office.

Mr. Ford undoubtedly makes a mistake and does an injustice by his attacks on the Jews. But the Jews have had even more powerful men than Mr. Ford attack them in the past, and have survived as a mighty useful, industrious and cheerful set of people. They will survive Mr. Ford's attack, too. Nor is it likely that they will wreak vengeance on Mr. Ford, first of all, because they are too sensible, next because they could not crush him if they tried, and lastly, because they are business folks who know that profit is to be derived from progress rather than from ruin.

But the basic fact is that none of these things have to do with the public attitude toward such an industrial organization as Henry Ford has created and now maintains. The public interest is in the continuance and growth of such an organization, and as many more of its type as the future may have in store for us, especially here in Michigan. No amount of gossipy criticism can effect good in such a development. The ability which can measure the hole is vastly more widely diffused in human nature than that which can estimate the food value of the doughnut. So just at this moment we believe in saying, "Three Cheers for Henry Ford."

The Mails and Foreign Trade

THE BUSINESS INTERESTS bent on extending the country's overseas commerce are so intent on the larger phases of the problem—such as credit and transportation facilities—that little attention is being paid to some of the less-advertised agencies which are working just as earnestly, if less conspicuously, toward the same end. That, however, does not detract from the importance of the service these latter organizations are rendering. When all the other machinery has been provided—if, happily, that day ever should arrive—it will be found that the accomplishments of the humbler laborers are of scarcely less import.

One of the latter helpers which has gone about its work unostentatiously but effectively is the Advisory Committee on Foreign Mails, which is affiliated with the National Foreign Trade Council. This committee has addressed itself to the task of broadening and extending the parcel post service to foreign countries and at the same time to bringing about in the general mail service conditions most favorable to American exporters. A statement just issued by H. H. Morse, of Boston, a member of the governing board of the committee, sets forth briefly some of the work the committee already has done, as well as some of the problems still confronting it. It is an enviable record.

It is largely due to the activities of the committee, the statement recounts, that the parcel post service has been extended to include nearly every country in the world, as against the mere handful included less than two years ago; that the combination package which permits the sample and the sales letter to travel together at different rates of postage was introduced; that the C. O. D. service with the Philippines was established; that the limit on weight with some foreign countries was increased from 11 pounds to 22. It was due to the advice and suggestion of the committee that the American delegates to the Universal Postal Union Congress, in Madrid, last October, successfully fought down the proposal to increase international postal rates, and, in so doing, brought about with great skill the creation of a new Pan-American-Spanish postal convention. When the latter becomes effective within the next few months domestic rates of postage will be permissible on letters addressed to Spain and all the countries of Central and South America, including Mexico, Cuba, the Dominican Republic and Haiti; domestic rates will apply to postcards and printed matter, and the weight limit of newspapers, printed matter and commercial papers will be increased, when sent thus, from two to four kilograms and from two to five kilograms in the maximum weight limit for single volumes of printed books. The dimensions of these articles in the form of roll are increased to a maximum of one meter in length and 15 centimeters in diameter.

It is the committee's intention to continue its efforts to obtain extension of the parcel post to all territories not yet reached; to procure the greatest increase in the weight of packages that is feasible, and to develop the foreign mail service in every way so as to make it of the largest service to American concerns engaged in world commerce.

The members of the committee now number 178, among whom are the executives of some of the foremost manufacturing organizations in the United States. An effort is being made to add to the roster, through the committee's secretary, D. W. Thayer, whose office is in Washington. The organization is worthy of the support of business generally.

Short Measure Stuff

MYSTERY

Now what in the world will Bergdoll do,
If Germany gets in a fight?
Will he hie himself over to Timbuctoo,
And give the reporters some work to do,
And think that he did something bright?

But there's something about it that puzzles me,
You might help me out if you will.
Why should he have hied himself o'er the sea,
When by waiting a bit he would soon be free
To go into vaudeville?

* * *

Want Dry Law Sharpened Up
—Newspaper Headline.

Needs a little bracer, maybe.

* * *

A Detroit man obtained a divorce because his wife made him sleep by himself. What would he have done if wife had insisted on using his spine for a foot-warmer.

* * *

Have you had a little bandit in your home?

* * *

Jess Willard is getting ready to fight Dempsey again. Now all those fans who went to Toledo last July and who saved their rain checks will have a chance to see another one of the scheduled 12 rounds.

* * *

The Detroit Symphony Orchestra wants its audiences to come across with a few notes, allegretto tempo.

* * *

THE MOVIE FAN'S BILL OF COMPLAINT

First we had a lot of bronco
Busters roaming western plains,
Who could hug a maid while blowing
Out the city feller's brains.

Then the vampire misses slithered
From the movie studios;
Drove strong men to ruin by merely
Showing bits of silken hose.

Now it's sex stuff that they're shooting,
All the ladies are betrayed,
They are handed back their virtues
In the last reel, sadly frayed.

They have used up legs and shoulders,
Hills and halls, saloons and beds;
But I hope to see a movie
Some day, where they use their heads.

—A. P.

Digitized by Google

FINANCIAL

Gladys-Belle Oil Leads Detroit 'Change Trading

Three hundred eighty-one thousand, seven hundred ninety-eight shares of stock were traded on the Detroit Stock Exchange during the period from December 30, 1920, to January 28, 1921, according to a tabulation issued this week by the secretary of the Exchange. Gladys-Belle Oil, common and preferred, led the total, with 95,185 shares. Paige-Detroit was second, with 75,590; Continental common, with 45,571, was third; Reo, fourth, with 34,635, and Packard common, fifth, with 34,212. The Stock Exchange statement follows:

	No. Shares	High	Low
Amer. Lt. & Traction, com.	3,555	92	69
Charcoal Iron of America, com.	4,125	3¾	2¾
Charcoal Iron of America, pfd.	825	3½	2¾
Coahuila Lead & Zinc, com.	4,300	16	8
Columbia Sugar	1,845	14½	12¾
Commerce Motor Truck	250	7½	6½
Com. Ry. Power & Light, com.	16	7	7
Continental Motor, com.	45,571	7¾	5¾
D. & C. Navigation	197	75¾	71
Detroit Creamery	531	25	22¾
Detroit Edison	1,620	98	97½
Detroit Brass & Malleable Iron	20	98	98
Edmunds & Jones, com.	865	14½	9¾
Federal Motor Truck	405	19	18
Ford Motor of Canada	1,840	260	217
General Motors	6,314	16	13¾
General Aluminum & Brass	100	13¾	11
Gladys-Belle Oil, com.	66,616	74	57
Gladys-Belle Oil, pfd.	28,690	84	61
C. M. Hall Lamp	130	16	15
Hayes Manufacturing Co.	5,115	3¾	2¾
Holland-St. Louis Sugar	400	8	8
S. S. Kresge, pfd.	25	96¾	96¾
Lincoln Motors—Class A	19,557	21½	17½
Michigan Stampings, Com.	135	19	18
Michigan Sugar, Com.	10,570	9	7¾
Michigan Sugar, Pfd.	200	8	8
Motor Products	210	43	37½
Motor Wheel	4,093	11	6½
National Creosot, Com.	1,000	1¼	9
Chas. F. Noble Oil & Gas, Pfd.	17,520	124	106
Packard Motor, Com.	34,212	11	9¾
Packard Motor, Pfd.	986	79	69¾
Paige-Detroit Motor, Com.	75,590	13¾	12
Parke, Davis	252	88¾	83
Reo Motor Car, Com.	34,635	35	32
Timken-Detroit Axle, Com.	3,120	33	26½
Western Knitting	1,815	11	8¾
Wolverine-Portland Cement	3,000	100¾	100¾
BANKS AND TRUST COMPANIES			
American State Bank	170	221	215
Detroit Savings	5	260	260
Dime Savings	35	260	260
First and Old Det. National	10	271	271
People's State	55	260	260
United Savings Bank	10	208	208
Union Trust Co.	14	180	180
BONDS.			
Det. Edison, Deben., 1930	1,000	86¾	86¾
Det. Edison, Deben., 1931	3,000	100¾	100¾
Total	381,798		

SURVEYING THE POSTAL SERVICE

B. K. Muir, of the engineering firm of W. B. Richards & Company, New York, is in Detroit making a survey of the postal service. Mr. Muir is one of a staff operating under the direction of the Richards company, which was engaged by the Congressional joint commission on postal service to determine the exact status of the service and report by March 1.

The cities in which the survey is being made are Detroit, New York, Chicago, Boston, Philadelphia and Washington. Every detail connected with service is being examined.

JANUARY BUSINESS CHECKINGS

January checkings as to business conditions made by the National Bank of Commerce, Detroit, among representatives of a number of lines of trade in the city, show an improvement as far as the future is concerned, but are not quite so good as to present business conditions, when compared with the December checkings. The result of the tabulation is given herewith:

Future Business Conditions—Improving: January, 1921, 22.22 per cent; December, 1920, 12.19 per cent. Stationary: January, 45.68 per cent; December, 53.66 per cent. Declining: January, 32.10 per cent; December, 34.15 per cent.

Present Business Conditions—Above Normal: January, 3.70 per cent; December, 3.66 per cent. Normal: January, 4.94 per cent; December, 7.32 per cent. Below Normal: January, 91.36 per cent; December, 89.02 per cent.

RESERVE CITY BANKERS' CONVENTION

The Association of Reserve City Bankers will hold its annual convention at the Lafayette hotel, Buffalo, Thursday and Friday, June 2 and 3, according to an announcement sent out this week by Fred W. Ellsworth, president of the association. Mr. Ellsworth is vice-president of the Hibernia Bank & Trust Company, New Orleans.

Current Investment Offerings

WATLING, LERCHEN & CO., DETROIT

Name	Pct. Int.	Maturity	Price	Pct. Yld.
Fort Street Union Depot Co., First Mortgage	4½	1-1-41	....	6.50
Det. Monroe & Toledo Short Ln. Ry. 1st Mtge.	5	1-1-33	....	7.50
Det. St. Gas Co. 1st mtge.	5	7-1-22	....	7.50
Det. Edi. Co. conv. deb.	8	1-10-31	....	7.85
Detroit & Hillsdale Ln. 1st mtge.	5	8-1-21	....	8.50
Det. & Northw. 1st mtge.	4½	5-1-21	....	9.50

HALSEY, STUART & CO., DETROIT

Swift & Co. notes	7	1925	96.75	7.90
East Ohio Gas Co.	7	1925	93.90	8.70
Ky. Ut. Co., 1st mtge. L.	6	1924	92.42	6.50
Public Service Co. of No. Illinois, coll. notes	6	1923	95.32	8.50
East. Cleveland, O., Ry.				
School Dist. Bonds	6	1921-40	acc. to Incl. mat.	5.40 to 5.50
Wilson. N. Car., direct obligation bonds	6	1922-32	at par	
			to yld.	6.00

BOLDGER, MOSSER & WILLAMAN, DETROIT

Harrison Co., Tex., road	5	1922-26	....	6.10 to 6.25
Okeechobee County, Fla., road and bridge	6	1929-44	....	6.10
Pima Co., Ariz., road	5½	1932-41	....	6.75
Morrison Hotel, Chicago, 1lls., 1st & ref. mtge.	6	1926-30	....	7
Park Fireproof Storage Co., 1st mortgage	7	1925	....	
Wisconsin Chair Co., secured gold notes	7	1922-24	....	6

CORRIGAN COMPANY, GRAND RAPIDS

City of Grand Rapids School bonds			....	5
Mich. Rd. Bonds, to yld			....	6
Penn. R. R. coll trust	6½		....	6.65
Province of Ontario			....	7.50
Grand Rapid Chem. Co.	7½		....	7.75
Kingdom of Belgium, 8% to yield			....	8

HAISE, WERBER & COMPANY, DETROIT

Long Island Railroad Co. Equipment Trust Fds.	6	8-1-21 and '28	mkt.	6.75
Adirondack Pw. & Lt. Cor. 1st & ref. bonds	6	3-1-50	87½	7.00
Ohio Power Co. 1st and refunding bonds	7	1-1-51	95¾	7.40
Wis.-Minn. Light & Power Co. bonds	8	2-1-22	99	9.00
Miami Conserv. District, Ohio bonds	5½	12-1-41	101⅞	5.35
Argentine Gov. Sterling loan bonds	1	....	$145 per £200 ($973)	

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6	1924-30	....	7
The Hemph-Robinson Co.	6	1926-27	....	6
Adolph Meyers	6	1926-29	....	6
Northw. Service Gar. Co.	6	1924-25	....	6

$638,445,000 Is Invested In Utilities in Michigan

A total of $638,445,000 is invested in public utilities in Michigan, according to a report made by the Michigan Public Utilities Commission to Gov. Groesbeck. This does not include the assessed value of express or telegraph companies within the state. Of this total, approximately $246,445,000 has been invested by steam lines. Electric light and power companies are next with $142,000,000, while $140,000,000 has been invested in electric railways. The telephone and gas companies present an aggregate of $110,000,000.

The Commission has found that 199 cities and villages own and operate utilities supplying water to the public, while 103 towns have invested in electric light. There are 75 cities supplying power to industrial plants, while three own and operate gas plants.

During 1919 the public paid to privately owned utilities a total of $235,000,000, or an average of $100 for each citizen. The Commission regards two telephone systems in the same locality as a waste and is endeavoring to eliminate one in each case.

The cost of the Commission to the state was $620,351.45, while $612,233.26 was turned into the state treasury.

It is possible that Rep. Lemuel G. Dafoe, Alpena, will introduce legislation to give the utilities commission exclusive rights over all utilities, with control of rates. He declares that with localities in control, politics frequently govern action to the detriment of all concerned.

WHITE STAR LINE

Following is the balance sheet of the White Star Line, as of December 31, 1920, as submitted to the Detroit Stock Exchange this week:

ASSETS

Permanent and long term investments	$1,451,931.44	
Less reserves for accrued depreciation	229,065.39	
		$1,222,866.05
Working assets		71,979.06
Deferred debit items		15,887.85
Sinking fund assets		38,000.00
		$1,346,632.96

LIABILITIES

Capital stock		$ 750,000.00
Long term bonds		246,000.00
Working liabilities		125,287.96
Accrued liabilities not due		19,050.39
Operating reserves		5,442.10
Other deferred items		26.00
		$1,144,799.35
Surplus accounts		203,834.61
		$1,348,633.96

TWO NEW INSTITUTIONS

Two new state banks appear in the list of incorporations prepared this week in the office of the Secretary of State. One is the State Savings Bank, West Branch, which has capital of $30,000, with R. C. McKay and William T. Yeo, West Branch, and James McKay, Prescott, as the principal incorporators. The other is the Byron Center State Bank, Byron Center, with capital of $25,000. The principal incorporators of this institution are Raleigh Deweerd and Peter Holleman, Byron Center, and Daniel Burgess, Ross. Both banks will do a commercial and savings business.

Digitized by Google

PARKE-DAVIS STATEMENT

Conservatism is the keynote of the Parke, Davis & Company statement, as of December 31, 1920, which has just come to hand. As may be noted in the comparative statement below, reserves of all kinds has been increased over a year previous, with the addition of two new reserve items.

ASSETS

	(Cents omitted) Dec. 31,'20	Dec. 13,'19
Accounts receivable	$ 5,609,241	$ 5,463,479
Reserve	933,764	452,119
	4,670,476	5,000,359
Cash and banks	4,159,193	4,696,049
Reserve	1,278,089	1,251,143
	2,881,103	3,444,905
Investments—		
State and munic. bonds.	1,047,392	417,154
War Bonds	285,632	536,632
Miscellaneous	97,950	1,000
Less reserve	6,832	
	1,414,342	1,253,786
Mach. and tab. equipment	2,095,149	1,902,818
Reserve	867,490	746,367
	1,227,659	1,156,430
Office furn. and fixtures	426,484	404,201
Reserve	197,420	177,990
	229,064	226,210
Real estate and buildings	2,329,291	2,702,401
Reserve	541,373	477,974
	2,457,907	2,231,427
Inventories—		
Merchandise	4,512,814	3,762,837
M'ls in stores	2,362,474	2,244,656
Manufacturing in process and bulk	2,510,824	3,093,712
Manufacturing auxiliary	129,740	111,569
Less reserve	658,530	
	8,849,324	9,212,774
	21,739,877	22,525,895
Less accounts payable	1,258,797	1,019,136
Reserve, special taxes	850,000	2,000,000
Reserve, dividend	947,326	947,076
	3,056,123	3,966,212
Net assets	18,683,753	18,559,683

LIABILITIES

Capital stock	$11,841,885 $11,638,850
Surplus	6,841,768 6,720,832
	18,683,753 18,559,682

INCOME STATEMENT

Gross earnings	$ 4,568,859	$ 6,694,762
Less amount necessary to equalize value of current assets in foreign countries with rates of exchange Dec. 31, 1920	1,009,341	116,266
Less depreciation of machinery, equipment, office furniture and buildings	204,338	194,845
Less reserve for excess profits and income taxes	850,000	2,000,000
	2,064,229	2,311,111
Net profit	2,494,669	4,293,591
Surplus at beginning of year	6,720,832	4,778,946
Plus recovery of Russian assets previously	489	21,644
	9,215,990	9,104,181
Less cash dividends paid in 1920	1,420,893	1,420,456
Less cash dividends paid Jan. 3, 1921	947,326	947,076
Adjustment 1919 profits	6,084	15,817
	2,374,223	2,383,349
Surplus at end of period	$ 6,841,768	$ 6,720,832

Board of Directors—H. E. Bartlett, D. C. Whitney, E. G. Swift, H. M. Campbell, Arthur Buhl, Jerome H. Remick and H. B. Mason, and the officers are as follows: President and general manager, J. E. Bartlett; vice-presidents, D. C. Whitney, H. M. Campbell; treasurer, Ernest G. Swift; secretary, Harry B. Mason; assistant secretary, John C. Spratt; assistant treasurer, S. S. Coleman; auditor, N. F. McLeod.

UNION STEEL PRODUCTS, ALBION

The Union Steel Products Company, Albion, paid $25,000 in bonuses to its 225 employes last year. This is more than the total of the sales of the company in 1906, the year it started in business. The bonus is paid to employes with the concern one year or more. The plant operated normally, in fact to capacity, all of last year, except during the last two weeks of December.

WHERE DID *YOUR* SURPLUS GO?

WHAT became of the surplus earnings of your organization in the period of marked activity and generous profits from which business recently emerged?

Did they go into extensions and improvements, now made unproductive by lessened business activity; into expanded inventories, now written off appreciably through readjustment in values; into dividends, now disbursed so as to afford no relief at a time when credit may have been badly needed?

Or did they go into a bond reserve fund of safe, readily salable securities, earning interest regularly and providing the best possible basis for credit which otherwise might not have been available?

Perhaps never more forcefully than in the business transition experienced in the past several months has the wisdom of a bond reserve fund been demonstrated. With many organizations such a fund has in this period meant the difference between successfully meeting a difficult situation and possible serious embarrassment.

For businesses, as well as for individuals, already committed to the wise policy of setting aside regularly a portion of their surplus in a bond reserve fund, we have an extensive list of suitable bonds from which to choose and a valuable advisory service to offer.

For those who may be considering such a move, but who are not yet definitely committed to it, our extensive experience will be found distinctly helpful, both in the preliminary investigations and in the final selection of appropriate investments.

May we send you our booklet—"Choosing Your Investment Banker," together with our latest list of bond offerings? Ask for list FG-8.

HALSEY, STUART & CO.

INCORPORATED — SUCCESSORS TO
N. W. HALSEY & CO., CHICAGO

FORD BUILDING, DETROIT

TELEPHONE: MAIN 728

CHICAGO NEW YORK PHILADELPHIA ST. LOUIS
BOSTON MINNEAPOLIS MILWAUKEE

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

MANAGED BY MEN YOU KNOW

Do You Know Michigan Inheritance Laws?

Do you know what a widow's dower is? Do you know the legal claims of relatives on your estate?

Every one who will leave property should know the substance of these laws, in order that his will may contain no conflicts with the statute that would result in its being set aside.

Our free booklet gives a digest of these inheritance laws which has helped many in arranging the descent of their property. Ask for a copy.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan
CAPITAL AND SURPLUS, $450,000.00

MATTHEW FINN
High Grade Municipal
and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Jan. 28, 1921	Jan. 21, 1921	Jan. 30, 1920
Total gold reserves	$2,106,137,000	$2,095,769,000	$2,012,656,000
Legal tender notes, silver, etc.	213,837,000	202,482,000	61,277,000
Total reserves	2,319,974,000	$2,301,251,000	2,073,933,000
Bills discounted—Secd by Gov't war obligations	1,048,769,000	1,056,117,000	1,457,892,000
All other	1,407,707,000	1,426,912,000	716,465,000
Bills bought in open market	165,453,000	167,899,000	561,313,000
Total bills on hand	2,621,533,000	$2,650,978,000	2,735,670,000
U. S. Government bonds	25,849,000	25,895,000	27,036,000
U. S. Victory notes	19,000	19,000	84,000
U. S. Certificates of indebtedness	261,402,000	264,631,000	276,421,000
Total earning assets	2,908,853,000	$2,941,523,000	3,039,181,000
Bank premises	18,228,000	18,218,000	16,555,000
Uncollected items, other deductions gr. deposits	595,894,000	667,141,000	933,178,000
5% Redemption fund against F. R. Bank notes	12,746,000	12,686,000	12,260,000
All other resources	6,830,000	6,184,000	5,341,000
Total resources	5,861,727,000	$5,946,999,000	6,074,412,000
LIABILITIES			
Capital paid in	100,147,000	99,962,000	87,892,000
Surplus	202,026,000	202,026,000	129,120,000
Government deposits	52,135,000	23,692,000	72,571,000
Due to members—Reserve account	1,731,823,000	1,765,225,000	1,950,712,000
Deferred availability items	430,307,000	472,816,000	720,256,000
Other deposits, including foreign gov't credits	24,054,000	25,204,000	95,418,000
Total gross deposits	2,238,317,000	$2,295,648,000	2,739,624,000
F. R. notes in actual circulation	3,096,748,000	3,115,310,000	2,840,944,000
F. R. Bank notes in circulation—net liability	207,169,000	207,285,000	250,830,000
All other liabilities	28,810,000	26,678,000	25,302,000
Total liabilities	5,861,727,000	$5,946,999,000	6,074,412,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	49.0%	48.5%	44.5%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	56.8%	55.6%	50.5%

General Financial News

STOCKHOLDERS' MEETINGS

Annual meeting of stockholders of the following companies have been announced: Ajax Rubber Company, February 23; American Can Company, February 8; Central Leather Company, February 23; Consolidated Cigar Company, February 21; Consolidated Gas Company, (N. Y.), January 24; Detroit Edison Company, February 7; Pacific Gas & Electric Company February 10; Pennsylvania Railroad Company, March 8; Stromberg-C. L. & C. Company February 10; Pressed Steel Car Company, February 16; Saxon Motor Car Corporation, February 8; Seneca Copper Corporation, February 8.

COLUMBIA GAS & ELECTRIC

The Columbia Gas & Electric Company has increased its quarterly dividend rate 25 cents, or to $1.50. During 1920 the net increased $1,359,000 over that of 1919, the total at the end of the year being $7,235,000. On December 31 the surplus was $4,836,000.

TRADE BANK STOCK SALE ON

Papers incorporating the Foreign Trade Financing Corporation with an authorized capital of $10,000,000 were filed with the Federal Reserve Board in Washington, late last week, and approved by the Board. Attention was drawn to the fact that the Board, in granting the charter to this corporation, has approved the inauguration of an institution with a greater capital than any other institution of its kind in the world. The corporation is being organized under the terms of the Edge Law in order to assist in the maintenance and development of the foreign trade of this country through the extension of long-term credits to foreign buyers of American goods. The funds available for the extension of such credits will be derived from the sale of debentures to the investing public. The corporation will be permitted under the law to issue such debentures to the amount of $1,000,000,000. Sale of the capital stock began this week, prospectuses having been sent to the country's 30,000 banks as well as to thousands of manufacturers and producers.

NEW STOCKS ON 'CHANGE

The New York Stock Exchange has admitted to list the following, among others: Detroit Edison Company, $2,000,000 stock, on notice of issuance at par for equal amount of 10-year, 7 per cent convertible debenture bonds, due February 1, 1929; Duquesne Light & Power Company $31,718,500 first mortgage and collateral trust 60-year bonds, series A, due July 1, 1949; American Chicle Company, temporary certificates for 149,336 shares of common; Kelly-Springfield Tire Company, $1,250,000 additional common, on notice of issuance as a stock dividend; Granby Consolidated Mining, Smelting & Power Company, Ltd., $2,500,000 5-year, 8 per cent convertible debenture coupon bonds, due May 1, 1925, on notice of issuance in exchange for outstanding temporary bonds; Middle States Oil Corporation, $2,500,000 stock, on notice of issuance and payment in full.

MICHIGAN MUTUAL'S BIG YEAR

For the Michigan Mutual Life Insurance Company, Detroit, the year 1920 was the best in the number of policies written of any year in the company's history.

New policies aggregated $19,900,748, as against $17,933,054 in 1919, and of the total nearly $6,000,000 were issued on lives of Michigan people. Total insurance in force at the end of 1920 was in excess of $87,500,000, against something more than $75,600,000 a year ago. The company's total income was $3,220,910.10, comparing with $2,853,883.85 in 1919. Disbursements were $2,451,618.42, comparing with $2,265,411.51 the previous year. During 1920 death claims were paid amounting to $793,281, as compared with $669,552 in 1919, and $659,786 was returned to living policyholders, as against $660,247 for the previous year. In its 53 years of existence the company has returned $32,976,813 to its policyholders.

Directors re-elected are: J. Mooney, A. F.

Digitized by Google

Moore, W. G. Hutchinson, M. D., John C. Grix, R. P. Williams, J. Farrand Williams, W. S. Green, L. H. Chamberlin, Alexis C. Angell, James V. Oxtoby, Nicholas Woods, George B. McGill, Oscar F. Looker, Ream C. Looker, George M. Grix all of Detroit; D. F. Mooney, Asuncion, Paraguay; J. H. Moore, Columbus, O.; Russell T. Elwell, Chicago; M. J. Mooney, Lima, O., and W. B. Marshutz, Milwaukee.

WILL SELL MAC-LAR ASSETS

The Wayne Circuit Court has directed the receivers of the Mac-Lar Battery Company, Detroit, to offer at public sale the company's assets, February 14, at the plant, 1046 Third avenue.

DETROIT EDISON STOCK LISTED

The Detroit Edison Company has filed application to have its additional capital stock of $2,600,000 listed on the New York Stock Exchange. Its 8 per cent convertible debentures, series of 1931, have been listed on the Detroit Stock Exchange.

SCOTTEN-DILLON STOCK INCREASE

Directors of the Scotten-Dillon Company, Detroit, have voted an increase in the capital stock from $1,500,000 to $3,000,000 and have authorized the distribution of a 50 per cent stock dividend equivalent to $750,000. The outstanding stock is now $2,250,000, in shares of par value of $10. This is the third important stock dividend in 10 years.

WABASH 1920 EARNINGS REPORTED

Gross earnings of the Wabash Railroad for 1920 are reported as $5,720,548, those for 1919 being $4,312,598. Net operating deficit after taxes was $440,476, compared with a net operating income of $747,073 in 1919.

PRESSED STEEL CAR MEETING

Stockholders of the Pressed Steel Car Company have been notified of a meeting February 16 to vote on an increase in common stock from $12,500,000 to $50,000,000, declare a 20 per cent dividend on the common stock and exchange $12,500,000 of preferred stock for an equal amount of common.

MOTOR WHEEL MEETING FEB. 15

The tentative date for the annual meeting of the Motor Wheel Corporation, Lansing, has been set for February 15.

KEENA ON UNION TRUST BOARD

James T. Keena, chairman of the board of directors of the Peoples State Bank, has been elected to the directorate of the Union Trust Company, Detroit.

SCHMIDT & DEERY CHANGE

The stock exchange business formerly conducted at 230 Penobscot building, Detroit, by Schmidt & Deery has been taken over by the firm of Howell & Wales, of New York, Chicago, Pittsburgh, Cleveland and Detroit. The former firm of Schmidt & Deery was dissolved by mutual consent as of December 31, 1920. The business will be continued in a manner similar to that of the former firm.

REALTORS INCREASE CAPITAL

The J. W. Bailey Company, real estate, Lansing, has increased its capitalization from $25,000 to $200,000, of which $120,000 will be common and $80,000 preferred. The increase was made to care for the growth in the business.

GREAT LAKES DREDGE ASSETS

The Great Lakes Dredge & Dock Company reports net cash assets of $3,400,000 for 1920, the largest in its history. The company's earnings exceeded those of all previous years.

BRIDGMAN SEEKS ANOTHER FACTORY

Bridgman is expecting to obtain a new industry shortly. The business men are now negotiating with parties interested in a wall board factory.

In the Transfer of Stock

many technical points arise where experience and knowledge of law prevent loss and embarrassing situations.

That is why corporations appoint this Company as their Registrar and Transfer Agent. Our charges are moderate.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Triple Assurance

Owners of our First Mortgage Bonds are secured three-fold; by the legal obligation of a responsible mortgagor; by the collateral security in the form of Detroit income producing property worth double the amount of the mortgage; and, by the seven millions of dollars of resources of this successful going concern.

But interest yield is not dwarfed by safety.

These bonds pay **6%**

DETROIT MORTGAGE CORPORATION
Real Estate Exchange Bldg.
Third Floor

SAFE INVESTMENT BONDS
FOR SAVINGS
JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.
CHERRY 2000

A Bank with a Reputation: 70 Years of Service.
THE DETROIT SAVINGS BANK
OLDEST BANK IN MICHIGAN
Interest Paid on Savings Accounts
45-47 Fort St. West, Penobscot Building. 14 Branches

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE FEBRUARY 2nd, 11 A. M.

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.	80	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Ld. & Trac. Co., com.	85		100	92 - 69	304 - 55	4%	4%	Quarterly	Feb. 1, 1921	1	1¾%			$23,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%				$14,236,200
Auto Body Co.	4¾	5¾	10	4¾ - 4¾	12½ - 5½			Semi-Ann	Jan. 20, 1917		25%	1½%		$1,074,000
Do., pfd.	7½	8½	10		10¼ - 10¼	6%		Semi-Ann	Feb. 1, 1921	3%				$527,600
Bower Roller Bearing Co.	15		10		29¾ - 16	Varies		As Decl'd	July 1, 1920	10%		3%		$600,000
Charcoal Iron Co. of America, com.	2½	2¾	10	2¾ - 2	5¾ - 1¾				Apr. 1, 1919	2%				$2,898,350
Do., pfd.		3½	10	3½ - 3¼	6¾ - 3¼				July 1, 1919	3½				$5,217,250
Cities Service Co., com.	261	266	100		355 -250½	*6%		Monthly	Jan. 1, 1921	*½%	1¾ %	½%	1¼%	$40,039,245
Do., pfd.	65¾	66¾	100		70 - 65	6%		Monthly	Jan. 1, 1921	½		½%		$75,465,564
Columbia Lead & Zinc Co.		14	1	16 - 6	25 - 6	Varies		As Decl'd	Nov. 15, 1917	20%				$300,000
Columbia Sugar Co.	12½	13	10	14½ - 13	20¾ - 13	Varies		Quarterly	Jan. 1, 1921	2½		8%		$3,000,000
Commerce Motor Car Co.	7¼		10	7¾ - 7¼	18½ - 6½	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pwr. & Light Co., com.	14	16	100	16 - 16	43½ - 10¾	4%		Quarterly	Nov. 1, 1921	1%				$18,585,960
Do., pfd.	34½	36	100		23 - 23	16%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,953,080
Continental Motor Co., com.	6¾	7	10	7¾ - 6¾	14¾ - 6¾	4%		Quarterly	Jan. 20, 1920	1				$6,447,000
Do., pfd., XD	90	93	100		100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,151,780
Detroit & Cleveland Navigation Co.	71¾	73½	100	76¼ - 71	76¾ - 71	8%		Quarterly	Feb. 1, 1921	2%		2%		$14,829,400
Detroit Creamery Co.	24	25½	10	25¾ - 22½	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,960,000
Detroit Edison Co., XD	96½	97	100	98 - 96¼	114 - 92¾	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,655,200
Detroit Brass & Malleable Works	90	93½	100	98 - 98	96 - 93	8%		Monthly	Jan. 1, 1921	½		1%		
Detroit United		90	100			8%		Quarterly	Dec. 1, 1920	2%				$15,000,000
Edmunds & Jones, com.	12	13	None	14½ - 14	34 - 9½	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 10,000 sha
Do., pfd.	75	83	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$880,400
General Motors		15¾	100	16 - 14¾	42 - 12¾	12%		Quarterly	Feb. 1, 1921	2%				20,563,358 shs
Federal Truck	20		10	20 - 18½	82 - 18¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	240	248	100	204 -220	440 -210	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.		15	10	11¾ - 11	Varies			As Decl'd	Oct. 1, 1920		5%			$1,952,750
Gladys-Belle, com., XD	61	64	100	71¼ - 56	120 - 57	16%		Quarterly	Jan. 15, 1921	4%		4%		$6,417,000
Do., pfd.	72	78	100	80 - 63	1 48 - 61	16%		Quarterly	Jan. 15, 1921	4%		4%		$2,000,000
Godchaux Sugar, com.	20	23	None		59¾ - 30½									$ 70,000 sha
Do., pfd.	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$3,500,000
Hanna Furnace, com.	26¾		10											$1,950,000
Do., pfd.	96	99	100						Dec. 24, 1920	3%				$750,000
Hall Lamp Co.	14½	15½	10	15 - 15	32½ - 16	Varies		As Decl'd	Feb. 1, 1921	1½%				$750,000
Hayes Mfg. Co., com.	24	30	10	31¾ - 25¾	44 - 24½	Varies		As Decl'd	Feb. 1, 1921	2%				$1,500,000
Holland-St. Louis Sugar Co.	7½	8	10		19½ - 7¾	12%		Quarterly	Oct. 15, 1920	6%				$2,000,000
Hurd Lumber Mining Co.	25	40	10		50 - 25	Varies		Semi-Ann	Jan. 2, 1919	10%				$2,500,000
S. S. Kresge, com.	127	132	100	96¾ - 96¾	151 -100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	97	102	100			6%		Quarterly	Jan. 2, 1921	1½		1½		$2,000,000
Linderman Steel, com.	12	15	10		24½ - 15½	6%		Quarterly	Jan. 2, 1921	1½%		1½%		$1,000,000
Lincoln Motors, Class A	19½	19¾	50	21½ - 17¾	34¾ - 13¾	$3.00		Quarterly	July 20, 1921	$1.25				$8,000,000
Mexican Crude Rubber Co.	7½		10		13½ - 9½				Dec. 1, 1914	2%				$750,000
Michigan Drop Forge, com.		40	None		90 - 90	$1.00		Monthly	Feb. 1, 1921	25c		50c		$ 12,500 sha.
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾%				$250,033
Michigan Stamping Co., com.	17		10	17¾ - 17¾	30 - 16½	9%		Quarterly	Jan. 1, 1921	2%		3%		$1,200,000
Michigan Sugar Co., com.	7¾	7¾	10	8 - 7¾	13¾ - 7¾	12%		Quarterly	Dec. 1, 1920	3%				$7,471,100
Do., pfd.	8½		10	8½ - 8	9¾ - 9¼	9%		Quarterly	Jan. 15, 1921	1½%				$5,703,500
Miles-Detroit Theater Co.	15½		100		21 - 15½	*16%		Quarterly	Jan. 10, 1921	4%				$350,000
Motor Products Corp.	42	45	None	43 - 43	60¾ - 37¾			Quarterly	Oct. 1, 1917	$1.00				$ 100,000 sha
Motor Wheel	11	11½	10	11½ - 11½	13½ - 8	*8%		Monthly	Jan. 1, 1921	1c				$4,500,840
Murray Mfg.		18	10		33 - 33	12%		Monthly	Jan. 15, 1921	1c				$733,400
National Grocer Co.	8¾	9¾	100	9¾ - 9	15 - 15	8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.	88	92	100		157 - 90	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	123	1 04	1.00	1.25-1.10	2.00-1.25	*15%		Quarterly	Dec. 1, 1920	4%		4½%		$1,000,000
Packard Motor Co., com.	10¼	10¾	10	11 - 9¾	28¾ - 9¾	10%		Quarterly	Oct. 31, 1920	2½%				$11,585,100
Do., pfd.	70	74	100	79 - 70½	98¾ - 67	7%		Quarterly	Dec. 15, 1920	1¾%				$10,225,500
Paige-Detroit Motor Co., com.	17¾	18	10	18¾ - 13½	45¾ - 12	*12%		Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.	95½	96½	25	97 - 93	117 - 93	*16%		Quarterly	Jan. 3, 1921	4%				$11,838,850
Penhollow Corporation, pfd.			100			8%		Quarterly	Jan. 1, 1921	2%				$500,000
Reo Motor Co.	21¾	22¾	10	23½ - 17¾	29¼ - 16¾	10%		Quarterly	Jan. 3, 1921	2½%		2½%		$6,037,250
Southeastern Co.	10	25			35 - 20	8%		Quarterly	Jan. 3, 1921	2%		2%		$1,500,000
Timken Axle, com., XD	30½	32	10	33 - 26¼	63¾ - 26	12%		Bi-Month	Jan. 15, 1921	2%		2%		$3,000,000
Do., pfd.			100		93½ - 93	7%			Dec. 1, 1920	1¾%				$5,032,000
Trus-Con Steel Co., com., XD	27¾		10		29¾ - 23¾	16%		Quarterly	Jan. 15, 1921	4%		4%		$1,450,250
Do., pfd.		9¾	100		20 - 9¾				Dec. 1, 1920	1%				$1,632,200
U. S. Radiator, com.	15	17½	100		31½ - 20									$4,000,000
Do., pfd.	78		100		95¾ - 80	7%			Jan. 25, 1921	1¾%		7%		$2,860,000
Waring Hat Co., com.			25	None										
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$140,680 shs
Western Knitting Mills	10½	11	None	11 - 8½	30¾ - 8½	$2.00		Quarterly	Nov. 25, 1920	50c				$750,000
White Star Line		42	50		50½ - 42	7%		Aug. 6 Nov.	Dec. 15, 1917	3½%				$1,000,000
Wolverine Portland Cement Co.	2	4	10	2½ - 2	5¾ - 2½									

*Old 500-570; new 6¾-27. $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip. §Increase to $600,000 authorized. ¶Book value, $1,916,997. Ed. & J. ‡ Book value, $4,219,327, Godchaux. Book value, $2,622,793.00. Western Knitting Mills. ‡ Book value $5,094,450. Wood Products. Pfd. ‡Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921
Canada	1.0000	85	8500
London	4.8666	3.6275	3.8500
Switzerland	.1930	.1529	.1602
Paris	.1930	.0599	.0706
Belgium	.1930	.0625	.0743
Holland	.4019	.3162	.3375
Italy	.1930	.03465	.0366
Greece	.1930	.0743	.0725
Spain	.1930	.1828	.1393
Vienna	.20263	.0023	.0028
Berlin	.23821	.01345	.0158
Denmark	.26799	.1595	.1940
Norway	.2682	.1595	.1860
Sweden	.2680	.2045	.2190

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Feb. 1, 1921	Jan. 5, 1921	oc. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	$1.86	$2.50	$0.00	$1.05	$9.20	$9.75	$9.55	$9.61
U. S. Liberty 1st 4s	$7.40	$8.50	$8.32	$5.60	$3.00	$4.80	$3.00	$4.12
U. S. Liberty 2nd 4s	$6.10	$6.30	$4.10	$5.00	$1.58	$3.84	$3.04	$4.10
U. S. Liberty 1st 4½s	$7.10	$6.35	$5.80	$5.15	$3.45	$5.14	$8.50	....
U. S. Liberty 2nd 4½s	$6.84	$6.20	$4.34	$5.00	$2.20	$4.06	$5.70	....
U. S. Liberty 3rd 4½s	$9.10	$0.04	$7.20	$6.32	$1.48	$4.10	$4.44	....
U. S. Liberty 4th 4½s	$6.20	$6.45	$4.86	$5.55	$3.75	$00.10	....	....
Victory Bonds, 4¾s	97.26	96.48	$4.80	$4.80	$4.00	$5.08	$5.32	$6.22

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement			Dividends		Detroit Stock Exchange				Feb. 3, 1921	
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Last Sale	Bid	Ask
American State	150	$1,000,000	$15,980,348	10%	J-A-J-O 1st	221	215	226	200	121	221	235
Detroit Savings	237	1,500,000	23,852,200	12%	5 Jan-Jul 1st 2 Ex Jan	260	258	259	250	259	...	
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly 1 Jan-Jul	...	...	260	258	258	258	
First and Old Detroit National	194	5,000,000	69,886,082	{12%	J-A-J-O 1st	271	271	275	268	271	...	
Central Savings Bank	192	1,000,000	17,615,136			...	...	...	...	...	...	
First State	160	1,000,000	12,789,601	10%	J-A-J-O 1st	...	...	268	265	265	245	275
Highland Park State	198	1,000,000	14,267,343	20%	J-A-J-O 1st	...	...	163	142	142	145	
Merchants National	167	2,000,000	9,780,667	8%	J-A-J-O 1st	...	...	153	142	142	145	
National Bank of Commerce	231	1,500,000	22,274,487	10%	J-A-J-O 1st	...	...	210	190	210	...	
Peninsular State	158	2,500,000	31,523,787	12%	J-A-J-O 1st	...	...	220	215	215	...	
Peoples State	282	5,000,000	100,783,895	12%	J-A-J-O 1st	360	360	353	300	360	355	
United Savings	157	500,000	6,832,934	12%	Monthly	208	208	215	209	208	200	
Wayne County Home	259	1,000,000	74,072,277	6%	Monthly	...	...	347	305	347	349	
American Loan and Trust	134	300,000		6%	J-A-J-O 1st	...	...	155	155	155	...	
Bankers Trust	117	500,000		8%	J-A-J-O 1st	...	...	...	...	...	...	
Guaranty Trust	174	300,000		8%	J-A-J-O 1st	...	...	148	148	...	...	160
Detroit Trust	417	1,000,000		14%	J-A-J-O 1st	...	...	...	...	...	1275	300
Security Trust	338	500,000		12%	J-A-J-O 1st	...	...	...	...	...	1290	
Union Trust	190	1,000,000		8%	J-A-J-O 1st	180	180	197	195	195	175	190
Commonwealth-Federal	124	750,000	10,328,127			...	...	120	...	...	1105	112
Bank of Detroit	160	1,000,000	18,469,135	10%	J-A-J-A 1st	...	...	...	...	200	1192	200
Continental Bank	120	700,000				...	...	...	...	...	?	
Michigan State	110	250,000	2,190,838	6%		...	...	...	...	...	120	125
American State, Dearborn	120	100,000	521,163	6%	Jan-Jul	...	...	...	...	...	...	
American State, Highland Park	132	200,000	3,098,452	8%	J-A-J-O 1st	...	...	122	122	122	118	122
Peninsular State, Highland Park	220	100,000	1,264,556	12%	J-A-J-O 1st	...	...	...	...	...	...	
Rouge State Bank	118	50,000	352,845			...	...	...	...	...	...	
Industrial Morris Plan	119	500,000				...	...	...	...	...	...	

*Under one ownership—stock combined.
†Nominal quotations.

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Consum-n Motors	4⅞	5	14	4	5
Hoover Steel Ball	16	24¼	13	14½	
Great Lakes Engr		90	†163	163	150
Liberty Motor (new)	4¾	5⅜	120	65	80
Liberty Motor (old)	47	65			
Noble Oil com	61	70	1.30	56	70
Noble Oil, com	67	69	1.30	68	68
Mills Cop. & Brass	18	28	19½	15	15
Un. Mtg. 100% com	10½				
Un. Mtg. 90% com	9				
Federal Discount	8	9½			
Det. Mort., com	13¾	15			15
Det. Mort., pfd	15½	5¼	6¼	5½	5¾
Det. Cop. & Brass	115	35			
Wilson Truck	16½	5¾			5¾
McCord Mfg., com	16½	7½			6
McCord Mfg., pfd	49	52			
Duplex Truck	15	5			

* Old basis. †Nominal.

Grand Rapids Stocks

The closing quotations on Public Utilities on Tuesday, February 1, 1921, are reported by the Corrigan Company as follows:

	Bid	Asked
Cities Service, com	234	236
Cities Service, pfd	67⅜	67⅝
Cities Service, Bankers	23⅛	23⅜
Cities Service, Deb. B	120	135
Cities Service, Deb. C	95	97
Cities Service, Deb. D	86	86
Commonwealth Power & Light, com.	14	17
Commonwealth Power & Light, pfd	24	28
American Public Utilities, com	8	12
American Public Utilities, pfd	20	30
United Light & Rys., com	21½	23
United Light & Rys., pfd	56	60
American Light & Traction, com	85	87
American Light & Traction, pfd	75	78

Lansing Stocks

Closing quotations on the Lansing Stock Exchange, Tuesday, February 1, are reported by G. N. Murchey & Company, as follows:

	Bid	Asked
Auto Body Co	4⅜	5½
Reo Motor Car Co	22	22½
Duplex Truck Co	6¾	6⅝
Bates & Edmonds Motor Co		15
Motor Wheel Corp	11¼	11⅝
First Bond & Mortgage Co	30	35
Michigan Mortgage Co	8¾	9¼
Michigan Screw Co	35	40
Lansing Co	35	45
Atlas Drop Forge Co	32½	36½
Federal Forge Co	8	10
Novo Engine	24	30

CLARKSON L. FARNSWORTH DEATH

Clarkson Lewis Farnsworth, son of Col. Fred E. Farnsworth, former general secretary of the American Bankers' Association, died January 7 at his home, Glen Laurel, Huntington, L. I. He was born in Detroit, educated in Hamilton Institute and Cornell University, was editor of the weekly paper of the Advertising Club of New York City at one time, and until his last illness, which lived five months, was with Murray, Howe & Company, New York. During the war he was a chief clerk in the division of automotive and accessory purchases under Col. Edwin S. George, Detroit.

WILL URGE STATE TRADE BODY

When the Michigan State Association of Commercial Secretaries meets in Port Huron, February 17, John I. Gibson, secretary of the Battle Creek Chamber of Commerce, will urge the formation of a state organization of commercial clubs and boards or chambers of commerce.

Cleveland Stock Exchange

	Last Sale
American Multigraph	19
American Ship	75
Dow Chemical	200
Firestone Tire & Rubber	88
Do 6% preferred	85
Do 7% preferred	77
Fisher Body Corp	20
Do preferred	70
Goodrich Tire, common	39¼
Do preferred	78
Goodyear Tire & Rubber	31⅛
Do preferred	47⅜
Grant Motors	3¼
Grasselli Chemical	137
Interlake Steamship	210
Jordan Motors	90
Miller Rubber	90
Murray Ohio	20
National Acme	25½
Paragon Refining	35
Peerless	24
Portage Rubber	32
Do preferred	42
Products & Refining Corp	6¾
Do preferred	18½
Standard Parts	4⅜
Do preferred	16
Stearns Motor	22½
Torbensen Axle	72
Victor Rubber	17
White Motors	39
Youngstown Sheet & Tube, pfd	103⅜

Active Bonds and Notes

Security—Maturity	Bid	Ask
Am. T. & T. 6s, Oct. 1, 1922	96⅛	96⅜
Anaconda 6s, Jan. 1, 1929	86	86½
Anglo-Am. Oil 7½s, Apr. 1, 1925	100⅛	100⅜
Balt. & Ohio 6s, July, 1929	90	90½
Bel. Govt. S. F. 7½s, June 1, 1945	96½	97
Beth. Steel 7s, July 15, 1922	99	100
British 5½s, Nov. 1, 1921	99	99⅛
British 5½s, Oct. 1, 1922	95⅛	95½
Canadian 5s, Apr. 1, 1926	87½	89⅜
C. C. C. & St. L. 6s, July 1, 1929	89	90
Hock. Valley 6s, Mar. 1, 1924	93	94½
Ill. Cent. 5½s, Jan. 1, 1934	89½	91
Jap. Govt. 4s, Jan. 1, 1931	61⅛	62
Jap. Govt. 1st 4½s, Feb. 15, 1925	75	75½
N. Y. Central 7s, Sept. 1, 1930	102	102½
Norway 8s, 1940	99⅜	100⅛
Penna. Ry. 7s, Apr. 1, 1930	103⅛	103⅜
St. Paul 4½s, Jan. 1, 2014	87	87⅜
Solvay 8s, 1927	96½	97⅛
Swedish Govt. 8s, July 15, 1939	86⅝	87⅜
Swiss Govt. 8s, July 1, 1940	102⅜	102⅝
U. S. Rubber 7½s, Aug. 1, 1930	99	99½
Virginian Ry. 6s, May 1, 1962	93	94½
Western Elec. 7s, Apr. 1, 1925	98	98⅜

Detroit Bank Clearings

Week of Feb. 2, 1921	$ 87,995,925.10
Week of Jan. 26, 1921	$ 79,018,607.01
Week of Jan. 19, 1921	$101,985,592.70
Week of Jan. 12, 1921	$ 96,173,447.74
Week of Jan. 5, 1921	$107,662,394.96
Week of Jan. 26, 1920	$ 97,641,653.77
Week of Feb. 2, 1920	$1,772,632.72
Week of Dec. 24, 1920	$ 77,826,441.37
Week of Dec. 21, 1920	$136,535,606.09
Week of Dec. 15, 1920	$107,314,389.92
Week of Dec. 7, 1920	$109,932,206.00
Week of Dec. 1, 1920	$ 91,142,146.85
Week of Jan. 15, 1920	$121,347,637.28
Week of Jan. 12, 1920	130,667,006.21

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Briscoe Motor	13	16
Chalmers Motor	2	3
Curtis Aeroplane	7	10
Goodrich, com	41	41½
Harroun	1	1⅝
Lee Tire	15⅜	19⅞
Nash	200	225
Pierce	26	76½
Republic Truck	21	24
Saxon	4⅜	5¼
Stromberg Carb.	37½	38
White Motors	38½	39

Digitized by Google

Wagner-Taylor-Edson Co., Inc.

Announces

Opening of Headquarters for the Middle West
With Offices in Detroit

Direction of A. McM. Creed
Vice-President

MARINE AND GENERAL INSURANCE
ENGINEERING SERVICE

Suite 409 Congress Bldg. Main 8360

PHILADELPHIA, PA.
422 Walnut St.

NEW YORK, N. Y.
80 Maiden Lane.

Twenty Years' Successful Experience



Your Customers Need

"A·B·A" American Bankers Association Cheques

When you sell A·B·A Cheques to a customer intending to travel in this country or abroad, you are rendering a service that the customer will appreciate.

A·B·A Cheques supply the vital need of travelers for a universally accepted form of funds that is safe and convenient—"the best funds for travelers."

Issued in denominations of $10, $20, $50, and $100. Bankers supplied with all necessary selling equipment, including neat packet cases for purchasers to carry their cheques in.

Write for particulars and literature to

BANKERS TRUST COMPANY
New York City

SALES PROSPECT LISTS
INSTALLED AND REVISED

Surveys Made

Banks
Investment Houses
Trade Associations

IRENE WILLIAMS
104 South Michigan Avenue
CHICAGO

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building
524 Griswold Street

Established Michigan Company, manufacturing light gauge steel products, wants experienced man with some capital as general manager. Replies confidential. State age, experience, previous employment. Address S. C. Thompson, Manistee, Michigan.

Investment Hints

SHORT AND LONG-TERM INVESTMENTS

Illustrative of how many investors do not comprehend the fundamental terms of bond and note issues in the following: Imbrie & Company, Murphy building, Detroit, sent a circular descriptive of the Beaver Board Company 8 per cent notes to a physician client in a nearby Michigan town. The doctor replied that he was interested in the notes, which are due in 1932, and asked: "Does 'due in 1932' mean that I have to wait 12 years for the return of my principal?" The reply to this client is given not only as illustrating the meaning of the term inquired about but also because it throws considerable light on the proposition of long-term versus short-term investments made at this time:

"We have your favor of the 20th inquiring as to whether an investor has to wait until maturity before he realizes his principal should he buy Beaver Board 8 per cent notes, due in 1932. In this market, investors are seeking the longest maturities possible when they buy bonds. Money is higher now than it has been for a good many years. Everyone expects to see cheaper money in the near future, and for this reason are not buying securities unless the maturity is some years distant.

"Every good security has a market whether it is listed on the New York Stock Exchange or not. We understand that application has been made to list the Beaver Board notes on the New York Exchange. Anyone holding these bonds has a perfect right to sell them any time, at whatever the market is. Should money be cheaper in, say, two years from now, bonds of this character will be selling on about a 7 per cent basis, which would mean that they would sell at a premium of about 7 points.

"If you were to invest in securities due in two years, just now you could get about 8 or 8½ per cent on your money. At the end of that time you would have to accept, say, about 7 per cent, and if money continued to get cheaper later on, possibly 6 per cent, so you can see the advantage of investing in a reasonably long-time bond.

"Bond men do not consider 12 years a long-time bond, as there are a good many bonds due in 50, 60 and 70 years. Securities due in eight and ten years are usually called short-time notes."

Public Utilities

Grand Rapids—The Commonwealth Power, Railway & Light Company has made the following promotions in its official staff: Jacob Hexma, from secretary and treasurer to vice-president; G. H. Bonrne, from assistant secretary and treasurer to secretary; George Sprague, Jr., treasurer; H. S. Kessler, comptroller; E. E. Nelson, assistant secretary; O. R. Coleman, assistant treasurer.

Port Huron—The city commission has refused to permit the City Electric Railway Company to operate its one-man cars on the streets. Mayor French informed the company that after investigating the operation of the cars in other cities he was satisfied that public sentiment was opposed to them. The city of Detroit is putting some of these cars into operation on its M. O. lines.

Grand Rapids—At the meeting of the board of supervisors of Kent county, to be held this month, John A. Becker will make application that permission be granted him and his successors or assigns to develop the water power on the Thornapple river, near Ada. The work includes the building of a dam.

Digitized by Google

Who's Who In Michigan Finance

Loren J. Kuehnle, Cashier, Merchants Savings Bank, Battle Creek.

Mr. Kuehnle was educated at the University of Michigan and received three and a half years' experience in the First National Bank of Ann Arbor in all departments of the bank. He then joined the sales staff of Watling, Lerchen & Company, Detroit, as a bond salesman, following which connection he engaged in business for himself at Ann Arbor, handling Hoover Steel Ball stocks. He left this business to join the Army, and upon his discharge became a state bank examiner under Commissioner Merrick. The latter post he gave up to become cashier of the Merchants Savings Bank of Battle Creek, November 8 last.



LOREN J. KUEHNLE

DETROIT MORTGAGE CORPORATION

Below is presented the balance sheet of the Detroit Mortgage Corporation, Detroit, as of December 31, 1920:

ASSETS

Land contracts and second mortgages		$4,587,459.59
First mortgages and first mortgage bonds		1,715,491.04
Notes and accounts receivable		170,541.75
Stock subscriptions receivable		87,586.36
Balances due on mortgage bond sales		93,137.00
War Savings Stamps, bonds and stock		494,068.57
Accrued interest receivable		98,358.17
Cash on hand and in bank		130,897.07
Treasury stock at cost		5,792.00
Office furniture and equipment		11,938.66
		$7,394,068.23

LIABILITIES

Preferred stock authorized $3,500 000 co		
Preferred stock outstanding	$2,982,365.00	
Preferred stock subscribed, not issued	225,130.00	
		3,207,495.00
Accounts payable—		
For mortgages and land contracts, etc.	40,029.23	
Due subsidiary corporations	100,000.00	
Miscellaneous accounts payable	4,737.29	
		144,766.52
Bills payable		227,000.00
Accrued interest payable		34,881.42
Mortgages payable on real estate covered in land contracts receivable, etc.		1,786,973.74
Mortgage bonds sold		1,352,400.00
Surplus and reserve—		
Deferred and realized profits undistributed	633,613.22	
Reserve for cancellations	8,918.23	
		642,531.45
		$7,394,068.23

NOTE—Common stock issued, 227,843 shares with no par value.

FEDERAL RESERVE BANK REPORTS

During 1920 the Federal Reserve Bank of Chicago showed earnings equal to 196 per cent on the paid-in capital.

ILLINOIS CENTRAL EARNINGS

The Illinois Central Railroad statement for 1920 shows gross earnings of $13,330,130, compared with $8,463,830 in 1919. The net operating income after taxes was $5,970,713, as against $4,252,449 in 1919.

DIME SAVINGS BANK
FORT AND GRISWOLD STS.
DETROIT, MICH.

BRANCHES

Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Grand-ot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt Elliott & Davison
Sherman & Chene
Dix & Artillery

Comprehensive Enough

to cover all phases of banking needs, and personal enough to observe those special circumstances upon which satisfactory banking transactions often depend, the service of the DIME SAVINGS BANK is appreciated alike by business houses and financial institutions regardless of the extent of their Detroit and other Michigan requirements.

Consultations and correspondence invited.

Capital and Surplus $3,750,000

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy., GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

Cities Service Co. Nets $17,370,464 During 1920

Cities Service Company closed 1920 with gross earnings of $24,698,039 for the year, an increase of $4,720,489 over 1919. After providing for all expenses, taxes, interest, preferred dividends and other charges, the balance for the year, available for reserves, dividends on the common stock and surplus was $17,370,464, an increase of $4,234,573 over the preceding year. This balance for 1920 was equivalent to $43.09 a share on the average amount of common stock outstanding, as compared with $39.09 in 1919. Requirements for payment of preferred dividends were earned 4.71 times in 1920, compared with 4.12 in 1919. Earnings for December, 1920, showed a good increase over December, 1919, although while utility earnings for December, 1920, showed decided increases, there was somewhat of a falling-off in earnings from the oil division for the month, compared with the preceding month, because of the curtailment of pipe line runs in the Mid-Continent Fields.

The public utilities division reported increases in both gross and net earnings for December. In the face of the retardation of industry in many sections, combined gross and net earnings of public utility subsidiaries were greater for December than gross and net for the corresponding month of the year before or for November, 1920, the latter having been the best previous month for the utilities in the history of the company. Further increases in rates were granted during December to Knoxville Gas Company, Montgomery Light & Water Power Company, Webb City & Carterville Gas Company and Carthage Gas Company.

STATEMENT OF EARNINGS, DECEMBER 31, 1920

	12 Months Ending Dec. 31, 1920	12 Month Ending Dec. 31, 1919	Month of Dec., 1920	Month of Dec., 1919
Gross earnings	$24,698,039.42	$19,977,550.77	$1,826,493.17	$1,757,622.23
Expenses	700,472.70	70,813.08	66,064.51	61,850.50
Net earnings	23,997,566.72	19,273,715.69	1,760,588.40	1,696,032.73
Interest on debentures	1,941,628.22	1,922,861.17	174,321.14	168,769.58
Net to stock	22,055,938.51	17,350,854.52	1,591,568.26	1,527,264.15
Dividend preferred stock	4,685,474.90	4,216,264.00	400,803.55	372,588.90
Net to common stock and reserves	17,370,463.61	13,135,590.12	1,190,764.71	1,154,675.25
Total surplus and reserves	52,950,942.16			

Twelve months ending	Net to Stock	Per cent earned on No. of times average amount of the Preferred Stock dend earned	Common Stock outstanding
Dec. 31, 1911	$ 922,032.89	1.77	8.23
Dec. 31, 1912	1,113,272.61	1.84	9.29
Dec. 31, 1913	1,986,600.89	2.16	10.71
Dec. 31, 1914	3,397,545.04	2.02	11.24
Dec. 31, 1915	3,816,944.29	2.43	15.27
Dec. 31, 1916	9,011,594.39	3.99	56.74
Dec. 31, 1917	18,892,407.01	5.09	66.72
Dec. 31, 1918	14,486,466.77	5.32	61.67
Dec. 31, 1919	17,350,854.52	4.12	39.09
Dec. 31, 1920	22,055,938.51	4.71	43.09

Series A 8% Convertible Debentures outstanding	$ 20,938,00
Series B 7% Convertible Debentures outstanding	8,547,540.00
Series C 7% Convertible Debentures outstanding	17,966,780.00
Series D 7% Convertible Debentures outstanding	3,031,800.00
Preferred Stock outstanding	76,719,371.62
Preferred Stock outstanding	8,276,110.00
Common Stock outstanding	43,440,587.00

Michigan Bank Elections

CHESANING

Chesaning State—Directors: M. L. Parshall, O. C. Sperry, G. N. Peet, Ralph Agnew, F. A. Greenfelder, G. M. Nason and L. A. Perrot.

LANSING

Capital National—Directors: R. E. Olds, Arthur C. Stebbins, Smith G. Young, Ray Potter, R. H. Scott, C. J. Rouser, N. P. Hull, A. E. Richardson, F. N. Arbaugh, F. W. Shumway and R. Y. Spier.

Officers: President, R. E. Olds; vice-presidents, A. C. Stebbins, R. H. Scott, Smith G. Young; vice-president and cashier, Robert Y. Speir; assistant cashiers, Harry D. Bennett and F. C. Wherrett; trust officer, Duane H. Mosier; auditor, M. A. Westfall.

American Savings—Directors: M. R. Carrier, W. K. Prudden, H. G. Harper, William Brogan, W. S. Foster, Hugo Lundberg, H. Rueschaw, B. C. Teel, Bert Baker, John B. Hopkins, D. E. Bates and Charles Toms. Officers are: President, W. K. Prudden; vice-presidents, M. R. Carrier and D. E. Bates; cashier, Charles Toms.

City National—Directors: Arthur D. Baker, E. F. Cooley, R. F. Davis, Joseph Gerson, H. S. Oler, J. W. Haarer, H. C. Klocksiem, J. W. Knapp, H. M. Lee, H. E. Moore, James H. Seager and Jacob Stahl. Officers: President, R. F. Davis; vice-president, E. F. Cooley; vice-president and cashier, J. W. Haarer; assistant cashiers, H. S. Terwilliger and H. J. Dietz.

Lansing State Savings—Directors: C. E. Bement, J. P. Edmonds, H. A. Haze, H. H. Larned, J. Edward Roe, E. C. Shields, S. H. Carpenter, C. F. Hammond, Jacob Himmelberger, J. G. Reutter, L. L. Sattler and Otto Zeigler. Officers: Chairman, H. H. Larned; president, J. Edward Roe; vice-president, S. H. Carpenter; cashier, L. C. Abbott; assistant cashier, C. A. Seray; manager of branch, L. L. Sattler.

LAURIUM

State Savings—Directors: Johnson Vivian, W. H. Thielman, F. S. Carlton, James A. Torreano, J. P. Fiermann, James T. Fisher and William Faucett.

First National—Directors: Alex Levin, W. J. Reynolds, Richard Hall, Paul Tiffany, Jacob B. Pinton, P. J. McClelland, F. H. Haller, Thomas E. Bawden, E. E. Lean, Oscar F. Niemila and James Vanette.

Merchants & Miners—Directors: James Chynoweth, Charles O. Jackson, Edward C. Hamblen, Gordon R. Campbell, Peter Ruppe, Paul F. Roehm, Fred Smith, Charles Briggs, James Hoatson, Norman MacDonald, W. B. Anderson and J. W. Downing.

MONROE

First National—Officers: President, E. C. Rauch; vice-president, J. F. Landon; vice-president and cashier, W. C. Gutmann; vice-president and assistant cashier, Fred J. Sill; assistant cashiers, Marion A. Bloy, C. L. Mettler; directors: E. C. Rauch, E. L. Landon, H. D. Hoffman, W. C. Gutmann, Jr., Horace Dutton, Chas. T. Southworth, Fred J. Sill, Wm. G. Gutmann, Wm. P. Cotton, Ed G. J. Hall, C. K. Mettler, C. H. Nickels, Frank S. Schrander, W. C. Tullis, Tom Smith, Sam Wallace, A. J. Weber, Oliver J. Goldsmith, Frank E. Boddiger, Roy C. Ash, who has been with the bank many years, was elected assistant cashier. Capital surplus and undivided profits at the close of the year were $260,000. The banking building adjoining the bank building will be remodeled to provide more room for banking purposes, and as soon as building costs come down the bank will rebuild.

PORT HURON

Federal Commercial & Savings—Officers: President, Charles Hamilton; chairman of board, A. D. Bennett; vice-president and cashier, Stephen A. Graham; vice-president, John G. O'Neill; assistant cashiers, F. C. Wellman, H. W. Mollhagen; secretary, Ralph Kerstin; savings manager bond department, T. S. Scuphoim, Jr.; manager mortgage department, R. C. Carlton. Directors: Chas. Wellman, Oscar B. Mueller, Henry Marx, John G. O'Neil, Phil Biger, S. A. Graham, A. D. Bennett, John W. Fead, M. W. Mills, W. D. Smith, S. L. Boyce and Louis A. Well.

United States Savings—Officers: President, C. C. Peck; cashier, L. W. Miller; assistant cashiers, R. H. Krueger and Roy Schultheiss; vice-president, E. J. Ottaway. Directors: Karl Ackman, Oscar Baer, H. H. Hart, E. W. Kiefer, Geo. S. Lovelace, Henry F. Marx, C. C. Peck, E. W. Osterhaurt, E. J. Ottaway, D. D. Smith, A. E. Stevenson and W. H. Watkins.

SAGINAW

Bank of Saginaw—Directors: Benton Hanchett, Helon B. Allen, Arnold Boutell, Edgar D. Church, William J. Cornwell, John H. Dwight, A. T. Ferrell, Fred J. Fox, George H. Hannum, Theodore Haas, John L. Jackson, Charles A. Khuen, James G. Macpherson, John Popp, E. A. Robertson, Otto Schupp, G. M. Stark, George W. Wendon and William Wickes.

Second National—Directors: George B. Morley, Stanford T. Gage, Frank D. Eaton, Arthur D. Eddy, James B. Peter, William H. Wallace, Frederick Carlisle, Peter Corcoran, Charles A. Bigelow, Elliott J. Cornwell, James T. Wylie, R. Perry Shorts, George H. Boyd, Amasa M. Rust, John W. Rust and Edward W. Clifford.

People's Savings—Directors: J. J. Rupp, Harry T. Wickes, S. E. Symons, William B. Baum, L. P. Mason, C. W. McClure, J. P. Boynton, Peter Drummond, and H. E. Oppenheimer. Officers: President, J. J. Rupp; vice-president, William B. Baum; secretary and treasurer, J. P. Boynton; assistant treasurer, B. P. Griffin.

Commercial National—Directors: George A. Alderton, Joseph W. Fordney, J. F. Brand, A. C. Melze, A. A. Anderson and C. A. Maynard.

American State—Directors: Charles Bauer, E. L. Beach, C. Cummingham, C. D. Davies, O. L. Dittmar, W. H. Filbert, G. S. Garber, W. F. Hemmeter, Edwin Kerstin, Frank H. Kohn, H. Krause, J. R. Liebermann, H. C. Remer, H. T. Robinson, Louis L. Schuiz, W. C. Wiechmann and Henry Wilcox.

ST. JOHNS

State Bank of St. Johns—Directors: Dr. M. Weller, A. E. Wilson, C. T. Babcock, Otis Fuller, G. G. Hewitt, C. A. Jones, and E. L. Thome. Officers: President, Dr. M. Weller; vice-president, A. E. Wilson; cashier, Frank Thome; assistant cashier, Walter Wykoff.

St. Johns National—Officers: President, J. C. Hicks; vice-president, C. T. Babcock; cashier, H. C. Dexter; assistant cashier, Hugh Watson. Directors: C. T. Babcock, C. A. Coleman, O. E. Dewitt, P. E. Walsworth, W. M. Smith and R. C. Dexter.

Farmers' State Savings—Officers: President, R. S. Clark; vice-president, Jesse Sullivan; cashier, E. A. Hamady; assistant cashier, R. D. Letts. Directors: R. S. Clark, Jesse Sullivan, L. D. Parr, D. C. Barron, Fred W. Swain, Joseph H. Schneider, Joseph Ulrich, John F. Parr, Fred Brown, A. Howe, C. D. Spuir, E. L. Bull, R. P. Hull, Fred C. Burk and E. A. Talmadge.

Clinton County National—Officers: President, J. C. Hicks; vice-president, C. E. Ball; treasurer, R. C. Dexter. Directors: O. P. Dewitt, C. C. Vaughan, W. M. Smith and P. E. Walsworth.

Motor Car Exports And the Tariff

(*Continued from Page 8*)

collectively voted for a uniform tariff of 33 1-3 per cent. This duty was to apply to all automobiles imported into and from any of the countries that entered into the agreement. The Prime Ministers, however, did not ask U. S. tariff on automobiles of over $2,000 in value and fixed the French duty at that rate on automobiles of the type mostly exported from the U. S.

"The establishment of a uniform rate upon cars of all prices at the present minimum of 30 per cent ad valorem, coupled with a reciprocal provision, will isolate the development of foreign trade in that the rate will apply to motor vehicles from such countries only on the current equality of treatment for American products. Against countries which, however, despite the benefits accruing to them because of the establishment of this uniform lower rate, continue to discriminate against American trade, there should be applied additional duties to be determined by law or warranted by the particular circumstances.

"With regard to the administration of a policy of reciprocal relations such as that outlined, the President of the United States should have the power to ascertain what countries discriminate against American trade and to take measures in accordance with this provision to protect United States interests."

SUTHERLAND LEAVES HUDSON

M. R. Sutherland has resigned as planning manager of the Hudson Motor Car Company and Essex Motors, Detroit. He formerly was with the Cadillac company.

Digitized by Google

Subscribe to the Michigan Manufacturer & Financial Record

INVENTORY VALUATION—For Federal Taxation and Banking Purposes

It is the policy of the Michigan Manufacturer and Financial Record to present to its subscribers articles of timely and vital importance.

That this is appreciated is evidenced in the interest which has been aroused by the leading article on Inventory Valuation of our issue of January 22, 1921.

The issue is now out of print, but for the convenience of our readers the article referred to has been reprinted in pamphlet form.

This article gives the opinion of a well-informed, unprejudiced observer on the subject of importance to the manufacturer, banker, accountant and lawyer; it should prove helpful to those who seek or give credit, plan for the future, or are concerned with the preparation of Federal Tax Returns.

It is not a detailed statement of methods but summarizes principles of valuation that have stood the tests of time and application and are governing in the present conditions.

The author is William M. Lybrand, of Lybrand, Ross Bros. & Montgomery, Accountants and Auditors, New York and Detroit, and we assume that the views expressed are those of his firm, which included Col. Robert H. Montgomery ,author of Montgomery's Income Tax and Excess Profits, Tax Procedure.

Copies of the reprint will be mailed free of charge to those who apply in writing to the Michigan Manufacturer and Financial Record, 611 Free Press Building, Detroit, Michigan.

New Publications

"FACTORIES THAT FIT"

Frank D. Chase, Inc., Chicago, has compiled and issued a highly interesting booklet entitled "Factories that Fit." The purpose of this booklet is to "get across" the Chase conception of sound engineering design in factory construction, namely, the idea of a manufacturer having his plant so fitted to the work it is to do that the processes of manufacture are accomplished in an orderly fashion, and with the least labor cost. "Factories that fit" embraces photographs (both exterior and interior) of some 40 factories in various parts of the country designed by Frank D. Chase, Inc. Included in this list will be found those of the Q. R. S. Music Company, New York city; Samson Tractor Company, Janesville, Wis.; Peerless Foundry Company, Cincinnati; Keith Railway Equipment Company, Hammond, Ind.; Richards-Wilcox Manufacturing Company, Aurora, Ill.; Chain Belt Company, Milwaukee, Wis.; Cribben & Sexton Company, Chicago; Galena Signal Oil Company, Whiting, Ind.; American Wire Fabrics Company, Blue Island, Ill., and others.

The Chase booklet is now being mailed, and can be procured on application.

GOLDEN RULE NUMBER OF "CHARACTER"

The January-February issue of "Character," an attractive booklet issued by Griffith-Stillings, direct advertising specialists, Boston, features an article on the Golden Rule as applied to commerce and industry, and also the suggestion that the week of November 6-12 be observed as Golden Rule Week each year, and Saturday be selected as Golden Rule Day for each week. Opinions of President-elect Harding, Roger W. Babson, Sherman Rogers, John Mitchell and other prominent men, on the value of the Golden Rule principle in business, are quoted in the leading article in the book.

ELECTRIC GOODS IN SOUTH AFRICA

The Department of Commerce has issued Special Agents Series No. 205 report, dealing with "Electric Goods in British South Africa." The report may be obtained for 20 cents from the Superintendent of Documents, Government Printing Office, Washington, D. C.

This report was prepared by Trade Commissioner R. A. Lundquist, who says that during 1919 more than $5,000,000 of electrical and allied material was imported by South Africa. The principal city is Johannesburg, which is the logical selection for American manufacturers of such goods who contemplate establishing a representative in the South African market. The Transvaal, of which Johannesburg is the principal city, bought approximately $68,000,000 worth of all kinds of machinery, supplies, etc. Before the war Germany was an important factor in the electrical goods market, but since 1914 very substantial gains have been made by the United States.

DETROITERS ON PAINT COMMITTEES

Three Michigan men have accepted invitations from President S. Marshall Evans, of the National Paint, Oil & Varnish Association, Inc., to serve on committees during the present year. George E. Moser, Jr., Detroit, is a member of the adulterated oil and turpentine committee; F. L. Colby, Detroit, is member of the naval stores committee, and H. J. Woodlock, Detroit, is one the paint jobbers' committee.

MILD WEATHER HELPS ROAD WORK

The mild weather has made it possible to lay gravel on roads in the southern part of the state and continue other work usually suspended during the winter. If this weather continues, the department will be in a better position to carry out its summer program.

Eastern Truck Sales Possibilities Noted

The Motor Truck Association of America, Inc., New York, which promoted the Highway Transportation Show held in New York January 2 to 8, has compiled some interesting statistics concerning trucks in the six principal states, showing increases since 1915

In New York 23,288 trucks were registered in 1915; 34,653 in 1916; 55,402 in 1917; 92,979 in 1918; 97,346 in 1919, while the estimate for 1920 is placed at 110,000. This means that there was an increase in truck sales of 11,365 in 1916; 20,749 in 1917; 37,577 in 1918; 4,367 in 1919, while for 1920 the increase is expected to total 12,654.

In Massachusetts there were 11,960 trucks in 1915; 18,194 in 1916; 26,964 in 1917; 33,011 in 1918; 53,304 in 1919. The annual increase was thus respectively, 7,766; 8,004; 6,047 and 20,293.

In Pennsylvania there were 8,379 trucks in 1915; 11,732 in 1916; 12,952 in 1917; 31,145 in 1918 and 40,839 in 1919. The increase was thus, respectively, 3,353; 1,220; 18,193 and 9, 694.

There were 4,847 trucks in use in Connecticut in 1915; the number increased to 7,759 in 1916, to 11,819 in 1917, to 15,051 in 1918 and to 22,100 last year. Thus the annual increase was, respectively, 2,912; 4,160; 3,132 and 7,049.

In giving out these figures the Association says it wishes to call special attention to the market possibilities of those states. While New York state is far ahead of all others as to number of trucks in use, the possibilities in the other states are still very great and probably have never been gone after as strongly as in New York state, says the statement.

Digitized by Google

GRATON & KNIGHT

Standardized Series

LEATHER BELTING

Tanned by us for Belting use

The Correct Belt for Every Drive.

Leather Belting for power transmission, Lace Leathers, Leather Packings, Gaskets, Washers, etc. Automotive Leathers—Straps, Clutch Leathers, Fan Belts, Boots, Leather Links, Liners, Coupling Discs, Washers, Crank Holders, Robe Straps.

THE GRATON & KNIGHT MFG. CO., Worcester, Mass.

Oak Leather Tanners, Makers of Belts and Other Leather Products.

Distributors and Branches in All Principal Cities.

C.C. COREY COKE

1303-4 MAJESTIC BLDG. DETROIT, MICH.

STEEL STAMPINGS OUR SPECIALTY

STEEL STAMPING AND SHEET METAL PARTS FOR AUTOMOBILE AND OTHER USES

QUALITY AND SERVICE

STEEL FURNITURE CO., Grand Rapids, Mich.

Detroit Representative. E. H. WELKER CO., INC. 66 W. Larned St. DETROIT

Production Managers—



Continuous Heat Treatment Furnace.

The following advantages are secured by the Continuous Method of Heat-Treatment:

Increased production per unit of floor space.
Reduction in manual labor per unit of production.

Uniformity of product, resulting in decreased scrap, following less dependence upon the human element.

The fuel economy that naturally follows the direct transfer of heat in spent gases to incoming material.

Improvement in working conditions by cooler shop.

In short, the saving in cost of the finished product due to economy in labor, time, fuel, floor space, decreased rejections, etc.

Do these advantages appeal to you?

Write nearest branch for Bulletin 217-B and learn whether this method is adaptable to your product and manufacturing conditions.

W. S. ROCKWELL COMPANY

Furnace Engineers and Contractors

50 Church St. (Hudson Terminal Bldg.), New York.

We Make Industrial Heating Furnaces for Every Requirement.

"FURNACE AND FUEL TO SUIT CONDITIONS"

Branches: Chicago—Cleveland—Detroit

Ellsworth Bldg. Hicken Bldg. Majestic Bldg.

McKIBBON CO. ELECTION

Officers and directors re-elected by the F. B. McKibbin; real estate manager, I. B. McLean. McKibbin Company, Lansing, are: Chairman A statement was submitted showing total of the board, E. F. Cooley; president, Arthur assets of $483,866.36, with surplus and reserves D. Baker; vice-president, James B. Barry; after one year of $45,639.78.

secretary-treasurer and general manager, F. B.

New Corporations

FOR WEEK ENDED JANUARY 20, 1921

Southern Michigan Oil Co., Coldwater; refining and selling gasoline and other products; Clarence F. Strong, A. Charles Boucher, W. Glenn Cowell, Coldwater. Manual ..... $ 10,000

Traverse City Transportation Co., Traverse City; maritime commerce and navigation; Charles F. Lapp, also Louise, Traverse City; Charles Andrews, Sr., Manitou 25,000

Sale Savings Bank, West Branch; commercial and savings; C. C. McKay, William T. Lee, West Branch; James McKay, Prescott 30,000

Bellagamba Co., Iron Mountain; purchase, sale and distribution of petroleum products at wholesale and retail; Victor and Maculina Bellagamba, Angelo Lera, Iron Mountain. 20,000

David Steam Motors, Inc., Detroit; to develop and perfect steam motor of steam power plant; Merrill Davis, 1216 Belvidere, E. M. Bliss, A. B. Eggert, Detroit 100,000

Henry Smith Floral, Walker township, Kent county; production, purchase and sale of flowers, fruits and vegetables; Henry Smith, Floyd Heckel, Francis L. Robinson, Grand Rapids. 200,000

Vinekist Grape Juice Co., Detroit; wholesale in syrup and fruit products generally; Phil and Fred C. Himmelein, 1417 Avery Ave., Detroit; Norbert Blumchein, Sandusky, O. 50,000

Western Hotel Corp., Big Rapids, Mecosta county; to operate hotel and lease office and store rooms; William F. Jenkins, Big Rapids, Gilbert J. Jenkins, Midland; John C. Jenkins, Big Rapids 50,000

Telephone Clearing House of Michigan, Grand Rapids; to pro-rate the toll earnings and make settlements with companies; C. C. Smith, Homer; William J. Melchers, Lynd L. Cass, Owosso 10,000

Grand Rapids Salvage Co., Grand Rapids; buying, selling and baling of papers, rags and other waste products; John T. Bates, Lewis V. Chamberlin, Harry Kelly, Grand Rapids 1,000

Reliable Jewelry Co., Detroit; diamonds, jewelry, silverware, trunks, tools, etc.; Max Aron and Rose Overbeck, Cleveland; Alex. Werbe, 1353 Burlingame Ave., Detroit 10,000

Wolverine Service Corp., Detroit; general insurance agency; Fred W. Andrews, 2480 Iroquois St.; John R. Herman, Ira Killam, Detroit 1,000

Home Investment Realty Co., of Battle Creek, real estate; Charles M. Hopkins, Leon J. Kircher, Glenn A. Cross, Battle Creek 10,000

International Distributing Co., Detroit, dealing in food products and hotel and restaurant supplies; Joseph A. Siffer, 5505 Beach St.; Morris Hynek, Celia Siffer, Detroit 10,000

Federal System of Bakeries of Holland; manufacture and sale of baked goods of all kinds, wholesale and retail; Theo. F. Sundstrom, Dick Oosting, Peter Knapp, Holland 10,000

Kelly Bros. & Kelly, Ferndale, Oakland county; wholesale and retail cement block products and general building supplies; Edward C. and Sylvester J. Kelly, Walter F. Kelly, Jr., 3756 Hancock Ave., Detroit 30,000

Standard Enameling & Trimming Co., (P.) Wilmington Del. Harry Lindberg, president; F. C. Gorman, secretary-treasurer, 631 Palmer Ave. E., Detroit; common, 35,000 shares, no par value; preferred 65,000

Detroit Brass Products Co., Detroit; manufacture and sale of metal products; Roy J. Taylor, Roy E. Brown, Arthur J. Tuggey, Birmingham 10,000

Andy Mann, Inc., Grand Rapids; manufacture and sale at wholesale and retail of furniture, fixtures and interior decorations; Andy Mann, Blanche Hilliker, L. W. Smith, Grand Rapids 25,000

Frankenmuth Milk Products Co., Frankenmuth, Saginaw county; to manufacture and deal in milk products; John M. Zehnder, Aug. Schuknecht, Birch Run; Emanuel Weiss, Frankenmuth 100,000

Robson-Graves Auto Co., Lansing; to deal in automobiles, motor vehicles, etc.; Dwight J. Robson, Clark R. Graves, James H. Burton, Lansing. 30,000

Muskegon Tire Corp., Muskegon; sale and repair of automobile tires and accessories; Thorkild J. Borkull, William Williams, Marie Williams, Muskegon 30,000

Digitized by Google

Byron Center State Bank, Byron Center; commercial and savings; Ra'euch Deweerd, Peter Holleman, Byron Center; Daniel Burgess, Ross 25,000

Greek American Trading Co., Detroit; to manufacture, buy, sell and deal in exports and imports; John Papaslex, 32 Russell St.; David Stanton, Grace Stanton, Detroit 1,000

Oliver Roofing Co., Detroit, to manufacture, trade and deal in roofing; Arthur H. Oberbeck, 3813 Pingree Ave.; Richard M. Oliver, Ruth M. Morin, Detroit 20,000

Eastern Heights Land Co., Detroit; purchasing, holding, selling and dealing in real estate; James S. Holden, Holden Bldg.; William Van Dyke, Lucian S. Moore, Jr., Detroit 150,000

Michigan Mfg. Co., Detroit; to manufacture and sell carburetors, generators and makers and machine products; Frank Reynolds, 665 Hazen Ave.; D. M. Harper, W. S. Burch 25,000

Emmet L. Sprague & Co., Detroit; to deal in lands, mortgages and other investment securities; Emmet L. Sprague, 3121 S. Clarendon Ave.; Fred V. Woodford, Detroit; A. L. Jeffrey, New York 20,000

Harrison Corp., Detroit; to deal in real estate; Marvin H. Harris m. Addison hotel, Detroit; A. Louis O'Connor, William B. Van Akin, Grosse Ile.... 60,000

Owosso Packing Co., township of Owosso; wholesale packing, meat and butcher business; William Telfer, Harold G. Te'fer, Edward L. Carr, Owosso 25,000

Paine & Jenkinson, Inc., Vicksburg, Kalamazoo county; to deal in automobiles, truck, tractors, etc.; Robert D. Jenkinson, H. Clinton Paine, Lucelin Jenkinson 50,000

Gladstone Shoe Mfg. Co., Gladstone, Delta county; manufacture and sale of shoes and leather; James La Verne Ladwig, Albert J. Miller, Wilbert W. Gasser, Gladstone 25,000

United States Steel Products Corp., Detroit; real estate, to also manufacture, buy and sell billets, bars, sheets, steel, etc.; Frank B. Palmer, Charles K. Phillips, Edgar J. Seeley, 216 Moffat Bldg., Detroit 10,000

Messner-Peters Auto Sales Co., Grand Rapids, sale of automobiles and accessories; Louis E. Noel, Charles E. Messner, Adelina A. Peters, Grand Rapids 10,000

Commonwealth Mortgage & Investment Corp. of Michigan, Lawton, Van Buren county; to deal in bonds, notes, mortgages, land contracts, etc.; Harmon J. Wills, trustee, Bay City; Dr. E. C. Goodrich, Lawton; Lloyd C. Held, Paw Paw 50,000

Pennville Canning Co., Pennville, Allegan county, canning of fruits and vegetables, etc.; Marcus C. Hutchinson, Pennville; Jacob and George Friday, Celoma 140,000

Hutchinson Hardware & Implement Co., Pennville; retail hardware and implement business; Claude E. Hutchinson, Walter A. Pullman, M. C. Hutchinson, Pennville 20,000

Imlay City Creamery Co., Imlay City; to deal in dairy products and general manufacturing and mercantile business; Wesley F. Millett, Charles W. Pelton, Walter Dickinson, Imlay City

Lansing Silo Co. (F.), Lincoln, Neb.; Harry C. Withington, secretary, Lansing 15,000

Lee Hardware Stores, Alpena; wholesale and retail mercantile and merchandising business; Lee Richardson, Alpena; Arthur E. Krueger, Onaway; James R. Forman, Alpena 200,000

Kraemer Lapidary Co., Detroit; purchase and sale of stones, gems and jewelry of all kinds; William A. Kraemer, 4245 McKinley, Emery A. Spaide, Eugene W. Combs, Detroit.. 100,000

Strathmoor State Bank, Strathmoor, Wayne county; savings and commercial; James H. Means, 958 Longfellow Ave.; Howard C. Wade, George H. Kirchner, Detroit 5,000

Haynes Lumber Co., Port Huron, St. Clair; manufacturing and sellin at wholesale and retail, lumber, builders' supplies and materials; George L. Brown, James J. Haynes, Mark J. Haynes, Port Huron 25,000

CHANGES OF OFFICE

Excel Battery Co., office moved from Hudson to Jackson 200,000

Crescent Gravel Co. (F.) (Ind.), Wilmington, Del., Michigan office moved from Saginaw to Reed City, 750 shs. p. v. ..... $ 5,000

CHANGES OF NAME

Pavoglio Granite & Marble (name changed to Peninsula Granite & Marble Co.), Marquette 80,000

(*Continued on Page 34*)

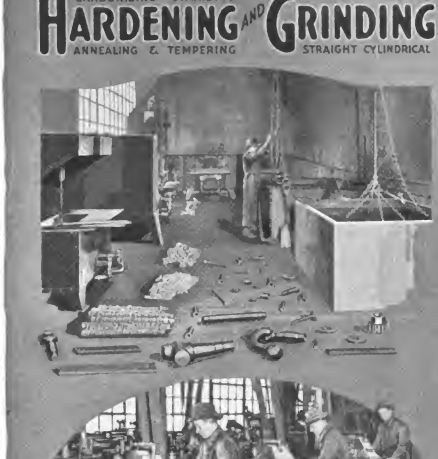
CARBONIZING CYANIDING

HARDENING AND GRINDING

SMALL

ANNEALING & TEMPERING

STRAIGHT CYLINDRICAL



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

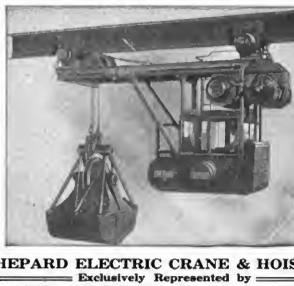
Piston Pins — Dowell Pins Hardened Straight — Headless Shuttle Bolts
Valve Roller Pins — Oil Pump Plungers — Universal Joint Pins
Roller Clutch Pins — Roller Bearing Rolls Straight or Differential Gear Pins — Small Gear Shafts

Detroit Machine Tool Company

6945 St. Antoine St. Telephone Market 575

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

NOT AN AGENT BUT A MANUFACTURER
I WANT YOUR WORK
MAY I SERVE YOU?
J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.
TELEPHONE MAIN 5945
CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES
Production Machine Work
PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS
SEND ME YOUR INQUIRIES
FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $800,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL
TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Skrzycki-Regan-Meyers Co. (name changed to Skrzycki-Regan Co.), Detroit 100,000

Richard H. Wolfe & Co. (name changed to Wolfe, Steffens & Co.), Detroit 20,000

INCREASES

State Bank of Perry, Perry, from $16,000 to 25,000
John W. Free State Bank, Paw Paw, from $30,000 to 50,000
Monroe Foundry & Furnace Co., Monroe, from $50,000 to 100,000
Wayne Steering Wheel & Bow Co., Wayne, from $10,000 to 100,000
Welded Steel Barrel Corp., Detroit, from $150,000 to 500,000
Flint F. Smith Bldg. Co., Flint, from $150,000 to 225,000
Rochester Foundry & Machine Co., Rochester, from $30,000 to 80,000
Dant & Reynolds Lumber Co., Detroit, from $100,000 to 200,000
Grand River Washed Sand & Gravel Co., Ann Arbor, from $150,000 to 200,000
Automobile Equipment Co., Detroit, from $20,000 to 50,000
Lockway, Stouck Paper Co., Benton Harbor, from $50,000 to 100,000
Newport Mfg. Co., Detroit, from $70,000 to 90,000
Sheriff-Goslin Co., Battle Creek, from $10,000 to 20,000
Tamarola Bottling Works, Detroit, from $5,000 to 30,000
Scotten, Dillon Co., Detroit, from $1,500,000 to 3,000,000
Ainsworth Mfg. Co., Detroit, from $200,000 to 500,000
Excel Battery Co., Jackson, from $5,000 to 10,000
Grand Rapids Furniture Co., Grand Rapids, from $150,000 to 350,000
Michigan Avenue Holding Co., Detroit, from $200,000 to 400,000
Rialto Photo Play Co., Flint, from $100,000 to 150,000
Welt Co., Detroit, from $10,000 to 100,500

DECREASES

Pittsburgh Shafting Co. of Detroit, Detroit, from $100,000 to 5,000
Consolidated Press Co., Hastings, from $100,000 to 1,000
Ideal Sales Co., Detroit, from $5,000 to. 1,500
Essiery-Bellaire Co., Oxford, from $25,000 to 5,000

NOTICES OF CHANGES OF ATTITUDE

Insert Spring Plate Co., Detroit..... 5,000
Dort Motor Car Co., Flint..... $60,000
Glynn Co., Detroit 30,000
Northern Real Estate Co., Escanaba..... 10,000
Electro-Gravure Engraving Co., Detroit 2,000
Bedford Amusement Co., Detroit..... 20,000
Engel Cider Refining Co., Jackson.... 30,000
Standard Enameling & Printing Corporation, Detroit 100,000
LaVogue Co. of Battle Creek, Battle Creek 5,000
F. C. Mason & Co., St. Johns..... 20,000
Hawley Dry Goods Co., Bay City..... 75,000
Hudson Produce Co., Hudson 5,000

NOTICES OF DISSOLUTION

Grand Ledge Gas Co., Grand Ledge.... 35,000
Cornell Studio, Detroit 15,000
Levy, Lawrence & Co., Grand Rapids.. 6,000
Railroad Land Co., Detroit 20,000

NOTICES OF WITHDRAWAL

Linick & Lens Amusement Co. (F.) (Ill.), Chicago, Ill., Detroit..... 20,000

Successor to The Village Smithy

(*Continued from Page* 10)

machinery is clearly evidenced here, where 160 of these crankshafts are produced from one machine in eight hours. A front axle for an automobile is made from a bar of 1⅜ by 2-inch steel, 67½ inches long and weighing about 53 pounds.

In 1919 this plant used 24,749,000 pounds of steel and produced 17,292,000 pounds of finished forgings, which were made and delivered to the machine shop at the rate of 5,000 complete sets of drop forged steel automobile parts a month. On the production of these forgings nearly 600 men were employed, drawing an aggregate wage of approximately $100,000 a month. Sixty-five die sinkers are employed in making and repairing the dies with which these forgings are made, and a repair force of 70 men is kept busy keeping the big machine in shape to do their work.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



CITY OF DETROIT
DETROIT PUBLIC LIBRARY

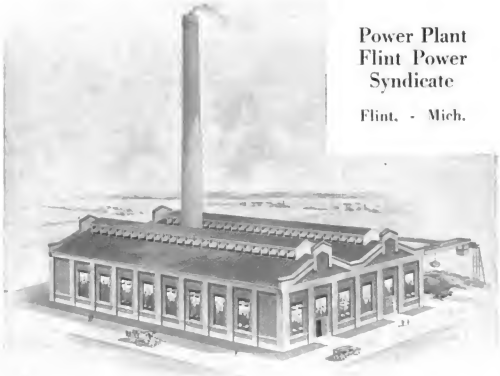
Detroit, February 12, 1921

THE PRODUCTION MANAGER SPEAKS

(Financial Section Page 27)

Vol. 27. No. 7 *Price Fifteen Cents*

ESTABLISHED NINETEEN HUNDRED



Power Plant
Flint Power
Syndicate

Flint, - Mich.

BUILDING CONSTRUCTION

W. E. Wood Co.

DETROIT

MICH.

Equipped by experience to build for you economically and speedily

Digitized by Google

MICHIGAN
MANUFACTURER
AND
FINANCIAL RECORD

Established 1907

CONTENTS

February 12, 1921

	Page
The Production Manager Speaks — Predicts automobile plants will attain no more than 60 per cent of 1920 output during 1921. By F. W. Hersey.	5
Michigan's Rate Problem — By George C. Conn, director of traffic, Buick Motor Company, Flint.	6
How Steel Balls Are Made — Methods used in the Hoover plant at Ann Arbor, one of Michigan's representative industries. By Howard Campbell.	7
Why the North Dakota Failures — Second of two articles by Phil S. Hanna, financial editor of the paper, who has just returned from a trip to the Northwest.	9
Something New in Steam Engines	10
News of the Legislature	11
Jaxon's New Power Plant	12
Michigan Fire Losses Analyzed	13
News of the Motor Industry	14-15
Transportation Matters	16
The Week's Building	18
Editorial	20-21
Financial Section — Quotations on Michigan Stocks—Hints to Investors—Federal Reserve Bank Statement—Detroit Bank Stocks—Active Bonds and Notes—Liberty Bonds—Foreign Exchange—Public Utilities—Who's Who in Michigan Finance—General Financial News.	22-29
New Corporations	35-37

Vol. 27 **Detroit, Mich.** **No. 7**

Published Every Saturday by the Manufacturer Publishing Company
Suite 611 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google

EXPERIENCE



The light that fails not is the lesson won
By him who does from him whose task is done!

THE one vital service alloy that goes into every foot of brass and copper Sheets, Wire, Rods, and Tubes of our manufacture, is *Experience*—and every user finds it!

MICHIGAN COPPER & BRASS CO.

DETROIT - MICHIGAN

Buy from the hub  *not from the rim -*

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

The Production Manager Speaks

Plant Executive of Conservative Detroit Automotive Manufacturer Predicts 60% Peak Output This Year

By F. W. HERSEY

ONE OF THOSE WAGS who always rise to the occasion with a quip or a conundrum applicable to the current topic of conversation has sent on its smiling mission the announcement that Henry Ford has bought the Hotel Statler, Detroit. Naturally the question, "What does he intend to do with it?" is the rejoinder, and the answer is that he intends to fill it with rumors. The joke does not require a diagram.

It is readily admitted that a pun is a crime punishable by slow torture, but there are extenuating circumstances in this case. It would take more than one Statler hotel to accommodate all the rumors about the automotive industry now floating about, and it is only by running as many as possible of them down that any idea of the true course to be sailed by the industry during the coming year can be obtained.

Rumor pessimistic has it that production in the automotive plants for the next year or two will be negligible; that it will take five years for the business to recover from the jolt recently suffered.

Rumor optimistic retorts that production will be not less than 75 per cent of what it was in 1919 and 1920; that the industry is due to recover in a year's time. When in search of information regarding the probable manufacture and distribution of product it is customary to approach the sales departments. Sales managers usually enjoy a broad vision and a beautiful imagination, which when applied to such promising sales indications as exist, produce an acceptable result.

The Iceberg in the Plant

On the other hand, the production managers are cold propositions. They lack imagination and have no time for vision. They deal in concrete facts, three of them—money, men and materials. By being too imaginative, too visionary, the production manager could easily overload his plant with inventory. Therefore he often takes the sales manager's estimate and divides it by a figure which suits him best.

The writer approached such a man for his opinion on production in the industry and his own plant in particular. His factory is included among those marked for conservatism and reputed to be "sitting pretty," with a minimum of financial worry, while so many manufacturers in every line are hustling for money. Not long ago he returned from a trip to Europe, where he had been studying the market for American cars, and within a few days of this interview had returned from an Eastern trip.

"Figure production in the automotive industry for 1921 on a basis of 60 per cent of what it was in 1920," he said in answer to the question. "If it does not exceed 50 per cent, do not be surprised. if it touches 75 per cent, then consider a miracle performed. This is not pessimism, nor is it false optimism. it is what we should expect. We are facing a sales problem after almost 20 years of production problems. From the day the motor car became an acceptable and practicable machine, the energies of the industry have been directed toward perfection and quantity in production.

"Aside from what I consider ordinary sales development, with every encouragement possible from a ready market, there have been no real sales problems. The fight has been to supply the increasing demand and cut production costs so that prices might be tempered in accordance with increasing competition. Look back over the periods in the development of the sewing machine, farm implements and steel and you will find the same principles as are today influencing the motor industry.

"First, there was the period of invention and development. Successful development created demand and production problems followed. The popularity of the sewing machine and farm implements induced rapid expansion of plants and the organization of new companies.

"For 20 years the development of the farm implement industry was as phenomenal for those days, between the 60's and the '90, as that of the automotive industry has been to us of this generation. Then came the reaction from production problems to sales problems. The industry was over-loaded. Plant capacity was greater than demand called for and surplus had to be disposed of abroad. Foreign markets, constautly disturbed by tariffs and exchange fluctuations, were alternately opened and closed.

"When production exceeded domestic consumption and foreign markets did not absorb surplus, what happened? There was depression and the over-expanded industries suffered. Weaker concerns fell by the wayside. The stronger companies united, the sales problem was recognized and the production problems solved by corporate system. Today neither the farm implement nor the sewing machine industry attracts special attention because of depressions.

The Automotive Parallel

"The 20-year period in the motor car industry has been rounded out with production machinery developed to its utmost and with a great number of different concerns manufacturing cars. Our facilities today are sufficient to more than satisfy domestic demand, and foreign markets are almost closed.

"Reconstruction problems and exchange decline are not the only reasons for the stagnation of the foreign motor car markets. The very immediate, quantity production of which we have boasted has been a factor. During the war we manufactured and shipped a vast quantity of automotive products to Europe for war purposes. Trucks and passenger cars were cast loose upon foreign soil after the armistice was signed. They became salvage, and because it was cheaper to sell them abroad than to ship them home, and better business to sell them than to throw them back upon te American markets, the government put them on the foreign markets at lower prices than manufacturers in these markets could sell their own product.

"Two things of interest to American manufacturers resulted from this procedure. A large

THE accompanying article is preliminary to a discussion of the potentialities of the market, within the next year or two, for materials and parts in the middle western automotive manufacturing center comprising Michigan, Ohio, Indiana and Wisconsin, and of which Michigan is the chief commonwealth.

Any examination of this subject must necessarily have to do principally with the sales policies which will be expected by the purchasing agents, who will contract for such materials, and with the mental attitude of these men as the result of the abnormal contractual conditions which have prevailed during the last two or three years. Concerning the latter, readers of the paper will remember, considerable recently was said by Elwood Sampson, of Detroit, chairman of the public relations committee of the National Association of Purchasing Agents.

The article will appear in an early issue.

Digitized by Google

demand undoubtedly existed, a portion of which was satisfied by these sales, and the antagonism toward American manufacturers by manufacturers of French and English cars doubtless was intensified by the low prices made on these cars. There was, however, and still is a very satisfactory demand for approved American cars throughout the world.

"Conditions of exchange and actual governmental and banking opposition to financing American imports into various countries, together with the world-wide slump in business, has created a condition of extreme stagnation in automobile exports for the last six months. This condition is more or less temporary and I am sure you will see a revival of export business. No one can safely become a prophet as to the time that this will take. It is a fact that the markets of the world are not at present overstocked with American automobiles. Conservative judgment would indicate a fairly satisfactory percentage of exports to be had during the current year.

"With such conditions obtaining in Europe and other countries, the consumers' strike descended upon the home markets, and while this strike is only a temporary condition, its effect so far as the automotive industry is concerned must be outlined.

"Take this company as an illustration. In 1920 we had a manufacturing program of about 2,000 cars a month and actually produced and sold more than 80 per cent. The falling-off in production all occurred in the last ninety days of the year. Of this, the foreign market absorbed something more than 25 per cent. Adhering to our policy of conservatism, we shall base our output on about 60 per cent of last year. Should the foreign markets improve more rapidly than now seems likely, this percentage probably will be increased.

"Judging from our position in the market, I believe the same ratios will apply equally well to other plants. In this I see no cause for pessimism, but I deprecate the extremely optimistic statements which have been so prevalent recently, believing that the actual facts do not bear them out and that the fundamental conditions of this country and the world fairly stated, entirely warrant a feeling of security in the business world.

Market Potentialities Revised

"The reaction from a sellers' to a buyers' market has knocked into a cocked hat all previous conceptions of market potentialities. I venture to say that the motor car manufacturer, distributor and dealer knows less about the character of the market today than ever before. They must find and analyze the market, which will call for a different quality of salesmanship than employed behind the counter of a department store.

"Selling motor cars has been more or less of a sporting proposition, with a lot of circus stunts thrown in. It has been full of romance and youthful buoyancy. The industry has now reached the manhood state and the frivolities will have to be removed.

"Henceforth the four fundamentals of success will be finance, management, quality product and strong dealer organization. The companies that will survive this situation, that will show the quickest recovery, will be those having the strongest dealer organizations. The strongest dealer organizations are those which have handled the same car or cars for the longest periods, gathering about them a loyal, satisfied customer followings. Also they are the organizations that have adopted the soundest financial policies.

"On my recent trip through the eastern part of the country I found business slowly picking up. I was surprised at the optimism in evidence, but the best sales predictions, I mean these not slivered with buncombe, bore out my estimate of general automotive production —50 per cent of 1920.

"Personally, I think this depression was the best thing that could have happened. The whole country needed it, and the automotive industry needed it. I do not see any cause for discouragement in the probability of reduced production. The situation calls for real management and salesmanship. Wage reductions must be made and very likely there will be some resentment expressed in strikes. Labor troubles may disturb production to such an extent that a real shortage of cars may result during the summer, but I fail to see how demand in 1921 can possibly anywhere near challenge our present production capacity."

Michigan's Rate Problem of the Moment

If Someone Can Improve on the Zoning System, Well and Good, But Plan Must Be Constructive



RAILROAD has only one way of raising money for operation, and that is from the sale of transportation. If the monies received for such service are not sufficient to meet the bills and interest on bonded debt, the railroad is bankrupt, and a bankrupt railroad is as badly off as a bankrupt individual.

In what I am about to say, please understand that I am not pleading for any railroad in parilcular, but am using the knowledge which came to me when in the railway service and which perhaps covers some details not heretofore made public.

Back in 1916 the rates in this territory were very low, compared with any others in the country, with the possible exception of shorthaul rates in Ohio, where an old statute law was in effect.

The rates were not only low but the operating costs necessarily high, especially the item of fuel. In 1916 about 15 per cent of the total expenses of the Pere Marquette railway were for fuel. In addition to the higher cost of coal was the fact that the winters were much more severe, necessitating more coal per ton of traffic moved, compared with most sections of the country. Under normal conditions the would have been bad enough, but the local conditions in Michigan presented a serious and unique situation.

Michigan an Isolated State

If you will look for a minute at the map of the country you will note that lower Michigan stands out absolutely by itself and occupies a geographical position unlike that of any other state. The upper peninsula of Michigan is very thinly settled and the freight and passenger rates are both on a higher basis than in the southern peninsula. Therefore in discussing this matter we will refer to the lower peninsula of Michigan as Michigan.

By GEORGE C. CONN

Director of Traffic, Buick Motor Company, Flint

It is almost surrounded by the Great Lakes. There are 104 towns and cities in the state reached by both the Great Lakes and the railroads, and they contain about one-third of the population of the state. With Lake Huron on the east and Lake Michigan on the west, the state is isolated and apart from its neighbors. We have no local trade of any account to the east on account of the Canadian customs laws, and there is comparatively little interchange trade between the southern peninsula of Michigan and the northern peninsula which moves by rail. For about seven months in the year there is a certain amount of trade between Detroit and the points in the northern peninsula which moves by water on account of low rates, but there is a constantly increasing business between Chicago, Milwaukee, Minneapolis and Duluth into the northern peninsula, due to better transportation facilities than can be had via the Straits of Mackinaw. The business alliance with Minneapolis is also strengthened by the fact that the Minneapolis Federal Reserve Bank has jurisdiction in this territory. There is more or less interchange of traffic between the state of Wisconsin and lower Michigan handled by the car ferries and the steamers on Lake Michigan, but this is not heavy traffic, compared with that which moves from Chicago and Detroit in lower Michigan.

It can therefore be fairly well stated that a greater proportion of the traffic of lower Michigan moves in and out by rail, largely through Port Huron, Detroit, Toledo and Chicago gateways; and in this respect the railroads of lower Michigan become a distributing and originating facility for their connecting lines.

There are about 6,330 miles of railroad in southern Michigan, and a population under the census of 1910 of 2,485,000, or 392 people per mile of railroad. The population per mile of road in the trunk line territory east of Buffalo is 889, and in New England, 1,389. This means that the railroads in Michigan have only a quarter as many people to draw business from as the roads in New England. This refers to freight as well as passengers, for it takes people to produce freight. Many of the northern counties of lower Michigan are very thinly populated. There are several counties with less than ten people to the square mile, and taking the counties north of a line drawn from Saginaw to Muskegon, the average population is only 26 people to the square mile. In these same counties, according to the Michigan Public Domain Commission, there are 4,000,000 acres of uncultivated land. This would give 50,000 farmers 80 acres each, and as farmers always have good sized families, this would mean at least 200,000 people to produce crops and buy supplies.

There is a certain amount of through traffic passing across the state of Michigan, especially on the lines of the Michigan Central and Grand Trunk. The through traffic which passes over the Pere Marquette between Chicago and trunk line points via the Niagara Frontier shows on the Chicago reports as being about 2 per cent of the total tonnage. North of the line of the Pere Marquette there is very little through business, and that moving via Ludington, Frankfort and Mackinaw City to trunk line points is probably less than 5 per cent of the total business through the city of Chicago.

Some Inequalities

The situation, therefore, comes down to the question of what originates and is consumed in lower Michigan, and on a very large portion of this business the lower Michigan roads, and especially the Pere Marquette and Ann Arbor,

(*Continued on Page* 30)

Digitized by Google

How Steel Balls Are Made

Methods Used in Hoover Plant, at Ann Arbor, One of Michigan's Representative Industries



STEEL BALL MANUFACTURE IN THE HOOVER PLANT AT ANN ARBOR

The photograph at the left shows the cold header department. One of these machines makes 7,500 balls an hour. At the right a workman is shown forging a ball blank.

By HOWARD CAMPBELL

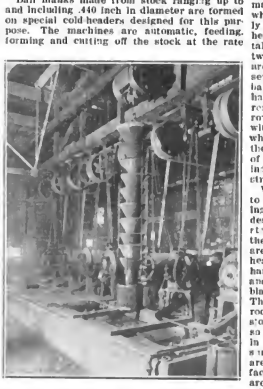
IN RECENT YEARS the application of ball bearings in machine design has increased rapidly. This type of bearing now is used in many machines where plain bearings formerly were considered good enough.

Until German export facilities were shut off by the war, the majority of the steel balls used in these bearings were made by the Deutsche Waffen und Munitions Fabriken, Berlin, and the product of this firm has become so celebrated that many persons think the steel ball industry was developed by the Germans. As a matter of fact, the art of ball making goes back to a very early date. The development of original methods for doing this work is attributed to the Chinese. To those who have credited the Germans with the development of commercial methods of ball manufacture it doubtless will be of interest to learn that the first commercial steel balls were made in this country under basic patents granted to Richardson, of the Waltham Emery Wheel Company, Waltham, Mass., and that the original ball making machinery for the plant of the Deutsche Waffen und Munitions Fabricken was designed and built in the United States and shipped to Germany ready for use.

In 1901 the Standard Roller Bearings Company, Philadelphia, acquired all obsolete and existing plants engaged in the manufacture of steel balls, and in 1906 the late L. J. Hoover left this firm and formed the Grant & Hoover Company, at Merchantville, N. J. On March 1, 1913, the Hoover Steel Ball Company, of Ann Arbor, Mich., was organized by Mr. Hoover for the purpose of engaging in the manufacture of high grade steel balls to take the place of those imported from Germany. When the European war started in 1914, the blockade of German ports by the British navy shut off the supply of steel balls formerly exported by that country to the United States, and the insistent demands of consumers for balls made in this country imposed a heavy strain upon the facilities of domestic producers.

The steel from which balls are made comes to the factory in coils or straight rods, according to its size. Stock less than half an inch in diameter comes in coils and is known as "wire," while all stock exceeding this diameter comes in straight bars. In the Hoover plant at Ann Arbor a well-equipped laboratory is maintained in which chemical and physical tests are conducted on each shipment of steel to determine its suitability for manufacture into balls, and an unloading ticket must be signed by the head of the laboratory before the steel can be taken from the cars to the plant.

Ball blanks made from stock ranging up to and including .440 inch in diameter are formed on special cold headers designed for this purpose. The machines are automatic, feeding, forming and cutting off the stock at the rate of 5,400 half inch balls an hour, or 7,500 of the 3-16 size. It is an interesting fact that the balls are larger than the stock from which they are made, a 1-4-inch ball being made from .190 inch diameter stock, and so forth.



Rotary furnaces in which the balls are heated. The spiral quenching apparatus has been pulled up out of the quenching tank.

Blanks for balls exceeding 5-8 inch in diameter are hot forged from straight bars. In handling this work multiple dies are employed which produce strings containing up to ten balls, according to the size. The stock is heated in furnaces, burning crude oil mixed with air under pressure. The temperature is maintained at 1,800 degrees F. or a little above, which provides for heating the stock as rapidly as necessary without burning it. When heated to the proper temperature, the bar is taken from the furnace and the end held between the dies of a hammer, where the balls are formed on the end of the die without severing the metal. In order to produce round balls in such dies, the bar is turned while the hammer is striking a number of blows, which results in forming the balls approximately round. Along one side of the die is a pipe with a number of holes drilled in it, through which water flows on to the dies to keep them cool. After being forged, the hot string of balls is taken to a punch press, where the individual ball blanks are sheared from the string and the superfluous metal removed.

While balls ranging in size from 5-8 inch to 2-1-2 inches in diameter are made by forging strings of blanks in the manner just described, the larger sizes are made by forging single blanks, making one blank at a time at the end of the bar. Bars of the proper size are placed in the furnace, where they are heated to a forging temperature. Then the hammer man places a bar under the hammer and forges a section of it into a string of ball blanks, each one being cut off as it is formed. The blanks are now sent to the dry-grinding room, where the major portion of the excess stock is removed. A dry-grinding machine is so constructed that a circle of balls is held in contact with a grinding wheel under pressure, so that as the wheel revolves the balls are rotated, bringing every part of the surface of the ball to the wheel. These machines are driven at the number of revolutions per minute required to give a surface speed of 4,500 to 5,000 feet per minute at the point where the grinding wheel engages the balls. Three large blowers gather the dust from the

Digitized by Google



At the left is shown the oil grinding department of the Hoover Steel Ball Company's plant. These oil grinders grind the balls smooth and round. At the right are the tumbling barrels, in which the balls are mixed with oil and lime and rolled to give them a polish.

machines by means of a system of pipes which extend to every machine, and convey it to dust collectors.

The balls are first rough dry ground and then finished in the same manner, except that in the finishing operation a finer abrasive wheel is used, which results in giving the balls a smoother surface while reducing their diameters a little closer to the ultimate size.

After the balls have been through the finish dry-grinding operation they are quite round, but the surface is covered with small scratches left by the grinding wheel and there is still a certain amount of excess metal to be removed.

Subsequent to the rough grinding operation, the balls are given a preliminary annealing in rotary gas furnaces, after which they are heat treated in the same type of furnace. In order to insure a uniform quality of product, the balls are fed from a hopper into a spiral which conducts them through the furnace and discharges them, when heated to the proper temperature, into a quenching bath which may be oil, brine or water, according to the size of the ball.

The fifteen rotary furnaces which comprise the production equipment of the Hoover heat treating department have a combined capacity ranging from 1,000 to 1,500 pounds of metal per hour and are so constructed that they deliver a definite quantity of balls of a definite size per unit of time. This fact is an important contribution toward continuous process and uniformity of product.

Every step in the process is controlled by a comprehensive potentiometer system, which includes not only a battery of eight multiple recording pyrometers, but a detached electric signalling board in plain view of every furnace operator at all times. This dual system not only permits the technician in charge of the pyrometer room continually to check the temperatures of each individual furnace, but enables the operator to tell at a glance whether his furnace is maintaining the predetermined temperature. The stylographic record of each heat is permanently filed so that future reference will reveal the complete hardening process to which each lot of balls was subjected.

Experience has proved that the Hoover spiral quenching bath does away with quenching defects arising out of the commonly used straightline bath. This apparatus consists of a metal spiral along which the balls travel before reaching the bottom of the tank, which is fifteen feet deep. The purpose of this is to distribute the balls and deflect their course so that they follow a winding path and are completely cooled before reaching the receptacle submerged at the bottom of the tank. The contents of the bath are kept in constant circulation to prevent their becoming overheated.

In hardening, the method differs according to the size of the balls, those of 5-16 inch diameter and less being quenched in water or brine. When a basket is filled, it is lifted out of the tank by means of an electric hoist and the balls removed. The rotary furnaces are used for hardening all sizes of balls.

During the process of hardening, internal strains are set up in the balls, and it is now necessary to relieve these strains without affecting the surface hardness. This is done by seasoning the balls in boiling water. The difference in crushing strength of the balls before and after seasoning is considerable. At the same time, the heat absorbed during this process dries the balls so quickly that surface oxidation does not take place.

At this stage, samples from every lot of balls are examined by the laboratory, where the crushing strength and surface hardness are determined and the fracture examined. If these results are satisfactory, the balls are released; if not, then the lot from which the samples were taken is held up until thorough tests have been made.

As the raw stock passes into production it is apportioned into lots, each lot of balls being given a number, which makes it easy to determine the source of any defect which might become apparent to the inspectors at any stage of manufacture. Throughout the entire manufacturing process, the shop interdepartment inspection exerts its influence and authority to prevent the finishing of defective material. The balls are examined between each stage of production, so that no time may be wasted on poor stock.

After the balls are released by the laboratory they are sent to the oil-grinding department, where they are put into tumbling barrels with a quantity of oil and abrasive and the barrels set in motion. As the barrels revolve, the rolling action of the balls in combination with the abrasive soon accomplishes the desired result. They are then passed through a machine which cleans them by the use of sawdust, after which they go to the "Hoffman" machines.

This is a machine which grinds the balls uniform to a given dimension in quantities,

(*Continued on Page 34*)



The photo at the left shows a corner of the Hoover inspection departm ent. Variations of one-ten-thousandth part of an inch can be easily seen by using the fluid gauge. At the right, part of the laboratory is shown. This machine tests the amount of weight necessary to fracture a ball.

Digitized by Google

Why the North Dakota Failures

How Townley Played Ducks and Drakes With Sound Banking Practice, and the Part the Farmers Took

By PHIL S. HANNA

WHEN WE HEAR the word "soviet," the natural mental picture is of Russia, but we have had and continue to have in a lessened degree, right in one of these United States, a dangerous little soviet scheme in actual operation. It is doubtful whether the people of North Dakota noticed with the Townleyites realize the degree of radicalism which has been foisted upon their state, for the wave of sentiment grew up slowly and in the beginning nearly all the people of the state were cemented together in the common cause of eliminating the middle man, which, they believed, would mean a bigger portion of the consumers' money for the producer. It got to be a passion with many to rant about the "grain gamblers" and "five stock price manipulators" long before Townley came on the scene, and being a state 90 per cent agricultural, there never has been in balancing factor such as there is in states like Illinois and Michigan, with their city voting power and difference of viewpoint.

There is strong testimony, however, that certain evils of which the farmers complained should have been and might have been corrected by the political party then in power, but nothing was done, notwithstanding repeated appeals by the farmers, mainly for more rural capital. Under the constitution of the state, if twice voted upon favorably, an amendment to permit the commonwealth to engage in business could be added. Such an amendment was added, first by a 62 per cent vote in favor of it and by an 80 per cent favorable vote the second time. The result was that at the next session of the legislature a bill appropriating $200,000 to carry out the implied wishes of the people was presented, and in one of the committee hearings on the measure an unfortunate event occurred at the agricultural department. A senator who was opposed to the bill got excited and told a delegation of farmers who had come to Bismarck to voice their approval to "go home and stop their hogs," and then and there, as it is said ahont the cowboy and his wife, "the fight was on."

The stage was beautifully set for the events which followed. Townley happened to be in North Dakota and he took the cue at once. "He just fell into it," says J. J. Earley, president of the North Dakota Bankers' Association. "He called together a few of his friends—he was enrolled as a Socialist and had been doing a little work in the western part of the state in behalf of socialism—and developed a plan for the organization and called it the Non-Partisan League." The success which attended his efforts is too well known to call for further elnboration here, but for the purposes of this article it is well to call attention to the fact that subsequently the League added to its title the word "National," and as events have shown since, the ambition is to make the League national in its power and influence. Well, the leaguers, as you have so often read, got control of the government from the supreme court down and passed the industrial acts which had been so long promised. But those acts made state enterprises took money and lots of it; so that it was necessary early in the game to provide a source of funds, and this was done by creating the Bank of North Dakota.

The law creating this institution, which, by the way, many of the farmers think is something like a Federal Reserve Bank, provides that the capital shall be $2,000,000 of state bonds, not $2,000,000 of money. The intention was to sell the bonds outside of the state, so as to avoid levying taxes, for it was one of the promises of the Leagners to the farmers that all the changes would be brought about without increasing taxes and by assessing the costs thereof against the consumer and speculator in food products. But the bonds would not sell and in fact have not since been sold, except that a loan of $1,000,000 was obtained from a Chicago bank with $1,200,000 of bonds as collateral. And thus the public funds of the state, counties, townships and school districts formed the chief source of working capital for the bank and the deposit of such funds was required by law. The state banks and nationnl lnnks were not compelled to deposit their reserves in the Bank of North Dakota, but if any bank failed to keep a deposit with it, such bank failed to receive a redeposit of public funds. Hence it became good business to keep an account with the Bank of North Dakota, the method of persuasion being gentle and indirect but of deadly effect to the banker who tried to hold back.

The Question of Interest

Now right here comes up the question of interest paid on deposits, and while the scheme adopted by the great Moses and his followers did not bring forth immediate complaint, the scheme has proved since to have been one of the first thorns in the flesh of the farmer, for it reduced the interest on the public funds about one per cent. The banks therefore have commonly been paying three per cent on public funds, but under the new scheme the Bank of North Dakota paid the political subdivision two per cent and collected four per cent from the bank with which the funds were redeposited. This gave the Bank of North Dakota a two per cent margin on all the funds which passed through its hands, cost the banker one per cent more and gave the municipal treasury one per cent less. And in popular language the arrangement "got hy" nicely for a time, for all minds were engrossed in the dissemination of the many financial benefits which had been promised which for a time began to flow out from the new institution.

In last week's issue of this paper was given a statement of the Bank of North Dakota as of January 16, 1921, where it may be noted that the total of deposits due to political subdivisions of the state was $12,453,666, of which items only $6,204,526 had been redeposited with 793 banks in the state, leaving $6,229,140 which might normally be termed lonnahle funds, but notice that four principal items among the assets more than mnke up the latter total: Bonds, U. S., state and county $1,962,756; loans to banks $2,607,418; loands to public bodies, $993,350; loans on real estate, $2,885,864, or a total of $8,449,368. The statement is repented here for convenience.

RESOURCES	
Bonds, United States, state and county	$1,962,756.25
Loans to banks	2,607,418.02
Loans on warehouse receipts	94,001.14
Loans to public bodies	993,350.93
Loans on real estate	2,885,864.57
Interest earned, uncorrected	282,752.85
Furniture and fixtures	52,002.26
Due from 793 banks in state	6,204,526.67
Due from banks outside state	60,476.97
Cash items due from banks	282,667.27
Cash items due from correspondents	106,161.88
Cash on hand and cash items	23,276.37
Total resources	$15,926,725.24

LIABILITIES	
Capital	$2,000,000.00
Surplus	40,000.00
Reserve to repay appropriations	24,103.17
Reserve for depreciation	9,860.66
Net profits for 1920	121,883.17
Net profits for 1919 to date	4,237.77
Appraisal fees	5,713.43
Individual deposits	226,039.10
Public deposits, sinking funds	3,678,756.10
Public deposits state treasurer	2,389,184.54
Public deposits (county, school, etc.)	4,849,896.32
Due to banks (reserves)	958,550.00
Collection items	59,195.12
Bills payable	1,000,000.00
Total liabilities	$15,926,725.24

Now the point to emphasize nalde from the very apparent unsound condition which the statement shows, is that the bank was enabled in the beginning to use surplus funds generously in support of the state industries, but that the effect of the scheme in regard to liability in this direction is constantly diminishing; and it is just in this failure to keep up unnatural benefits to favored institutions without resorting to issues that has been to spell the failure of the Townley scheme.

For example, the sinking fund deposits, $3,678,756, January 16, provided good capital, while bonds it was created to retire were not due but some are coming due and the state must use the funds before long. The county and school money provided good capital until it was needed, and unless the counties and school districts tax themselves in order specially to provide deposits for the Bank of North Dakota, that fund must be used, and the same is true of funds accredited to the state treasurer. But hear ye how the cunning Moses and his cohorts have in a measure got around paying back deposits. It is said authoritatively that when the municipal light plant at Bench, N. D., gave checks on the Bank of North Dakota to its employes for wages, the bank simply refused to pay the checks. Very simple and very effective and of course kept the funds in Fargo. Warrants issued to the farmers for hail losses were supposed to be covered by taxes raised by the state and deposited in the Bank of North Dakota, but when the warrants were presented for payment, the holders simply were advised that payment would not be made for the time being. And if one had time he could gather plenty of testimony of many such devices resorted to by the Bank of North Dakota in order to hold on to its capital, i. e., the people's money raised for other purposes. Meanwhile

U. S. Rubber Co. Profit For 1920 Is $21,275,524

The United States Rubber Company in its preliminary report for 1920 states that total assets at the end of December were $389,245,980, as compared with $319,534,204 in 1919 and $262,891,450 in 1918.

Net profits for the year were $21,275,524, on total sales of $255,744,685, while the net the year before was $17,730,237 on business of $255,589,465. In 1918 net profits amounted to $16,072,042 on $215,398,425 of sales. The profit for 1920 was equivalent to $19.82 a share on the common stock, as against $17.59 in 1919, the common for the year totaling $81,000,000, as compared with $72,000,000 in 1919.

After taking into account dividends, previous surplus, and other items, the net profits and loss surplus at the end of 1920 was $53,347,227, as compared with $52,310,163 in 1919 and 41,848,051 in 1918.

Digitized by Google

hail warrants are changing hands at discounts ranging from 5 to 25 per cent and it is not to be wondered that Townley has suddenly found plenty of time to change his scene of operations to Nebraska.

The Farmer's Bank Deal

Bankers will be interested in the generous way in which the League organizers obtained a "farmer's bank" for the farmers living around Valley City, N. D. The scheme is not exclusive but mainly co-operative in that the smooth gentlemen co-operated with the farmers in obtaining a bank for them. The story was told by a Valley City banker about as follows: The organizers got the farmers together and sustained subscriptions for capital to the American Exchange Bank with a capital of $200,000, the majority of which was paid in notes. Thereupon they went to James Grady and H. C. Aamoth, who were holding control of the American National Bank, and purchased this institution for $375 a share. Later the minority interests were bought out at around $200 a share. The national bank charter was given up and the bank reopened under state charter, with the farmers in full control. Shortly afterward the League gentlemen who did the organizing effected an increase in the value of banking house of $20,000 and also effected a charge of $20,000 to expense or otherwise, and walked off with $40,000 for their services to the farmers in organizing the bank. The deal was so raw that for decency's sake Attorney General Langer made them put back $20,000, but the other $20,000 never was returned to the stockholders. Langer, it may be noted, shortly afterward was deposed because Governor Frazier "didn't have confidence in him." Now it is said that the capital is to be reduced to $100,000 and it may be presumed that a like amount of notes will be returned to the subscribers. The story goes that the entire transaction would have stood had it not been for action by the Comptroller of the Currency.

Again it will no doubt be interesting to Michigan bankers to learn more of the modern way of holding on to deposits. Other banks, doubtless encouraged by the example of the Bank of North Dakota, when put hard for reserve have invented the scheme of receiving but not opening letters which are supposed to contain cash letters. (Cash for which remittance must be made by mail). In one bank I saw a pile of unopened letters and when the cashier was asked why the same were not opened he replied that he thought they contained checks, and to be on the safe side he had deferred opening his mail. Another story is told by the same banker of a bank at Courtenay, N. D., which ran low on reserve and there was strong suspicion in the minds of the directors that the institution was insolvent; so they went to Bismarck to see the state bank examiner (called Commissioner of Banking in Michigan). They are said to have laid their troubles before that official and were advised to go back home and keep on doing business as best they could but to keep the bank open by all means regardless of their fears. This town, by the way, has a population of around 400 and has three banks. Tower City is another place with about 500 population and three banks, but there isn't as much real money in either city in the combined banks as one should have.

In connection with the persistent charges that the Federal Reserve Banks have discriminated against the farmer in favor of business interests, observe this case. A small national bank, not far from Valley City, was especially hurt by outside withdrawals, so that its deposits, which were normally around $150,000, fell off to $47,000 at the end of December. One of the reserve city bankers who had been working all fall to help them out showed the writer a statement which revealed that the Federal Reserve Bank of Minneapolis had lent this bank $80,000, notwithstanding other borrowed money liabilities of about $30,000 which were incurred. And the officials of the Minneapolis Reserve Bank were quoted in Valley City as saying that they would go the limit to help the member banks. In this case they surely did. And for some time to come they probably will be in the retail banking business in North Dakota as a result of their efforts to help the farmer. But what would we say if some bank at Flint for instance had borrowed about twice the amount of its deposits? It shouldn't need much argument to disprove some of the foolish, hastily formed statements made about the Federal Reserve Banks.

The Banker Holds the Bag

Now these instances are not given with the motive of making fun out of the misfortunes of the North Dakota bankers, for it is a sad commentary that out of the mess he will emerge the loser in more ways than one. His credit has been injured, his profits have dwindled and he looks out at the farmers, many of whom he helped to get started when they didn't have a dollar, going by in their automobiles while he is scratching his head for some way to meet his checks and keep his doors open. If there is one reason for the inconsiderate attitude on the part of the Dakota farmer toward his banker it is that credit has been too easy and the banker has been to the farmer like an indulgent father to an only son. How many states are there other than North Dakota where a farmer can buy a piece of land without paying a dollar down? There are hundreds who got their start hecnuse they could buy land on a basis of crop payments—one-half of the first crop to the seller, and the banker taking a mortgage on the buyer's half as security for funds advanced for seed and machinery. Meanwhile a good reputation for honesty brought the struggling farmer credit at the general store and credit for his implements; the basis of

(*Continued on Page 32*)

Something New in Steam Engines

A STEAM ENGINE, said to be of almost limitless utility and embodying many new applications of old mechanical principles in a manner so novel that at first glance the expert would declare it impracticable, is the product of a Detroit inventor, E. U. G. Reagan, whose success in developing the machine is due largely to the backing of a combination of Detroit and Pittsburgh capital.

The engine is an eight-cylinder, reciprocating type machine, weighing approximately 160 pounds, which is less than the weight of the transmission of an ordinary five-ton truck, and developing 72.8 brake horsepower. In outward appearance it somewhat resembles a truck transmission, as may be seen by the accompanying illustrations. It is 12 inches high, 15 inches long over all and 11 inches long over the heads and cylinders. Mr. Reagan says it is practicable for automotive, marine and a variety of other uses.

The engine has no base, no crankcase, no crankshaft, no connecting rods and no flywheel. It is assembled without packing or gaskets of any kind. It has only eight bolts, and not a single bolt or screw in any moving part. It operates both forward and reverse at the same speeds with only two rotating valves. It has the same power, directly connected, from the starting point up to 600 revolutions per minute. It has a one-lever control, which starts it and stops it, all speeds forward, neutral and reverse.

A unique feature is the fact that, owing to the method of control and the fact that the power may be applied by direct transmission, the steam pressure in the cylinders may be



THE NEW REAGAN STEAM ENGINE

used as a brake, depending upon the position of the control lever.

The cylinder dimensions are 2½-inch bore by 2½-inch stroke. Just as in any other steam engine, the power varies in proportion to the cylinder dimensions. The engine may be constructed of any desired size, with any even number of cylinders. A sight-feed steam lubricator system is used.

Power from the pistons is transmitted to the driving shaft through a flexible power ring, somewhat on the same principle that a worm gear operates, or as the strength and weight of an animal is applied through a treadmill. The power ring encircles the shaft and acts upon bearings affixed to the shaft on either side. Friction is reduced by the use of ball bearings.

The power ring is actuated by trunions which fit into the notches provided in the cylinders, which encircle the power ring. Each trunion has a brass ball on its end to reduce friction as it works through its slot, and is fixed to the power ring so that the head may move in any direction through an arc of approximately three degrees. Thus they are permitted to assume the position whereby power may be applied by the pistons to the best advantage and at the same time without applying any end thrust on account of the position of the trunions to the roller bearings on the shaft.

Steam is admitted to the cylinders through the rotating valves at either end of the engine. The intakes and exhausts are so arranged that two opposite cylinders are idle at any one moment, while the two series of three cylinders are working in opposite directions. Thus end thrust on the roller bearings on the shaft is eliminated.

The fact that this engine in effect is two separate engines makes it possible, the inventor says, to use it as an air compressor, one end being used for steam and the other as a pump.

In conjunction with the engine Mr. Reagan has developed a new type of steam generator, which he believes solves many, if not all, the difficulties that hitherto have attended the use of this device.

The boiler is built of units, whereby any one or more units may be removed without dis-

(*Continued on Page 16*)

Digitized by Google

Several Business Bills Are Before the Legislature

During the last and present week the Legislature has been flooded with bills, has proposed and started investigations of various kinds, talked capital punishment and taken further steps in the reorganization of the state government.

A resolution asking Congress to restore to the states the control of all railroads within the states has been passed by the House and is before the Senate.

The cost-plus system of letting contracts for public work by the state, counties, municipalities and townships is under discussion, with a bill before the upper house to prevent contracts being awarded under such a system. Among the other bills on the calendar are those prohibiting contractors on state or municipal work from employing any person who has not resided within the state one year; taxing of mining companies only on all buildings above ground at their actual value and on ore mines during the year, instead of on shafts and estimated value of property underground; repeal of the 1919 railroad rate statutes; limiting of money lenders to a rate of 3½ per cent, regardless of the amount lent; providing eight-hour day for labor in all mines, quarries, workshops, factories and manufacturing concerns in the state, with time and a half for overtime; preventing employers from exercising police power over their employes and prohibiting the taking of finger prints or photographs of employes; raising the mill tax for support of University of Michigan from one-half to five-eighths of a mill; compelling all insurance companies to pay the full face value of policies where the loss equaled or exceeded the insurance, and placing all auditing in the hands of state auditor.

During the present week a conference was held to consider an annual tax on Michigan corporations organized and operating for profit and on foreign corporations entering this state, the money to go into the coffers of the state. At present the filing fees for incorporating based on the capital stock and paid to the state department are about the only general corporation tax.

An effort to make the taxation of shipping docks owned and operated by railroad lines of the state a local proposition, instead of regarding them as other railroad property which is absolved from local tax but comes under state tax levy, is proposed.

FORD CUTS SOCIAL SERVICE

In connection with the recent resignation of Dr. Samuel S. Marquis as head of the sociological department of the Ford Motor Company, Detroit, the company has let it be known that the work hereafter will be conducted on a smaller scale. Dr. J. E. Mead, one of the executives of the department, did the talking.

"There will be no change of policy," Dr. Mead said, "and it is not true that the Ford Motor Company has decided to abolish its sociological department. The reason for the decision to conduct it on a smaller scale is that this department is to be consolidated with several others.

Dr. Mead said that as far as he knew the force would not be reduced, but that the workers would not cover the project in as great detail as has been done in the past.

In time of greatest activity the sociological department had a force of 130 workers.

MOONEY MANAGES BUILDERS' SHOW

C. H. Mooney, formerly manager of the Fort street-Military avenue branch of the Commonwealth-Federal Savings Bank, Detroit, has been made business manager of the Third Annual Builders' Show, to be held in the Armory, March 19 to 27.

STRAIGHT LINE METHODS

Simplicity in Management

The Fine Art of Business

"... in all things the supreme Excellence is Simplicity"

Efficiency is the result of intelligent simplicity.

To relieve management of needless and wasteful effort in the control of production and cost, and to simplify the direction of all important activities, office as well as factory, work must be carefully planned and the plan persistently worked.

All competent plans are based on reliable figures. The deduction of *facts from figures* and the practical, timely and systematic application of those *facts* to individual needs is management simplified—the Fine Art of Business.

This lack of simplicity is the weakness we have noted most in our many years of personal audits and system service in practically every field of industry. And always this lack of simplicity is due to the lack of *a competent plan persistently worked.*

We have just issued a small booklet on this most interesting subject, Simplicity in Management. It outlines the need of simple, straight-line methods in the control and direction of business. It shows briefly the practical, time and labor saving value of plans based on competent facts and figures. It is a hand book to the Fine Art of Business.

Sent to executives or managers on request.

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON
CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY
CLEVELAND, BUFFALO, PITTSBURGH
CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND
NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.
Miners and Shippers of Coal

LONE STAR
Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT
Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

Jaxon's New Power Plant

Some Construction Details of $250,000 Building Installation Now Nearing Completion in Jackson

THE Jaxon Steel Products Company, Jackson, has a central power plant under construction which, when completed, will be one of the industrial show places of the city. The plant is being built by the du Pont Engineering Company, a subsidiary of E. I. du Pont de Nemours Company, Wilmington, Del. The Jaxon Steel Products Company is a part of the General Motors Corporation, which is controlled by the du Pont interests. The plant under construction will be 82 by 40 feet in size and 50 feet high. Work was started last August.

The lay-out was made with a cost estimate of $250,000. The building is of sand-lime brick, and the north and south walls have been made of corrugated iron to permit of future expansion. There are two units of water tube boilers, each rated at 354 horsepower, but capable of developing 1,500 horsepower. Both are equipped with soot blowers and two combustion E type automatic stokers, which are fed from an overhead hopper with a capacity of 45 tons of coal, sufficient for operating the plant 16 hours. The hopper is fed by a coal handling apparatus, made of structural steel, and a monorail system is used to operate an electrically driven traveling crane with a bucket, holding three quarters of a ton at one time. The same apparatus handles the ashes.

A blower used to provide a forced draft for the stokers connects with the boilers and is driven by a horizontal steam engine. The fans make 584 revolutions per minute. The stokers are regulated automatically. The oiling system also is automatic and the supply of water is controlled by two water feed pumps. The water is run through a water feed heater, heated to 200 degrees, and then accurately measured. An attachment of the stokers measures the coal used and thus permits an accurate check on efficiency.

The smokestack has a foundation 30 feet 6 inches in diameter, and sets 70 feet in the ground. At the base the stack is 18 feet, 4 inches in diameter, while at the top the diameter is 9 feet, internal measurement. The deadweight of the stack is 537 tons and it is guaranteed to withstand wind pressure up to 100 miles an hour.

There is a 500 k. w., three phase, 4,800 volt, 60 cycle turbine as part of the electrical equipment. The generator efficiency of the turbine at its full load is 94 per cent. The buss wall is of concrete and is equipped with copper buss, disconnecting switches, current transformers and oil switches. The latter are controlled from the switchboard, which is at the front of the buss wall. The switchboard has mounted on it, meters, measuring devices and switch control levers. All the underground wires leading to the main plant are lead-covered, laid in a fibre conduit, which in turn is encased in a slab of concrete and buried five feet in the ground.

In the construction of the plant the du Pont Engineering Company has followed its policy of purchasing as much of the materials as possible in the town where the work is being done, and thus it is said that most of the $250,000 which this power plant cost will have been expended in Jackson.

The Jaxon Steel Products Company is expected considerably to increase its manufacturing activities and its new power plant is part of the program.

$8,272,211 Expended On Lincoln Highway in 1920

In checking accomplishments at the end of 1920, officials of the Lincoln Highway Association express themselves as highly pleased with the progress made in the improvement of the transcontinental route during the year. Each state traversed by the highway from the Atlantic to the Pacific has done all that it was physically able to accomplish during the year. Nowhere did lack of money hamper the work.

As a result, 548 miles of actual improvement have been added to the thoroughfare. That is 16 per cent of the total length of the road. The money spent in bringing about this construction fell but little short of the total expended in 1919, which represented the high point in cash investment on the Lincoln Way in any one year.

Had it not been for physical handicaps, such as the lack of transportation facilities and building materials, the high price and prevalent shortage of labor, the condition of the securities market affecting the sale of bonds for road building, and the reluctance on the part of reputable contractors to undertake road work in consequence, it is an assured fact that 1920 would have seen a greater outlay for building the Lincoln Way than any year in the past. Much of the work contemplated for 1920 has of necessity been carried over into 1921, and accordingly the Lincoln Highway Association is expecting a new year of splendid results.

The work for the year is given in the following table:

State	Mileage	New construction	Maintenance
New Jersey	14.0	$ 852,000	$105,352
Pennsylvania	22.0	1,162,000	500,000
Ohio	19.5	507,612	.....
Indiana	10.0	294,746	.....
Illinois	51.0	2,180,000	.....
Iowa	21.0	571,845	71,700
Wyoming	237.5	493,200	37,136
Nebraska	29.0	527,822	.....
Utah (est.)	16.5	144,000	16,000
Nevada	65.0	745,845	7,867
California	2.5	51,321	63,836
Total	529	$7,470,490	$801,721

Total expenditures upon the Lincoln Highway in 1920, $8,272,211.

The progress made in bringing the Lincoln Highway from a dream in the minds of its founders, seven years back, to its present status, is summarized in the following table of yearly expenditures:

1914	$1,200,000
1915	2,580,380
1916	4,580,105
War (1917	2,500,918
(1918	2,996,107
1919	9,386,400
1920	8,324,624
Total	$31,569,094

ENGINEERS MEET FEBRUARY 18

The next meeting of the Detroit Engineering Society will be held at the Detroit Board of Commerce February 18. The speaker will be L. P. Alford, editor of Industrial Management, and his subject: "The Engineer in Industrial Reconstruction."

AMERICAN BRASS OFFICES

The Detroit branch office of the American Brass Company, Waterbury, Conn., has been removed to 455 Book building. Charles F. Craig is in charge.

Digitized by Google



It Laces A Belt In 3 Minutes

The CLIPPER Belt Lacer

Is a handy little outfit which is easily portable and which does a speedy, efficient job of belt lacing. The joint is snug, smooth, flexible and strong. Sent on trial, if desired. Covered by perpetual guarantee.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

Michigan Fire Losses in Five Years $43,767,928

THE National Board of Fire Underwriters through its Actuarial Bureau has just completed a five-year analysis of fire losses in Michigan. These figures, now for the first time made public, reveal the price which is paid by the state for public ignorance or carelessness in the matter of fire hazard. They are drawn from an exhaustive study of approximately 57,000 different fires actually reported upon by the insurance companies, and to the figures presented it is estimated that 25 per cent should be added to cover fires not reported to the Actuarial Bureau.

The causes are classified into three groups, of which twelve are listed as strictly preventable, with a total of $15,487,857, or 35.4 per cent of the whole; nine are designated partly preventable and total $18,683,374, or 42.7 of the whole, and beyond these are the unknown causes totalling $9,596,697, or 21.9 per cent. These unknown causes may be considered as probably largely preventable, since, if known, they would be distributed among the other causes.

Examining more closely, one finds that while exposure, meaning the spread of fires already started, takes the lead with a total loss of $5,255,973, the largest original cause of fire is that of electricity, with its toll of $4,573,567. Next after electricity the most destructive fire cause was stoves, furnaces, boilers and their pipes, $3,408,753; followed by defective chimneys and flues, $2,618,903 and spontaneous combustion, $2,600,206.

The complete table of five years' totals and yearly averages by causes is as follows:

Strictly Preventable Causes:	
Defective chimneys and flues	$2,618,902
Fireworks, firecrackers, etc.	61,266
Gas, natural and artificial	176,574
Hot ashes and coal, open fires	417,306
Ignition of hot grease, oil, tar, wax, asphalt, etc.	271,202
Matches and smoking	2,557,907
Open lights	2,480,819
Petroleum and its products	1,240,824
Rubbish and litter	102,949
Sparks on roofs	2,070,399
Steam and hot water pipes	60,155
Stoves, furnaces, boilers and their pipes	3,408,753
Total	$15,487,857

Note: In each of the above cases, preliminary inspection would have shown the element of danger, which then might have been easily remedied.

Partly Preventable Causes:	
Electricity	$4,573,567
Explosions	915,402
Exposure (including conflagrations)	5,255,973
Sparks from machinery	1,853,744
Incendiarism	1,830,665
Lightning	998,926
Miscellaneous known causes	677,221
Sparks from combustion	781,690
Spontaneous combustion	2,600,206

Note: It is estimated that at least half of the loss occasioned by electricity, sparks from fires, and spontaneous combustion was preventable, and that all the other causes had some degree of preventability.

Unknown causes (probably largely preventable)	$9,596,697.

Michigan stands ninth among all the states in losses from fire, and the totals quoted above should, as stated, be increased by about 25 per cent to cover losses not reported to the National Board of Fire Underwriters. Thus it will be seen that this state during the years 1915 to 1919, incinsive, paid $43,767,928, or a yearly average of $8,753,585 for the indulgence of the costly habit of playing with fire. If the huge five-year total of $43,767,928 could have been used instead of wasted, it would have built 8,750 houses at $5,000 each (sufficient to furnish homes for 43,000 people, or more than the population of Muskegon), or it would build 4,300 miles of good macadam roads at $10,000 a mile.

ST. LAWRENCE ROUTE REVENUE

Addressing the Detroit Engineering Society, at the Board of Commerce, last week, Prof. Gardner S. Williams, of the University of Michigan, said that while the cost of the Great Lakes-St. Lawrence ocean route engineering work would approximate $750,000,000, the sale of water power would bring an annual revenue of 15 per cent on the investment and the revenue from navigation rights would reach 7 per cent a year. Relative to methods of developing the route, Prof. Williams said that either the United States and Canada would unite in constructing it, or long-term franchises could be granted to private corporations. Potential water power available, he said, would release 60,000,000 tons of coal now used in the Great Lakes district, and that water power could be sold for $54 per horsepower per year, a much lower commercial rate than now in force.

HOLMES LUMBER CO. SOLD

The Arthur L. Holmes Lumber Company, Detroit—Gratiot, West Warren and Van Dyke avenue yards included—has been sold to Joseph A. Braun and Fred L. Lowrie. The name will not be changed. Mr. Lowrie is president of the F. L. Lowrie Lumber & Finish Company and Mr. Braun is president of the Braun Lumber Company.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 — Main 6602
680 Port St., E. DETROIT

Hughes
FACTORY EQUIPMENT
STRONG DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE - ALLEGAN, MICH.

PHOTOGRAPHER
STUDIO BUILDING
4836 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

NASH'S PRODUCTION SPURT

One of the most talked-of concerns in the automotive industry today is the Nash Motors Company, Kenosha and Milwaukee. Announcement that the company made more than 41,000 vehicles last year—37,263 passenger cars and 3,848 trucks—was not expected in many quarters, and it brings the Nash concern up among the half dozen big producers, of which Ford is the leader, followed by Dodge, Buick, Studebaker and Chevrolet. Overland dropped out of the van last year as a consequence of the strike which interfered with production for several months. Another concern which made an unexpectedly good showing last year was Franklin, which is classed among the first eight or ten largest producers.

STUDEBAKER OPERATIONS

Operations of the Studebaker Corporation, Detroit and South Bend, Ind., are said to be steadily progressing toward a normal basis. During the first three months of this year it is planned to make 12,000 cars and to increase this output probably one-fourth during the next three months, or even doing better if conditions warrant. Studebaker is now in a position where its production can be materially increased at any time, owing to the completion of the new South Bend plant. During the last year the Corporation made approximately 52,000 cars, which is 13,000 more than in 1919.

REPUBLIC RUBBER RESUMES

The Republic Tire Company, Youngstown, O., which had been closed for some time, resumed operations January 31 in its tire departments, also increased mechanical goods production.

SIMPLEX WIRE WHEEL RE-ELECTS

The Simplex Wire Wheel Company, Cadillac, has re-elected the old board of directors and officers: President, J. P. Wilcox; vice-president, W. E. Curry; secretary-treasurer, J. C. Ford. The other directors are J. B. Wagner, W. A. Kyser, C. B. Smith, C. A. Saunders, George J. Sandel and C. F. Williams. The concern moved to Cadillac from Detroit, where it was known as the Kol-Ben Wheel Company.

PRESSED STEEL PLANT ABOUT READY

President W. Ledyard Mitchell, of Maxwell-Chalmers, announces that the company's new pressed steel plant is about ready for manufacturing. The plant covers more than 217,000 feet of floor space and will supply all pressed steel for both cars. The main building contains two craneways each with a double row of presses, 300 feet long and each equipped with a crane capable of picking up any material or even the presses themselves and moving them to any other part of the building.

49,035 OWN GMC STOCK

It is announced that on January 10 stockholders of the General Motors Corporation numbered 49,035, as against 36,884 on October 5, 1920, and 26,136 on April 5, 1920.

ANOTHER NEW CLARK AXLE

Announcement is made that a new motor bus axle of the internal gear type has just been placed in production by the Clark Equipment Company, Buchanan. The first model in production is that for a single deck, 20 to 30-passenger motor bus, to be equipped with solid or pneumatic tires. All models of this bus axle will use standard stock parts. The design provides for a low body with a minimum number of steps, insuring a low center of gravity and providing maximum road stability.

This new Clark product is designed so that a low-hung body may be used without loss in the seating capacity. Added efficiency in bus construction is obtained when a drop frame is used in connection with the Clark axle, permitting the use of underslung springs. The axle is light.

The company announces that while the model of the 25-passenger bus axle has been put into production first, it is prepared to turn out units up to the largest size; in all of which standard stock parts are used as the load carrying member, drive shafts and differential.

GOODYEAR GAINS 50%

Vice-President G. M. Stadleman, of the Goodyear Tire & Rubber Company, Akron, O., has announced that business of the company during January increased more than 50 per cent over December orders and that as soon as the refinancing arrangements of the company have been completed it will be necessary to increase the output more than 100 per cent, or to 18,000 a day.

GOVE SAID TO BE ABOUT READY

From Brighton comes the report that the Gove Motor Car Company expects to have its factory in readiness for production within 30 days and that assembling of the first Gove cars will be started early in March.

MULLINS BODY PROFIT $701,290

The Mullins Body Corporation ended 1920 with a net profit of $701,290 and after deduction of preferred and common dividends, had a surplus of $211,920. Net sales amounted to $3,711,420.

FIRESTONE INVENTORY, $37,273,000

Inventories of the Firestone Tire & Rubber Company, Akron, O., on January 1, 1921, totaled $37,273,873, as compared with $26,369,535 in 1920. Materials on hand, in transit or in process totaled $21,168,140. On January 1, 1920, the amount was $11,217,872. Finished products show only a slight increase, the total this year being $16,105,733, as compared with $15,751,662 last year.

INTERNATIONAL MOTOR TRUCK

The last year was the best in the history of the International Motor Truck Corporation. Seven thousand twenty-five trucks were sold, as compared with 4,604 in 1919 and 3,829 in 1918. Sales of trucks and parts will show a total of about $35,000,000, says the Wall Street Journal, as compared with $22,123,951 in 1919 and $19,641,572 in 1918. "Last August," says the newspaper, "anticipating the falling off in business, the management readjusted its production schedule from approximately 700 trucks to 500 trucks a month. For the first quarter of 1921 the company has again readjusted its production schedule, this time to an amount less than the number of orders which it expects to receive. The volume of orders received has been fairly uniform since September and has averaged 562 a month. Deliveries to customers, since August, have been slightly less than 500 a month."

DURANT STOCK MOVES UP

There has been some comment in automobile trade quarters concerning the upward movement of the stock of Durant Motors. The sub-

Digitized by Google

scription price was $10 a share and the trading a few days ago brought the shares up to 18⅛. The first of the Durant cars are expected to be out next August. Very little has been learned officially as to the company's production plans.

STEWART-WARNER PROFITS

Net profits of the Stewart-Warner Speedometer Corporation, Chicago, for 1920, amounted to $2,728,472 before taxes, as compared with $2,331,915 in 1919.

MICHIGAN COMITTEEMEN

The Motor and Accessory Manufacturers' Association announces that the following Michigan men have been named members of committees: Executive—E. P. Hammond, Gemmer Manufactnring Company, Detroit; A. W. Copland, Detroit Gear & Machine Company, Detroit. Finance—Messrs. Hammond and Copland. Show and alottment—C. H. L. Flintermann, Detroit Pressed Steel Company, Detroit. Banquet—Messrs. Hammond and Flintermann. Membership—A. W. Copland, chairman; G. W. Yeoman, Continental Motors Corporation, Detroit; Fred Glover, Timken-Detroit Axle Company, Detroit.

MOTOR WHEEL MEETING MARCH 1

The annual meeting of the Motor Wheel Corporation, Lansing, will be held in the office of the Prudden unit, March 1, at 2 p. m., for the election of directors. The meeting was postponed from the third Tuesday in February.

MAURICE J. MOORE DIES

Maurice J. Moore, secretary and treasurer of the LaFayette Motors Company, Indianapolis, died February 1 as the result of acute dilation of the heart, following an operation on his knee a week before. He was 35 years old.

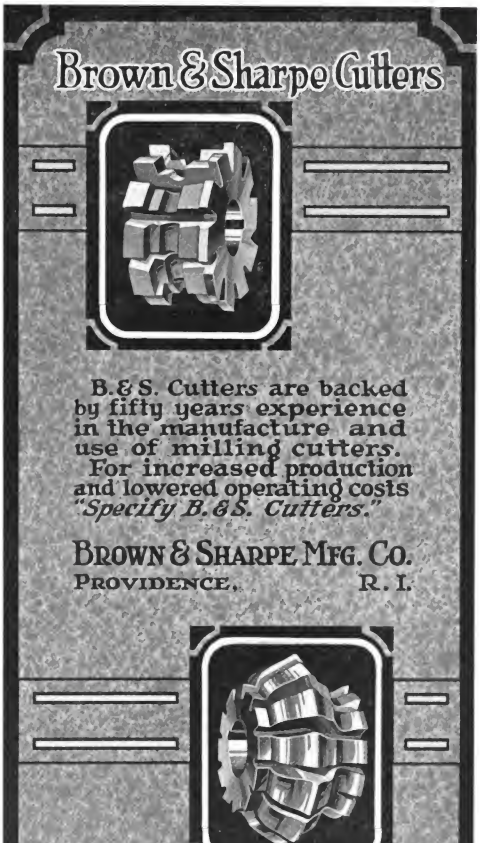
Mr. Moore had held the position of secretary and treasurer of the LaFayette Motors Company since the corporation's inception in 1919. He was also president of the LaFayette building Company and was largely responsible for the building of a colony of homes for LaFayette employes near the LaFayette plant. He was formerly connected with the Northway Motor & Manufacturing Company, Detroit, and was at one time comptroller of the Chevrolet Motor Company, Flint. During the war he was disqualified for overseas service by the affected knee, injured in a football game several years ago, but performed an important service as captain in the Motor Transport Corps, in charge of finance, accounting and settlement of claims under the Motor Vehicles Divison.

AUTOMOTIVE EXPORTS INCREASING

According to a report issued by the United States Department of Commerce, there is a steadily increasing market for American motor cars in countries outside of Europe, which will help in stabilizing the industry. In 1919, during a period of 11 months, 14,104 commercial vehicles were sold abroad, of which 3,453 were sold in France. This country was the best customer for American trucks. When France put on the 45 per cent tariff, the number of trucks sold in 1920 was only 135, but, all told, foreign sales of American cars reached $43,168,368, an increase of more than $10,000,000 over the sales of 1919. Great Britain became the best customer. While truck sales in the United Kingdom in 1919 amounted to $811,299, in 1920 the business increased to $7,277,665. Also the United Kingdom bought 20,096 passenger cars, compared with 5,021 in 1919.

NEW DORT SALESROOM OPENED

The new salesroom of the Baker-Fisk-Ifugill Company, 3934 Woodward avenue, Detroit, was formally opened this week and the 1921 Dort models exhibited.



Digitized by Google

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

Collections of Every Kind and Size

T A C T F U L L — PERSONAL COLLECTION SERVICE for Manufacturers and Dealers Business and Professional Men — E F F E C T I V E

Write ——— For Interview ——— Phone

B. APPLEBY Dist. Mgr.
1019 Dime Bank Bldg., Detroit Main 3361

"Results or No Pay"

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building
524 Griswold Street

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks
Investment Houses
Trade Associations

IRENE WILLIAMS
101 South Michigan Avenue
CHICAGO

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Detroit—Boards of commerce of Michigan, Wisconsin, Illinois, Indiana, Ohio and Minnesota have united in a campaign to urge Congress to modify the Seaman's Act so far as it applies to inland waters, and particularly the Great Lakes. A meeting of representatives from states bordering on the lakes was held at the Detroit Board of Commerce, last week. It was decided to have a general meeting in Detroit in April and draw up tentative amendments to the law and then send a delegation of 100 men to Washington to appeal directly to the legislators for a change in the laws. It is contended that the act is driving ships from the Great Lakes or forcing abandonment of many ports of call.

Washington—The New York Central Railroad Company has been authorized by the Interstate Commerce Commission to issue $7,000,000 of refunding and improvement mortgage bonds to be pledged to the director general as security for a demand note for a similar amount for additional improvements during federal control. The bonds are dated April 1 and mature October 1, 2013.

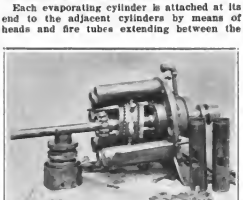
Detroit—General Agent Harris announces the Lehigh Valley freight service has reverted to pre-war schedules and that 24 hours have been clipped from the running time between western cities and New York and Philadelphia. Freight shipped from Detroit will arrive in New York or Philadelphia on the third morning, with similar shortening of delivery time for westbound freight.

Something New in Steam Engines

(*Continued from Page 10*)

turbing the other units and the other units may be used to make steam after one has been removed. The boiler flues consist of 48 pieces of 2½-inch seamless steel tubing, each 24 inches long. This makes the flues 96 feet in total length. Inserted in each fine are 13 steam and water tubes of ½-inch seamless steel tubing, a total of 624 feet, and giving approximately 150 square feet of heating surface.

Each evaporating cylinder is attached at its end to the adjacent cylinders by means of heads and fire tubes extending between the



Reagan engine partially assembled, showing the cylinders with slots, flexible power ring with ball bearings, roller end thrust bearings and one of the two rotating steam valves.

heads. Connecting steam and water mains extend along one end of the boiler near the tops and bottoms of the units, and the units are connected with these mains.

The boiler includes a novel superheater. Connected at one end of the steam main is a conduit, which extends back and forth above the boiler units and then down to the space below the units and back and forth above the burner. Thus the steam is heated to a high temperature.

There is what is claimed to be an exceedingly efficient injector device whereby, when used in motor vehicles, water may be injected automatically into the boiler when the vehicle is going down hill and cut off automatically when the vehicle returns to level or goes up hill.

This consists of a water float and needle valve, which are actuated through connections with the evaporation cylinders and which are connected through a tube with a spring and piston actuated valve which controls the water supply. Thus when the vehicle goes down grade, the needle valve is closed by the change in position of the float, the steam pressure from the evaporation cylinders is cut off, the pressure on the piston of the water supply valve is removed and the spring opens the valve. When the vehicle returns to level or goes up grade an opposite action takes place and the water supply is cut off. When the water gets low in the boiler the injector acts automatically in the same manner.

A perforated plate burner is used with this generator, with a superheater that turns kerosene oil into coal gas. The generator burns about a gallon of oil an hour while in full operation.

The generator has been tested to 900 pounds pressure, cold water test, but carries only 450 pounds working pressure.

Mr. Reagan started work on the development of his engine and generator in April, 1917. The Allied Die Casting Company built the first engine for him and it was tried out at the

(*Continued on Page 35*)

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

MAIN 1491

SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4115 AUDITS SYSTEMS COSTS

INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for
CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.
TOLEDO EXPRESS—4:20 a. m. and every two hours to 6:20 p. m.
JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.
JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.
FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.
IMLAY CITY LIMITED—3:15 p. m.
PORT HURON—6:10 a. m. and every two hours to 9:10 p. m. Sundays only, 11:00 p. m.

$10,000 EXECUTIVE WANTED
To Take active part in local manufacturing corporation. Must be high-grade and possess thorough knowledge of factory systematizing and cost-accounting. Should be able to buy a few thousand dollars' worth of stock so as to become an officer and director. Exceptional opportunity. Reply considered confidential. Address K. K., care Michigan Manufacturer and Financial Record.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—Plans are being made for the erection of the largest store and office building in Lansing, on the site of the American Savings Bank structure, destroyed by fire recently. The Dancer-Brogan Company has closed a 99-year lease with W. K. Prudden for the property, and with the J. W. Bailey Company will put up a building at least 10 stories high. The cost, it is estimated, will be about half a million dollars. A building company will be formed and work will be started early in March, to be completed ready for occupancy about June 1, 1922. The structure will be known as the Prudden building.

Detroit—Two hundred and thirty-five permits were issued during the week ended February 5, involving an expenditure of $763,360, as compared with $934,680 for the preceding week and $1,562,755 for the corresponding week in 1920. While the total for the week was lower, there was an encouraging feature, namely that most all of the money represented was for new construction. There were 154 permits for new work, entailing an expense of $666,565, and 81 permits for repairs and alterations, to cost $96,795.

Adrian—No new buildings were contracted for during January, but four permits were issued for repair and remodeling work, entailing an expenditure of $4,750. This is $3,750 in excess of the amount spent in 1919 and in 1920, when only one building permit was issued during January.

Pontiac—The 34 building permits issued during January involved $34,933, while during December nearly $14,000 more was expended for buildings and repair jobs.

Saginaw—There was a considerable decrease in building operations in the city during January as compared with a year ago, from the monetary standpoint. The number of permits issued was 49, or five more than in January, 1920, but the expenditure involved totaled $25,694, as compared with $52,415. Of the 49 permits, 24 were for garages and 16 for alterations and repairs.

Kalamazoo—During the week ended January 29 five building permits were issued, the expenditure involved being estimated at $12,600. Last winter during the corresponding week a single permit was issued, involving $1,000.

Detroit—Data from the city building department shows that during January 813 permits for new buildings were taken out, as compared with 536 in January, 1920. However, the cost this year is $3,095,964, as compared with $5,093,855 last year. There were also taken out 305 permits for repairs or alterations, involving $885,979, as compared with 150 permits, involving $564,975, a year ago. Thus the money total for January was $3,981,343, as against $5,658,830 in January, 1920.

Jackson—Twenty building permits were issued during January, and mostly for minor work, such as alterations and repairs, the total involved being $14,060.

Adrian—The Andrix Lock-Nut Company will build a plant addition, 50 by 50 feet in dimensions.

Detroit—Among the contracts awarded by architects, according to the announcement of the Detroit Builders and Traders' Exchange, during the week ended February 3, were the following: A two-story store, flat and office building to be erected at Oakman boulevard and Glendale avenue; a one-story bank building for the Merchants and Mechanics Bank, in Hamtramck; a private bank building to be located at Junction and Michigan avenues, and a one-story addition to the Children's Free Hospital. Among the more important projects from offices of architects are the following: A two-story brick residence and garage; a brick and steel 31-family apartment; a two-story stone residence; an eight-steel, eight-apartment building; a two-story brick and steel recreation building; a brick, steel and stone church edifice to be erected in Highland Park; a three-story, brick and steel school, and a brick and steel intermediate school.

Grand Rapids—Permits issued during the week ended January 27 totaled 27 and the expenditure involved $47,850. This is three times as much as the outlay for the corresponding week a year ago. The biggest item in the list is for a $27,000 addition to the factory of the Grand Rapids Chair Company.

New York—The American Contractor states that according to its 1920 compilations of building activities in 194 of the larger cities of the country, 417,287 building permits were taken out and that the expenditure represented was $1,511,489,459, while in 1919 the money spent was $1,428,423,683. The increase was thus 6 per cent.

Jackson—Bids on the new Seymour school building and the addition to the Bennett school will be opened March 17. The school board has approved revised plans for the Seymour building. For this job bids will be asked on the complete work and also on the building with the third floor left unfinished.

PACKARD ADDS 1,000 MEN

Simultaneously with the payment of its regular quarterly preferred dividend to stockholders, Thursday of this week, the Packard Motor Car Company, Detroit, announced that owing to the increase in sales and the improved outlook for spring business, it was adding 1,000 employes immediately.

BUYS TRAINLOAD OF REOS

That the early spring buying season is opening satisfactorily in the automobile trade is indicated by the order for a trainload of automobiles for immediate shipment placed with R. C. Reuschaw, sales manager of the Reo Motor Car Company, by George McFarland, president of the Harrisburg Automobile Company, Harrisburg, Pa., during the Chicago Automobile Show. Mr. McFarland visited the New York Show as usual and ordered his full allotment of Reo passenger cars and Speed Wagons for January, which was shipped him. The buying season opened so vigorously in his territory following the eastern show during the second week of January that he realized the necessity of obtaining increased shipments that he might be prepared for the spring rush. The result was Mr. McFarland's trip to the Chicago show and his trainload order for February shipment.

ROBINSON NEW BANK EXAMINER

E. Robert Robinson, Grand Rapids, formerly a state bank examiner under Commissioner Merrick, has been appointed a national bank examiner attached to the Seventh Federal Reserve District, with headquarters in Chicago. Robinson is well known in Grand Rapids financial circles, having sat one time been connected with the National City Bank, which he left to become an assistant national bank examiner before joining the Michigan force.

Digitized by Google

MR. HATHAWAY CORROBORATED

A reader who took notice of the remarks of P. R. Hathaway, of the Michigan Sugar Company, before the ways and means committee of the House of Representative, as outlined in this paper January 29, writes as follows:

"We wish to say during the last year the Internal Revenue Department at Washington sent us so many requests for duplicate reports on income tax for 1917 and 1918 that it has got to be a regular nuisance. We are evidently not alone in this annoyance, and the sooner the matter is remedied the better it would be for all concerned. It practically takes one-third of our bookkeeper's time to answer these questions."

MICHIGAN BUILDERS ORGANIZE

Builders and contractors of Michigan held a two-day session in Lansing last week to promote closer co-operation. They decided to go ahead this season on the American plan of employment, to endeavor to lower the costs of construction and formed a preliminary organization. In the matter of wages the state will be apportioned into sections, with a minimum scale set for each. A board of governors will be named to select officers and administrators of the association. During the meetings the builders were entertained by the Novo Engine Company and H. G. Christman Company.

PRODUCTION FOUNDRIES CO.

Although no definite announcement has been made, the Production Foundries Company, Ann Arbor, is expected to resume within a short time. W. O. Adams, plant manager, is quoted as saying that the work at first will consist of filling general orders, and that the output will be considerably increased when resumption of operations at the Ford Motor Company's tractor plant takes place, for the company has orders on hand from the Ford plant. It is expected that within the next few weeks production of the Ann Arbor concern will have progressed to about 50 per cent of normal. When operating normally the plant employs about 150 men.

U. OF M. HIGHWAY CONFERENCE

Under the auspices of the permanent committee on highways and highway transportation education of the University of Michigan, and the state highway department, a mid-western conference on these subjects will be held at Ann Arbor, February 23.

Included the speakers are: Dr. P. P. Claxton, United States commissioner of education; Prof. C. J. Tilden, Yale University; Roy D. Chapin, Detroit; Harriet E. Beard, Detroit; Thomas MacDonald, chief of the United States Bureau of Public Roads; Col. Mason Patrick, corps of engineers, United States Army; Charles Bennett, Connecticut state highway commissioner; Thomas Snyder, secretary Indiana Highway Transport and Terminal Association; A. R. Kroh, Goodyear Tire & Rubber Company, Akron, Ohio, and William C. Reefield, former Secretary of Commerce.

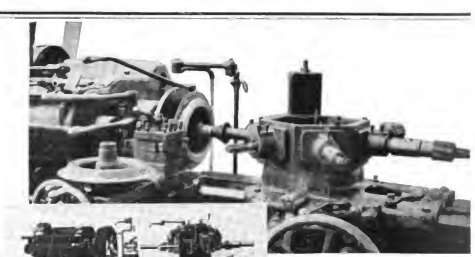
Among the faculty of Michigan on the program will be President M. L. Burton, Dean M. E. Cooley, Prof. H. E. Riggs and Prof. Arthur Blanchard.

NEW LANSING CO. FACILITIES

The new warehouse and sales office of the Chicago branch of the Lansing Company, Lansing, have been fully established at 1535-1537 State street. J. Fred Schultz, formerly of Lansing, is manager of the branch. The warehouse is 50 by 150 feet, four stories and a basement.

GLOBE CASKET ELECTION

The Globe Casket Company, Kalamazoo, has elected George E. Bardeen, president; Woodbury Ransom, vice-president; H. E. White, secretary and general manager, and Charles A. Peck, treasurer.



A Malleable Iron Pressure Ring (12¾" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x 44"—21" Swing to ⅝"x 4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office—**Ford Building**
Chicago Office—**618-622 Washington Boulevard**
Milwaukee Office—**209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY, FEBRUARY 12, 1921

The Proposed Corporation Tax

THE GOVERNOR of the state is credited with the proposal that a new source of revenue shall be found for the purpose of meeting the rapidly increasing demand for money by the state government. The form which this new levy shall take is a tax on corporations. The particular species of tax is not definitely stated by those who have given out the program, but the indications are that it is to be a corporation profits tax, from the amount which it is proposed to levy and the graduations which are described as a part of its operation. The only definite thing which has been put out about the measure is the deception of the public which has been practiced by the newspapers, whether wittingly or ignorantly, as to the present tax-paying status of the corporations of the state. From what has emanated from Lansing, the average uninformed citizen—and the average citizen is uninformed—would be led to believe that corporations pay no taxes at all nowadays. An insignificant figure of their contributions to the state treasury has been published, this amount being probably the aggregate of franchise fees paid by the corporations of the state upon the filing of their articles of incorporation.

As a matter of fact, corporations of this state pay taxes on all their real and personal property, on an assessment more nearly approaching their true cash value than any other taxpayers. Their annual reports contain statements of their property holdings which are made on the theory of putting their best foot forward. These reports are made, first of all, to comply with the law, and, secondly, for credit purposes. Under the circumstances, the highest property values carried on books are reported. Forthwith these reports are conned by the assessing officers of the larger cities, where the greater number of the corporations are taxpayers, and used as a basis of local assessment. How many corporation officers seeking relief from what they consider overassessment of the corporate properties, are confounded with their own sworn statements taken from the annual reports!

In addition to paying taxes to the state and its various municipal subdivisions, the corporations of Michigan pay an enormous sum to the federal treasury for income taxes. In 1919, the latest year for which complete figures have been compiled, 5,951 corporations in Michigan paid corporation and excess profits taxes aggregating $143,175,293 on incomes earned in 1918. The figures for 1920 were very much larger, according to the casual reports which were made from time to time by the internal revenue collectors. It may be interesting to note that the income taxes of corporations in Michigan for 1918 were 42.5 per cent of their net incomes, while, under the peculiar operation of the federal tax law, private incomes aggregating $415,313,164 produced but $22,336,385 of taxes, or about 5.5 per cent of their total. Thus the discrimination shown by the operations of the federal revenue laws against corporation income and in favor of that realized by individuals and made subject to taxation under the law is very great. The earnings of capital invested in corporations are made to produce nearly eight times as much as similar income from investments and operations of individuals.

When some years ago Gov. Osborn proposed a corporate excess tax law, the same process of discrimination was its informing feature. A corporation, having a given capital, doing a given business and producing a given net revenue, would have been taxed heavily under that proposed measure, while an individual non-corporate owner, employing the same amount of capital, doing the identical amount of business and realizing an equal net profit, would go scot-free of the proposed discriminatory corporate tax.

It cannot be held that such a procedure would effect a heavier levy of taxes upon the wealthier citizens of the state. The corporation, as a rule, has a capital that is provided by a large number of shareholders of more or less uniformly small means, while the individually-held property must of necessity be the possession of capitalists of large wealth.

Michigan stands sixth today in industry as compared with its sisters states of the Union, or at least she did so stand prior to the present cessation of industrial activity. The favorite method of industrial development has been through assemblages of capital in corporate form. If further discriminations in taxation are to be made against the corporate industrial operator, it cannot be very long until investments made in that form must become unpopular and the supply of capital available for industry under the protection of corporate limitations of liability must shrink. This consequence would be harmful to the growth of industry, and the future growth of Michigan depends on the extension of industry. We have already heard enough from the captains of industry in the country about the evil results of the continuance of a discriminating tax system, devised for war purposes, beyond the period of the war and into conditions of peace. The addition of a state system having the same demerit could certainly have none other than similar harmful effects.

The corporation tax proposed by the administration has another bad side. It would levy the bulk of the taxes produced by it in the industrial cities, thereby relieving the general properties of the state from their share of the burdens of government. Such a plan as is proposed today would derive 60 per cent of its income from Wayne county alone. It would probably derive 90 per cent of its product in taxation from the counties of Wayne, Kent, Saginaw, Bay, Genesee, Oakland, Jackson, Calhoun and Kalamazoo. Such a distribution of the burdens of the state's government would be bound to be sectional. With the bulk of the income derived from the industrial counties of the state, and the bulk of the votes which determine the expenditure of state revenue coming from the agricultural counties and those possessing only small village industrial centers, it would not be long before the farmers would be making ducks and drakes of the state's revenue. Taxation without representation and expenditure of public money without responsibility to the territory from which it is derived are hardly conditions which Michigan should care to encourage in this day and generation.

The great sense of Michigan should find expression on the matter of state taxation in a clarion call for the reduction of state expenditures rather than in their increase. It is the most arrant nonsense to say that the growth of the state and the enlargement of the functions of government are calling for the tremendous increase in state expenditures that is proposed this

Digitized by Google

year. The net income of the state is becoming so shrunken between bad business conditions and increases of state and federal tax levies that our ordinary and necessary accrual of new capital for normal growth has become interrupted. We read that in the lowered proportion of increase of commercial and savings deposits which our consolidated bank statements show. Let us be careful that we do not read it further in a reduction of the opportunities of employment in Michigan, reflected by the diminution of industry.

Hoist by Their Own Petard

THE USUAL—and entirely sound—arguments against the eight-hour bill introduced in the Michigan legislature will be advanced. It will be contended that in these times of business readjustment every man who wants to work ought to be encouraged to work, with no limitation on his efforts, and that no artificial conditions should be set up whereby the cost of producing the necessities of life will be increased. It seems to us, however, that most of the opposition to the measure ought to come from workingmen themselves.

The reason for their opposition will be found in the developments that will follow the enactment of such a statute. When the demand for manufactured commodities becomes normal again and the factories are hard put to it to turn out enough goods to fill their orders, more than eight hours of daily work probably will be necessary. With an eight-hour law in effect, is the employer going to pay the time and a half overtime fixed by the statute? He may in some cases and under certain conditions, but the majority of manufacturers will adopt the more economical procedure of putting on more than one eight-hour shift, operating their plants sixteen or even twenty-four hours a day and paying their men regular time rates only. The result will be that the prospect of overtime will fade from the view of the very interests seeking to obtain it by statute.

From another standpoint, eight-hour shifts would be advantageous to manufacturers who found themselves overstocked with orders, in that they would make possible a reduction of interest, rent and certain other fixed charges and effect a saving in investment in equipment. Why let the machinery lie idle sixteen hours a day, when it might work sixteen or even twenty-four? Or, why install more when the present equipment will suffice if operated more steadily?

Another One

HOUSE BILL NO. 100 provides that no person may be employed upon any public work by any municipality or by the state or its departments unless such person has resided in the state at least six months. The proponents of this measure probably have in mind the present unemployment situation and desire to sew up public improvement jobs for Michigan workmen. If the slack period were likely to last any great length of time, the proposal to give such work to home people exclusively might not be so bad, but when the outlook is that by the time weather conditions are such as to permit the resumption of improvements, industrial conditions will have recovered in a measure sufficient to bring most of those now idle back into the factories, legislation such as this bill proposes becomes harmful. With the current oversupply of labor absorbed, the state and the municipalities would find themselves hamstrung by the inhibition against allowing contractors to import labor, with the result that public improvements which now too long have been held up by money conditions and other difficulties would be further delayed.

The bill ought to be defeated.

Have You Signed Your Waiver?

A CORRESPONDENT has submitted for inspection a letter received from the Bureau of Internal Revenue, at Washington, which invites his company to sign a waiver of the necessity of the revenue department's auditing the 1917 returns by March 1, 1921, as provided by law. The waiver reads in part as follows:

"In consideration of the assurance given it by officials of the Income Tax Unit of the Bureau of Internal Revenue that its liability for all federal taxes imposed for the year 1917 shall not be determined except after deliberate, intensive and thorough consideration,——————hereby waives any and all statutory limitations as to the time within which assessments based upon such liability may be entered." Boiled down, the proposition is about as follows: We are unable to audit your 1917 returns as provided by law, and therefore ask you to extend the time for us and to continue your liability. If you do not do so, it may be necessary to audit your return in a hurry, in which event it may cost you more or perhaps less than it should.

Manufacturers with a lofty spirit of willingness to support the government may feel inclined to co-operate, but in view of the methods of the bureau often complained of, one would hardly blame a man for not signing the waiver.

Short Measure Stuff

VALENTINES

From us to the Police Commissioner

You may be my valentine
If your efforts don't relax,
And keep the bandits off my trail
Till I've paid my income tax.

—

Gov. Groesbeck to Warden Fuller

I don't like some of the things you've done,
I want your job for a friend of mine.
So if you will kindly ring in your time,
Why then I will be your valentine.

—

Dr. Burton to the State Legislature

Our school is too small and it's wearing out,
A bunch of new buildings would be just fine.
So you may present us, if you please,
With an eight million dollar valentine.

—

"Gus" Schantz to the Boys

This year I cannot run my boats
As far as Mackinaw,
Unless I get a valentine
That kills the seaman's law.

* * *

WINE LID OFF, IF DOC SAYS SO

—Newspaper Headline.

"I can feel myself slipping," moans W. P. M. "I just know I'm going to suffer a relapse."

* * *

A Detroit woman is suing a physician for loss of a leg. Maybe he pulled a little too hard.

* * *

Burbank has grown some beardless barley,
And science sets up quite a cheer;
Yet there was not a murmur, hardly,
When we home brewed some hirtless beer.

* * *

The man who invented Lent was the original "back to normal" advocate.

* * *

LONGING

The birdies soon will sing again,
Which surely will be nice;
For nothing gives me such a pain
As this here snow and ice.
—Youngstown Telegram.

Oh, snow and ice are very nice—
I like to bob and skate;
But pavements flush with melted slush
Them is the things I hate.
—Penelope in Cleveland Plain Dealer.

The wintry winds fill me with pep,
Oh snow and ice I dote;
But girls exposed from knees to toes
That there's what gets my goat.

* * *

Looked that old straw hat over yet?

—A. F.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

IT IS VERY EASY these days to find plenty of sentiment and prediction expressed according to the wish of the prophet rather than according to Simon pure belief. As a man who has something to sell that cost him more than present prices will bring and he will tell you that the price adjustment has run its course and that we may expect an upturn rather than a further drop; but dig out the man who is out of the selling market—which species of man is, of course, rare at present—and he will tell you a different story. In fact, there is much in the present attitude of business men that may be compared with the mental state of a man convalescing from a severe illness—the fever has passed, the crisis is over and the mind is normal, but the body is at that state of recovery where long days of rest and quiet recuperation are necessary. The patient in the case, moreover, is a pretty husky proposition and will be hard to hold down, but Dr. F. R. Board gave out some pretty sound warning about a year ago which the patient now has begun to think about; and what is more pointed, the new doctor saved the country from undergoing a serious operation. More than likely, therefore, the patient will heed "doctor's orders" for the time being.

Our home situation is good. Comparatively it is better than many of us realize, and the figures of clearings, borrowings and deposits go quite a way toward proof of it. Detroit clearings for the week ended February 9 were $76,606,462, compared with $101,049,806 for the same week a year ago. Take off the latter figure an amount ranging from 25 to 30 per cent due to lower prices—say the difference is only 15 per cent, or about $15,000,000, which would make the comparison ratio 76 for the week this year, against 85 a year ago and the decrease in volume of transactions as represented by clearings is nowhere near the decrease that might be expected as a result of the supposed falling-off in business.

Bank deposits, as this is written, are resisting nicely the downward abrupt tendency of the period around the holidays, and borrowing of banks, as shown by the statements of the Chicago Federal Reserve Bank, are letting up. On December 30, 1920, the banks of the Seventh District owed the Chicago bank $475,000,000 in borrowed money obligations, whereas the total on February 4 was $369,000,000. Taking the combined returns of the Reserve Banks into consideration, the figures for February 4 show a desirable improvement over the previous week. Members' loans and rediscounts decreased $23,000,0000, circulation decreased $15,000,000 and members' deposits went up $28,146,000; and a further agreeable trend to be noticed is that the southern and western Reserve Banks are taking back part of the paper previously rediscounted with Boston, Cleveland and Philadelphia Reserve Banks. Even San Francisco had enough surplus to justify its taking $15,654,000 of paper for New York.

It is a singular circumstance, in view of the tendency shown by nearly all the other Reserve Banks toward an increase in reserve ratios, that the New York Reserve Bank continues week after week as a tail-ender in this respect. On reviewing reports since December 30 it appears that on only two occasions did any other Reserve Bank bring up the rear in the matter of reserve ratios, and the exception in each instance was Minneapolis, which beyond doubt may justify over-extension of credit, if any, by the delicate banking situations within its province. But New York, which, by the way, represents nearly 30 per cent of the combined federal bank resources ($1,707,634,000 or assets as against total assets of the system of $5,849,053,000 on February 4) continues as a laggard. Our esteemed contemporary, the Commercial & Financial Chronicle of New York, devoted much space some months ago in an effort to discourage peak load credit undertakings by the New York Reserve Bank, and if the present ratio has been brought about by unnecessary original credit granting in New York, it would seem to be about time to begin the campaign anew.

As predicted in these columns January 1, there came a fair sized revival during January, and it has extended well into February, notwithstanding the continuance of weather which does not help the clothiers. It is the more remarkable therefore to note quite a pronounced improvement in the textile industries. But on the whole, while the general trend is upward, there are spots of resistance here and there that must be disinfected before we may expect any extended gains. The chief of these is the railroad conundrum. In spite of rates nearly double pre-war figures, we are treated with every report to an exhibit of diminishing returns. It would be a blessing provided the experiment could be made without holding up business, if a section of the roads could be turned over to the union managers "as is," financially and physically, with the stipulation that they run the roads without further government or private financial assistance for a period of six months, and with a distinct provision that the unions make good any losses or take any gains over 6 per cent after all expenses. The reader may draw his own conclusions; imagination needs but little fertilizer to picture results.

There is one event locally that tends to prove that some workers are sure that business has fully recovered, and that is the strike at the Fisher Body plant. A discerning business man interprets the workers' action to mean that they think business so good that they can afford to walk out.

M'CORD BOOK VALUE $26 A SHARE

Company's Difficulties Due to Plant Expansion, Followed by Business Slump; Little Danger of Loss

DETROIT business suffered a mild shock early in the week when bankers interested in the McCord Manufacturing Company issued invitations to creditors to attend a meeting at the Board of Commerce on Friday, February 11, for the purpose of appointing an advisory committee of creditors to determine the future policy of the company.

Investigation, however, reveals that there is small likelihood of any loss either to creditors or stockholders if arrangements proposed by the committee can be carried out at once. It is known that the chief difficulties have arisen because of unprofitable operations of the West Pullman plant, the auditors' preliminary report exhibiting enough of a loss here to wipe out the ample profits at the other plants. Parties close to the situation express the conviction that the disposal of this one enterprise (West Pullman) will remove the chief obstacle in the way of profits.

It is noteworthy that net profits for 1920 of $34,000 were made nootwithstanding the losses and after paying out $400,000 in dividends during the year. An item of $635,000 representing inventory reduction to market brings the net gain down to a minns figure of $601,743 for the year. But on the basis of the preliminary statement, and collections and reserves all taken out, there remains a book value of $3,290,000 surplus applicable to 125,000 shares of common stock, or $26 a share. The situation viewed from all angles is the familiar result of the sudden business recession of last year. Like many other manufacturing companies, McCord was spurred on by a desire to catch up in facilities for prodnction with the insatiable demand for goods, and the slump caught it with large property and inventory account, small cash assets and a too large borrowed money liability. There is a large surplus in property assets over the funded debt and ample inventory and current assets to cover liabilities of all kinds if creditors will accept the situation and get behind the bankers' movement to work it out deliberately. A rush to force collection will avail little. For comparison we present an approximated statement:

Assets	Dec. 31, 1920	Dec. 31, 1919
Cash	78,000	$ 380,000
Government bonds and notes		21,000
Accounts receivable	1,201,000	1,691,000
Inventory	4,166,990	3,442,000
Plant and permanent assets	5,403,000	5,369,000
Other assets	335,000	524,000
	$11,783,000	$11,627,000
Liabilities		
Preferred stock	$ 1,325,000	$ 1,243,000
Notes payable	3,588,000	1,602,000
Accounts payable	1,374,000	1,126,000
Funded debt	1,957,000	2,174,000
Other liabilities and reserves	249,000	959,000
Surplus for common	3,290,000	4,523,000
	$11,783,000	$11,627,000
Sales for 1920		$14,829,000
Less cost	$12,784,000	
Overhead and miscellaneous	1,034,000	
Other costs	483,000	
		$14,286,000
Net		$ 34,600
Less adjustment of inventory to market		635,000
Deficit		$ 601,000

The bankers committee is comprised of the following: Frank G. Smith, vice-president, First and Old Detroit National Bank, Detroit; W. L. Dunham, vice-president, Dime Savings Bank, Detroit; John Fletcher, vice-president, Fort Dearborn National Bank, Chicago; Ralph Van Vechten, vice-president, Continental and Commercial National Bank, Chicago; H. E. Otte, vice-president, National City Bank, Chicago; Owen T. Reeves, Jr., vice-president, Corn Exchange National Bank, Chicago; Averill Tu-

Digitized by Google

den, vice-president, Merrill, Cox & Company, Chicago; Walter Kasten, vice-president, First Wisconsin National Bank, Milwaukee; J. H. Puelicher, president, Marshall & Ilsley Bank, Milwaukee; O. W. Johnson, president, Manufacturers National Bank, Racine; David G. Janes, president, First National Bank, Racine.

Current Investment Offerings

HALSEY, STUART & COMPANY, DETROIT

Name	Rate %	Maturity	Price	Yield %
Public Service Co. of Northern Illinois collateral notes	6	9-1-22	96.37	8.60
Southwestern Bell Telephone Co. notes	7	4-1-25	96.50	8.00
Province of Saskatchewan	6	1-15-26	96.10	7.15
State of South Dakota Highway and Rural Credit	5½-6	1-15-31 36-41		5.40-5.70
State of Washington General Fund bonds	5½	2-1-41 Opt. 1931	102.70	5.15
Gulf Oil Corporation 12-Year Sinking Fund Debenture bonds	7	1923	98.00	7.25

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6	24-30	....	7
The Bemb-Robinson Co.	6	26-27	....	6
Carpathia Singing Society	5	23-25	....	6
Wm. E. Johnson	5	21-25	....	6
Chas. Steinberg	5	1922	....	6

PRESTON, DAVIS & BOYLE, DETROIT

Province of Ontario	6	10-1-23	....	7¼
Greater Winnipeg Water District	5	7-1-22	....	8½
Empire District Electric Co.	8	1-1-49	....	8
Detroit Edison Co. Debentures	8	1-10-31	....	7.85
National Leather Co.	8	11-15-26	....	8
Oklahoma Gas & Electric Co.	7½	2-1-41	....	8

BOLGER, MOSSER & WILLAMAN, DETROIT

Caswell County, N. C., Road	6	34-47	....	6
Gerrish Township, Roscommon Co., Mich., Highway Improvement	5	1929	....	6.25
Okeechobee Co., Fla., Road and Bridge	6	29-44	....	6.10
Harrison Co., Tex., Road	5	32-36		6.25-6.10
Morrison Hotel of Chicago, 1st and refunding, mortgage	6	32-30	....	7
Wisconsin Chair Company, secured	7	22-24	....	8

CORRIGAN COMPANY, GRAND RAPIDS

City of Grand Rapids School Bonds		....	....	5
Michigan Road Bonds		....	....	5
Pennsylvania Railroad Collateral Trust	6½	....	....	6.55
American Agricultural Chem. Co.	7½	....	....	7.75
Southwestern Bell Telephone Co.	7	....	....	8

MURCHEY BROADENING SERVICE

G. N. Murchey & Company, who have been established in Lansing two years, are extending their investment business. Mr. Murchey has been in Lansing four years, having represented William A. Neer & Company, Detroit. Two years ago he organized the local company to provide full investment service.

The departments which have now been created include the New York department, in charge of H. P. Quinlan; trading, directed by G. Roger Hawkins, who has been with the Neer company until recently; and investment, in charge of Lyman Covell, who is backing a community merchandising campaign for the distribution of securities. These departments, together with all other branches of the business are under the general direction of Mr. Murchey.

The firm has direct connections with all stock centers. Its offices are at 100 Capital National Bank building.

CLEARING HOUSE ELECTION

At the annual meeting of the Detroit Clearing House Association, William Livingstone was elected president and J. L. Langton, secretary and manager. The clearing House committee comprises John Ballantyne, Julius H. Haase, Emory W. Clark, George H. Kirchner and James T. Keena.

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK
WOOLWORTH BUILDING, NEW YORK

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. R. Denham, Representative.

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

For Rainy Days:

There is a "rainy day" ahead there, somewhere, and everybody has got to figure on it. What is your net value, confidentially?

It may consist of prudent investments that will bear inspection. It may include life insurance money.

Capitalize it in this way:—gather it into a "Trust Fund" in this Company's care, and set it apart for future uses. Our "Living Trusts" make it easily possible to banish care as to the future.

Come in and talk it over with our officers.

Also get our new book on "WHAT YOU SHOULD KNOW."

THE MICHIGAN TRUST COMPANY

Grand Rapids, Michigan.

MATTHEW FINN

High Grade Municipal
and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Feb. 4, 1921	Jan. 28, 1921	Feb. 6, 1920
Total reserves	$2,326,157,000	2,319,974,000	2,054,656,000
Bills discounted—Sec'd by Gov't. war obligations.	1,017,152,000	1,048,768,000	1,481,557,000
All other	1,418,921,000	1,407,767,000	751,982,000
Bills bought in open market	167,818,000	168,058,000	554,750,000
Total bills on hand	2,603,891,000	2,621,533,000	2,788,289,000
U. S. Government bonds	28,849,000	28,849,000	26,776,000
U. S. Victory notes	19,000	19,000	63,000
U. S. Certificates of indebtedness	259,370,000	261,452,000	276,064,000
Total earning assets	2,896,729,000	2,908,853,000	3,061,192,000
Bank premises	18,244,000	18,228,000	10,586,000
Uncollected items, other deductions gr. deposits, 5% redemption fund against F. R. Bank notes	597,980,000	595,036,000	896,971,000
All other resources	17,865,000	17,746,000	12,232,000
	7,105,000	6,830,000	5,049,000
Total resources	5,849,053,000	5,861,727,000	6,040,685,000
LIABILITIES			
Capital paid in	100,228,000	100,147,000	89,119,000
Surplus	202,036,000	202,026,000	120,120,000
Government deposits	50,373,000	52,129,000	42,446,000
Due to members—Reserve account	1,742,762,000	1,731,823,000	1,869,428,000
Deferred availability items	423,433,000	430,302,000	654,725,000
Other deposits, including foreign gov't credits	26,243,000	24,054,000	95,570,000
Total gross deposits	2,243,011,000	2,238,317,000	2,662,495,000
F. R. notes in actual circulation	3,078,750,000	3,090,748,000	2,891,779,000
F. R. Bank notes in circulation—net liability	197,219,000	202,149,000	240,780,000
All other liabilities	30,818,000	28,310,000	29,396,000
Total liabilities	5,849,053,000	5,861,727,000	6,040,685,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	49.3%	49.0%	44.1%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	56.9%	56.5%	49.7%

Banks and Bankers

NEW BANK AT MILFORD

The Farmers State Savings Bank has been organized at Milford, Oakland county, to do a commercial and savings business. The capital is $50,000 and the principal incorporators Arthur M. Bird and Fred Childs, Milford, and Harmon A. Smith, Wixom.

RACHOW ORGANIZES BANK

W. J. Rachow, former manager of the savings department of the First and Old Detroit National Bank, Detroit, has acquired an interest in the Central Foreign Exchange Corporation of Hamtramck, and has organized what is to be known as the Citizens Bank of Hamtramck, Beger, Rachow, Stefanowski & Company, bankers, which is to open for business about February 15 at 9701 Jos. Campau avenue, operating as a unified institution in a general banking business, handling also foreign exchange, real estate mortgages and steamship transportation. Mr. Rachow came to Detroit about four years ago from Charlevoix, where he was cashier of the State Savings Bank.

LANSING MERGER EFFECTIVE FEB. 14

The consolidation of the Lansing State Savings Bank with the American State Savings Bank has been ratified by the stockholders and the united institutions will open February 14 under the name American State Savings Bank. The Lansing bank has had a separate existence of 30 years and the American of 19. J. Edward Roe, president of the Lansing bank, becomes head of the American State Savings Bank, with Cashier Charles E. Toms, of the American, as cashier of the consolidated banks. Practically the entire clerical staff will be retained, as will the two branches.

F. C. WHERRETT MOVES UP

Harry D. Bennett, who since 1908 has been an officer of the Capital National Bank, Lansing, resigned, effective March 1, to take over the duties of secretary-treasurer of the Garlock Sales Company. He has held the latter position some time. Mr. Bennett has been assistant cashier at the bank for several years, having moved to Lansing 13 years ago from Eaton Rapids, where he had five years of banking experience. He started at the Capital National as teller. He will be succeeded by Fred C. Wherrett, next in line.

PARKS WOLVERINE DIRECTOR

E. F. Parks, president of the First National Bank, Paw Paw, has been elected as a director of the Wolverine Insurance Company, Lansing.

FIRST NATIONAL, MUNISING

Deposits, $1,432,688; capital, surplus and profits, $182,662. No borrowed money and a 20 per cent reserve, as per statement of December 29, 1920, just received. This is the bank of which Chester D. Masters, formerly cashier of the First State Bank, Petoskey, has recently taken charge.

FENTON, DAVIS & BOYLE DIVIDEND

At a meeting of the board of directors of Fenton, Davis & Boyle, Chicago, Detroit and Grand Rapids, a dividend at the rate of 7 per cent per annum was declared on the preferred stock of the corporation computed to and including December 31, 1920, to stockholders of record on January 25, 1921.

Addressograph
For Sale

Motor Driven Model B, in good condition. Prints direct from ink. Has "lister" attachment for running off lists from address plates. A bargain buy. See Mr. Grimm or Mr. Walker, Security Trust Co., Detroit.

Digitized by Google

COMPANIES AND DEALERS APPROVED

The following companies and dealers were approved by the Michigan Securities Commission at its meetings during January:

Companies—Michigan Catering Co., Jackson, Mich.; Straus Brothers Co. (bonds), Lagonier, Ind.; Jackson Stove & Stamping Co., Jackson, Mich.; Samuel & Barnet Levine (bonds), Detroit; Trout Chemical Co., Cadillac, Mich.; F. C. Mason Co., St. Johns, Mich.; Avery Company (notes), Peoria, Ill., Dearborn Equipment Co., Kalamazoo, Mich.; Sutter Basin Company (bonds), Sacramento, Calif.; People's Coal & Builders' Supply Co., Flint, Mich.; Foreign Commercial Corp., Detroit; Detroit Export Finance Corp., Detroit; Solvay & Company (bonds), Brussels, Belgium; Sidway Mercantile Co., Elkhart, Ind.; Liverpool Silver Mines Co. (bonds); G. A. Kelly Co., Inc., Flint, Mich.; Buckley Food Products Co., Toledo; Federal Bakeries Corp., Detroit; Stevens-Duryea, Inc., Chicopee Falls, Mass.; Fleischmann Company (notes), Cincinnati; Sulpho Laboratories Co., Jackson, Mich.; Detroit Housing Corp., Detroit; Kent Folding Dresser Table & Furniture Co., Detroit; Alma Real Estate & Exchange Co., Alma, Mich.; Durant Hotel Co. (bonds), Flint, Mich.; Atlas Crucible Steel Co., Dunkirk, N. Y.; Weller Nurseries Co., Holland, Mich.; First State Mortgage Corp. of Detroit, Detroit; P. F. Collier & Son Co. (bonds), New York; Michigan Canned Food Co., Detroit; Hayes Motor Truck Wheel Co., St. Johns, Mich.; Northrop Loek Co., Detroit; Standard Oil Company (debentures), San Francisco; American Multigraph Co. (notes), Cleveland; Frost Gear & Forge Co., Jackson, Mich.; Kessler Motor Co., Detroit; Dallas Power & Light Co. (bonds), Dallas, Texas; Community Market Corp., Detroit; American Amusement Co., Muskegon, Mich.; Simms Modern Cut Glass Co., Detroit; Security Oil & Refining Co., Scottsville, Ky.; Independent Sugar Co. (bonds), Marine City, Mich.; Black Hawk Hotel Co. (bonds), Davenport, Ia.; Standard Gasoline & Trunking Corp., Detroit; Beaver Board Companies (notes), Buffalo, N. Y.; Dashwood Power & Investment (bonds), Augusta, Me.; Woodmere Real Estate Co., Inc., Detroit; Grand Rapids Brass Co. (notes), Grand Rapids, Mich.; Continental Discount Corp., Saginaw, Mich.; Allen Steel Forge Co., Detroit; Altorfer Brothers Co. (bonds), Peoria, Ill.; A. J. Kirstin Company, Escanaba, Mich.; Seranac Coal Mining Co. (bonds), Marion, Ill.; Gibson Mandolin Guitar Co., Kalamazoo, Mich.; Hayes-Ionia Company, Grand Rapids, Mich.; Detroit Self-Help Real Estate Investment Co., Detroit, Mich.; Mueller Metals Co. (bonds), Port Huron, Mich.

Dealers—Stefan M. Borzgewski, Detroit; Gilbert Vernet Handy, Detroit; W. C. Carey & Co., Detroit; C. H. Daniels & Co., Detroit; F. J. Kinder & Co., Detroit. Emmet L. Sprague & Co., Detroit; Begin-Moyers Co., Flint, Mich.

Licenses of the following were revoked:

Gove Motor Car Co., Detroit; Title Guaranty & Casualty Co. of America, Detroit; Allied Vermin Proof Perch Co., Dexter; Continental Piston Corp., Detroit.

The Wayne County Bond & Mortgage Company was reinstated.

U. S. PRESSED STEEL STATEMENT

The U. S. Pressed Steel Company, Ypsilanti, manufacturer of steel whippletrees, neck yokes, etc., has favored this paper with a statement of condition as of December 31, 1920. The statement is reproduced herewith:

ASSETS	Dec. 31, '20.	Dec. 31, '19.
Merchandise	$ 76,790.34	$ 67,598.29
Stores	103,851.97	94,584.75
Machinery	63,899.22	56,328.03
Dies and Tools	15,039.75	16,201.97
Real Estate and Bldgs.	28,802.47	27,562.84
Treas. Stock		11,000.00
Cash in Bank	2,956.30	1,229.82
Petty Cash	84.97	582.82
Accounts Receivable	32,894.47	48,199.79
Invest., L. H. & W. S. S.	1,954.95	1,954.95
	$325,475.44	$325,244.45
LIABILITIES.		
Capital Stock	150,000.00	150,000.00
Bonds	30,000.00	35,000.00
Surplus	26,885.54	15,885.54
Loss and Gain	16,281.43	.....
Sinking Fund for Bonds	4,350.00	4,361.86
Bills Payable	53,178.06	105,330.20
Accounts Payable	50,780.01	14,661.71
	$325,475.44	$325,244.45

Net earnings after deduction of taxes: 1917, $10,000; 1918, $13,000; 1919 and 1920, none reported.

Board of directors: T. W. McAndrew, G. M. Hull, D. L. Quick, Jr., Geo. Geer, C. V. Brown. Officers: President, T. W. McAndrew; vice-president, G. M. Hull; treasurer, D. L. Quick, Jr., secretary and general manager, C. V. Brown.

Orders booked, not shipped, December 31, 1920, totaled $189,635.33.

Opportunity

Any investment review of the past year must unfailingly select as its outstanding feature the high bond yields offered during the entire period. No similar opportunity has ever been presented to the present generation of investors, nor, when the turn comes, is it likely to be repeated in our lifetime.

Those who have secured high interest yields (8% or more) by investing in safe, long-term bonds, have good reason to look back at the year with complacency. To those who have not, thought must suggest the impulse—the resolution—to seize the opportunity before it slips away forever.

It was our privilege, during 1920, to start thousands along the road that leads to financial independence by means of helpful investment advice. The same help is available (without obligation) to all old and new friends who need our analysis and solution of their individual investment problems.

Write or call for "Prices and Values," a timely pamphlet

A. B. Leach & Co., Inc.

Investment Securities

Chicago	New York	Baltimore
Philadelphia	Milwaukee	Cleveland
St. Louis	Cincinnati	Minneapolis
Boston		Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE FEBRUARY 9th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100	92 - 60	204 - 55	6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com.	82½	89	100			4%	4%	Quarterly	Feb. 1, 1921		1¾%			$23,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,398,200
Auto Body Co.	4½	8½	10	4½ - 4½	12½ - 5½			Quarterly	Jan. 20, 1917		25%	1½%		$1,074,000
Do., pfd.	7	8	10		10½ - 10½	6%		Semi-Ann	Feb. 1, 1921	3%				$627,600
Bower Roller Bearing Co.	15	19½	10		29½ - 16	Varies		As Dec'd	July 1, 1920	10%		3%		$930,000
Charcoal Iron Co. of America, com.	2½	3½	10	2¾ - 2	5½ - 1¾				Apr. 1, 1919	2%				$3,839,250
Do., pfd.	2½	3½	10	3½ - 3½	5½ - 3½				July 1, 1919	2%				$5,217,250
Cities Service Co., com.	253	260	100		355 -250½	*6%		Monthly	Jan. 1, 1921	1½%	1¾%	1½%	1¾%	$40,039,245
Do., pfd.	68½	69	100		70 - 65	6%		Monthly	Jan. 1, 1921	1½%		1½%		$73,465,864
Conbuila Lead & Zinc Co.		14	1	16 - 6	25 - 6	Varies		As Dec'd	Nov. 15, 1917	20%				$300,000
Columbia Sugar	10¼	11	10	14½ - 12	24½ - 11½	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co.	7¾		10	7¾ - 7¾	18½ - 6¾	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pw. Ry. & Light Co., com.		16	100	45½ - 45½	45½ - 16	Varies		Quarterly	Nov. 1, 1919	1%				$18,585,900
Do., pfd.	34	35	100		23 - 23	16%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,953,000
Continental Motor Co.	6¾	8½	10	7¾ - 7¾	14½ - 5¾	4%		Quarterly	Dec. 20, 1920	1%				$9,447,698
Do., pfd., XD	90	93	100		100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,181,700
Detroit & Cleveland Navigation Co.	73½	75¾	100	75½ - 71	100 - 71	8%		Quarterly	Jan. 1, 1921	2%		2½%		$1,529,400
Detroit Creamery Co.		25½	10	25¾ - 22½	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,600,000
Detroit Edison Co., XD.	96½	97	100	98 - 96¼	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,655,300
Detroit Brass & Malleable Works		98½	100	99 - 98	99 - 93	6%		Monthly	Jan. 1, 1921	1%		1%		
Detroit United		90	100			8%		Quarterly	Dec. 1, 1920	2%				$15,000,000
Edmunds & Jones, com.	12½	15	None	14½ - 14	34 - 9¾	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$140,000 shs.
Do., pfd.	75	85	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$860,400
General Motors	14½	14¾	10	16 - 14¾	42 - 12¾	20%		Quarterly	Feb. 1, 1921	5%				20,563,384 shs.
Federal Truck	20	22½	10	20 - 18½	82 - 16¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	235	242	100	264 -230	460 -210	Varies		As Dec'd	July 15, 1919	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.	13	14½	10		11½ - 11	Varies		As Dec'd	Oct. 1, 1920		5%			$1,962,750
Gladys-Belle, com., XD.	60	61	1.00	.73 - .58	.71 - .27	16%		Quarterly	Jan. 15, 1921	4%		4%		$6,407,000
Do., pfd.	71	74	1.00	.80 - .63	1.48 - .61	16%				4%		4%		$2,000,000
Godchaux Sugar, com.	20	22	None		39½ - 39½			Quarterly	Jan. 1, 1921					$70,000 shs.
Do., pfd.	68	72	100			7%				1¾%		1¾%		$5,500,000
Hanna Furnace, com.	27		10											$1,965,000
Do., pfd.	96	99	100											$750,000
Hall Lamp Co., com.	14	15½	10	15 - 15	32½ - 16	Varies		As Dec'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.		14½	10	17½ - 14½	42 - 12½	As Dec'd		As Dec'd	Jan. 1, 1921	1½%				$1,500,000
Holland-St. Louis Sugar Co.	6¾	7	10	8 - 7¾	19½ - 7¾	12%		Quarterly	Oct. 15, 1920	6%				$2,000,000
Iron Fire Mining Co.	25		1		50c - 50c			Semi-Ann	July 1, 1919	10c				$2,000,000
S. S. Kresge, com.	132	142	100	96¾ - 96¾	151 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	97	102	100			6%		Quarterly	Jan. 1, 1921	1½%		1½%		$2,000,000
Lindeman Steel, com.	12	15	10		24½ - 15½	6%		Quarterly	Jan. 2, 1921	1½%		1½%		$1,068,000
Lincoln Motors, Class A	19¾	20¾	10	21½ - 17¾	50¾ - 15¾	$3.00		Quarterly	Jan. 1, 1921	$1.50				$5,000,000
Mexican Crude Rubber Co.	7	7¾	10		13½ - 9¼				Dec. 1, 1914	3%				$750,000
Michigan Drop Forge, com.		50	None		90 - 50	$3.00		Monthly	Feb. 1, 1921	25c		50c		$12,500,000
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾%				$250,000
Michigan Stamping Co., com.	17¾	18½	10	17¾ - 17¾	30 - 15½	9%		Quarterly	Dec. 1, 1920	2%		1½%		$1,800,000
Michigan Sugar Co., com.	7¾	7¾	10	9 - 7¾	13¾ - 7¾	4%		Quarterly	Dec. 1, 1920	1%				$7,471,100
Do., pfd.	8		10	9 - 8¾	9¾ - 9¼	6%		Quarterly	Dec. 1, 1920	1½%				$3,703,500
Miles Detroit Theater Co.			10		21 - 15½	*16%		Quarterly	Jan. 10, 1921	4%				$350,000
Motor Products	42	44	None	43 - 43	60¾ - 37½				Feb. 2, 1921	$1.25				$1,000,000 shs.
Motor Wheel	11¾		10	11¾ - 11¾	15½ - 9¾	*8%		Quarterly	Nov. 20, 1920	2%				$4,940,849
Murray Mfg.		18	10		32 - 33	12%		Monthly	Jan. 15, 1921	1%				$733,450
National Grocer Co.	8½	9½	100	9½ - 9	156 - 8½	*		Jan. 2, 1921		2%		2%		$2,000,000
Do., pfd.	88	92	100		157 - 90	8%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	120	125	1.00	1.35-1 10	2.00-1 9¾	*10%		Quarterly	Jan. 1, 1921	4½%		4½%		$11,000,000
Packard Motor Co., com.	10½	10½	10	11 - 9½	28½ - 9½			Quarterly	Oct. 31, 1920	2½				$13,885,100
Do., pfd.	74½	74½	10	79 - 70½	96¾ - 67	7%		Quarterly	Dec. 15, 1920	1¾				$15,000,000
Paige-Detroit Motor Car Co.	17	18	10	18¾ - 13¾	45½ - 12			Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.	87	90	25	97 - 93	117½ - 85	*16%		Quarterly	Dec. 1, 1920	4%		8%		$11,838,850
Penberthy Injector, pfd	99½	101	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$600,000
Reo Motor Co.	21½	21¾	10	23½ - 17½	29½ - 16¾	10%		Quarterly	Jan. 1, 1921	2½%		2½%		$6,937,350
Scotten-Dillon Co.		21	10		35 - 20	8%		Quarterly	Jan. 3, 1921	2%		2%		$1,500,000
Timken Axle, com., XD.	31	32	10	32 - 26¾	63¾ - 24	12%		Bi-Month	Jan. 15, 1921	2%		2%		$5,000,000
Do., pfd.	90	95	100		93½ - 84	6%			Jan. 3, 1921	1½				$5,000,000
Trus-Con Steel Co., com., XD.	27¾	29	10		29½ - 29½	16%		Quarterly	Jan. 15, 1921	4%		4%		$1,450,250
Do., pfd.		9¾	10		9¾ - 9¾	7%		Quarterly	Dec. 1, 1920	1¾%				$1,532,280
U. S. Radiator, com.	16	17½	100		31½ - 20									$4,000,000
Do., pfd.	78		100		95½ - 80	7%			Jan. 25, 1921	1¾		7%		$2,800,000
Waring Hat Co., com.		25	None											
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		
Western Knitting Mills	9½	10½	None	11 - 8½	30½ - 8½	10%		Quarterly	Nov. 25, 1920	50c				$140,050 shs
White Star Line		42	50		50½ - 50½	7%		Aug & Nov	Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.	2½		10	2½ - 2	5½ - 2½				Dec. 15, 1917	1c				$1,000,000

*Old $80-370: new 63½-27. $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip. ‖Book value, $1,016,997, Ed. & J. ¶Book value, $3,219,327, Godchaux. Book value, $2,622,793.00, Western Knitting Mills. †Book value $8,064,450, Motor Products. ‖Old. ††Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Feb. 9, 1921
Canada	1.0000	.85	.8500	.8900
London	4.8665	3.6275	3.3500	3.8750
Switzerland	.1930	.1523	.1602	.1511
Paris	.1930	.0598	.0768	.0715
Belgium	.1930	.0635	.0742	.0781
Holland	.40196	.3162	.3375	.3420
Italy	.1920	.03465	.0366	.03645
Greece	.1930	.0723	.0735	.0707
Spain	.1930	.1328	.1398	.1401
Vienna	.20263	.0023	.0028	.0026
Berlin	.23821	.01345	.0138	.0187
Denmark	.26799	.1595	.1940	.1848
Norway	.2682	.1595	.1860	.1760
Sweden	.2680	.2045	.2190	.2295

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Feb. 8, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 3, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	91.76	93.50	90.00	91.06	99.20	99.75	99.56	99.66
U. S. Liberty 1st 4s	87.40	85.50	85.92	85.80	98.00	94.30	98.00	94.12
U. S. Liberty 2nd 4s	86.40	84.80	84.10	85.00	91.53	93.84	93.04	94.10
U. S. Liberty 1st 4½s	87.76	86.35	85.50	86.18	93.48	95.34	98.50	....
U. S. Liberty 2nd 4½s	86.56	86.80	84.34	85.00	93.20	94.08	95.70	....
U. S. Liberty 3rd 4½s	87.20	86.22	84.60	85.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	86.80	86.46	84.36	85.86	93.75	100.10	....	....
Victory Bonds, 4¾	97.26	96.48	94.30	98.50	94.00	95.04	95.88	96.22

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement			Dividends		Detroit Stock Exchange					
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Low	Range 1920 High	Low	Last Sale	Feb. 8, 1921 Bid	Ask
American State	150	$1,000,000	$15,989,348	10%	J-A-J-O 1st	221	215	220	200	221	...	221
Detroit Savings	257	1,000,000	23,862,260	12%	5 Jan-Jul 1st 5 Fb Jan	200	258	259	259	259	...	...
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly 1 Jan-Jul	...	...	260	258	258	250	...
First and Old Detroit National	194	5,000,000	69,880,082	*12%	J-A-J-O 1st	271	271	273	268	271	...	...
Central Savings Bank	142	1,000,000	17,615,136									
First State	160	1,000,000	12,780,601	10%	J-A-J-O 1st	...	...	298	295	295	248	275
Highland Park State	198	1,000,000	14,287,348	20%	J-A-J-O 1st	...	...	170	170	170	135	...
Merchants National	167	2,000,000	9,769,667	8%	J-A-J-O 1st	149	149	163	142	149	145	...
National Bank of Commerce	231	1,500,000	22,274,487	10%	J-A-J-O 1st	...	...	210	190	210	...	...
Peninsular State	158	2,000,000	31,523,787	12%	J-A-J-O 1st	...	...	220	215	215	...	...
Peoples State	282	5,000,000	109,783,805	12%	J-A-J-O 1st	360	360	335	306	360	355	359
United Savings	157	500,000	9,832,934	12%	Monthly	208	208	215	209	208	200	...
Wayne County Home	259	4,000,000	74,072,277	16%	Monthly	...	...	347	306	347	...	...
American Loan and Trust	134	300,000	.....	6%	J-A-J-O 1st	...	...	155	155	155	...	127
Bankers Trust	117	300,000	.....	8%	J-A-J-O 1st	...	...	...	...	...	...	...
Guaranty Trust	174	300,000	.....	8%	J-A-J-O 1st	...	...	148	148	...	...	160
Detroit Trust	117	1,000,000	.....	4%	J-A-J-O 1st	...	...	...	...	...	275	300
Security Trust	338	500,000	.....	12%	J-A-J-O 1st	...	...	...	...	...	280	...
Union Trust	190	1,000,000	.....	8%	J-A-J-O 1st	180	180	197	195	195	175	190
Commonwealth-Federal	124	750,000	10,328,127			...	...	130	...	...	105	112
Bank of Detroit	160	1,000,000	18,469,135	10%	J-A-J-A 1st	...	...	...	...	200	192	200
Continental Bank	120	700,000	.....			...	...	...	...	...	...	...
Michigan State	110	250,000	2,190,838	6%		...	...	...	...	...	130	135
American State, Dearborn	125	100,000	321,163	6%	Jan-Jul	...	...	...	...	...	...	...
American State, Highland Park	132	200,000	2,068,452	8%	J-A-J-O 1st	...	...	123	122	122	118	122
Peninsular State, Highland Park	220	100,000	1,264,556	12%	J-A-J-O 1st	...	...	...	...	...	...	...
Rouge State Bank	118	50,000	352,845			...	...	...	...	...	...	...
Industrial Morris Plan	119	500,000	.....			...	...	...	...	...	...	...

*Under one ownership—stock combined.
†Nominal quotations.

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Columbia Motors	4⅞	5	14	4	5
Hoover Steel Ball	15	16	24½	18	15
Liberty Motor (new)	5⅝	6¼	..	..	6⅜
Noble Mfg. com	66	67	1.30	58	66
Mich. Cop. & Brass	16	18	26	19¼	16
Great Lakes (new)	11	14	..	..	..
Great Lakes (old)	55	65	..	..	..
Un. Mtg. 100% com.	19½	11½	..	..	..
Un. Mtg. 90% com.	19	..	..	..	..
Federal Discount	7	11	..	..	..
Det. Mort., com.	12⅝	..	..	..	3⅞
Det. Mort., pfd.	15⅞	..	6¼	5½	5⅝
Det. Cop. & Brass	15	25	..	..	..
Wilson Truck	15½	5⅜	..	..	5⅜
McCord Mfg., com.	15⅛	5½	..	..	..
McCord Mfg., pfd.	44	52	..	..	..

*Ex-dividend. †Nominal.

Lansing Stocks

Closing quotations on the Lansing Stock Exchange, Tuesday, February 8, are reported by G. N. Murchey & Company, as follows:

	Bid	Asked
Auto Body Co	4⅝	5½
Reo Motor Car Co	23¼	23½
Duplex Truck Co	6	7
Bates & Edmonds Motor Co	..	16
Motor Wheel Corp	11½	12⅝
First Bond & Mortgage Co	30	37
Michigan Mortgage Co	4½	6
Michigan Screw Co	35	40
Lansing Co	45	50
Atlas Drop Forge Co	25	30
Federal Forge Co	8	10
Novo Engine	24	27

Interested in Petoskey Portland Cement, Peninsular Portland Cement, Federal Discount, Columbia Motor.

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Briscoe Motor	12⅜	14
Chalmers Motor	1	2
Curtis Aeroplane	7	10
Goodrich, com.	39¼	39⅝
Harroun	⅝	1⅛
Lee Tire	20	20⅝
Nash	390	225
Pierce	24⅜	25
Republic Truck	21½	21⅝
Saxon	4½	5
Stromberg Carb.	36½	37
White Motors	38	39½

Status of Trust Company-State Bank Legislation

According to latest advices from Lansing, Rep. Joe Watson's bill to give state banks trust powers may come out of committee in amended form with enough of the author's measure left to give the small banks power to act as administrator and executor.

The outcome of this proposed legislation will be watched with much interest by the banking fraternity. It is admitted by some of the smaller national banks which have undertaken a trust business by means of availing themselves of the amendment to the Federal Reserve Act that the business is not profitable. Yet others testify that their new departments are a success. Trust company officials of Detroit point out that there is no particular objection to permitting small banks to act as administrator or executor, but that a broad grant of trust powers to banks doing a general banking business should be followed by a provision that trust companies as such may have general banking powers. A point often lost sight of is that failure to perform under a trust agreement may create a liability greater, in cases, than the entire capital of a small bank. The circumstances surrounding country banking are so different from those of the large cities that it doubtless will be difficult to frame legislation that will be equitable; yet it were much better to bring the miscellaneous trust activities of the small bank cashiers within the purview of the bank examiner, whereby they may be checked up twice a year, than to go on under the system which has been so long in practice, with little or no supervision.

The Great Lakes Engineering Works, Detroit, has declared a liquidating dividend of 50 per cent on stock of record February 7, payable February 10 on a basis of 25 per cent in cash and 25 per cent in bonds of the new corporation which purchased the properties of the original company. A 100 per cent liquidating dividend was paid in October. The name of the corporation will be retained.

Detroit Bank Clearings

Week of Feb. 9, 1921	$ 76,666,462.35
Week of Feb. 2, 1921	$ 87,995,926.10
Week of Jan. 26, 1921	$ 79,015,607.01
Week of Jan. 19, 1921	$101,986,894.70
Week of Jan. 12, 1921	90,173,447.74
Week of Jan. 5, 1921	$107,662,994.95
Week of Feb. 9, 1920	$101,049,806.28

Dividends Payable

Company	Rate	Payable	Stock of Record
Amer. Smelting & Ref., com	1¾% Q	Mch. 15	Feb. 28
Amer. Smelting & Ref., pfd	1¾% Q	Mch. 1	Feb. 11
Brunswick-Balke-Collender, com	2½% Q	Mch. 1	Feb. 11
A	1¾% Q	Feb. 15	Feb. 5
Detroit United Railway	1½ Q	Mch. 1	Feb. 12
General Asphalt	1¾% Q	Mch. 1	Feb. 11
Int. Rubber & Tire	2½ Q	Mch. 1	Feb. 15
Southern California Edison, com	$2.00 Q	Feb. 15	Jan. 31

Grand Rapids Stocks

The closing quotations on Public Utilities on Tuesday, February 8, 1921, are reported by the Corrigan Company as follows:

	Bid	Asked
Cities Service, com	230	256
Cities Service, pfd	68	69
Cities Service, Bankers	22¾	23⅝
Cities Service, Deb. B	125	130
Cities Service, Deb. C	84	86
Cities Service, Deb. D	82	86
Commonwealth Power & Light, com	13	25
Commonwealth Power & Light, pfd	33	36
American Public Utilities, com	8	12
American Public Utilities, pfd	21	25
United Light & Rys., com	21	23
United Light & Rys., pfd	85½	88½
American Light & Traction, com	88	90
American Light & Traction, pfd	75	80

NEW BROKERAGE FIRM

Emmet L. Sprague and Fred V. Woodford have established the investment house of Emmet L. Sprague & Company, with offices in the Murphy building, Detroit. Both were formerly associated with H. W. Noble & Company.

I Have $10,000 to Invest

College man, 32 years old and married, at present connected with large company, wants to invest between five and ten thousand dollars cash, with services, in a well-established business. Nothing but a clean-cut, paying proposition will be considered. Box E. H., Michigan Manufacturer and Financial Record.

Digitized by Google

As Your Transfer Agent—

this Company would afford protection against mistakes and irregularities in the handling of your stock. Our Transfer Department handles daily many transactions of a most technical nature.

Appoint this Company and the stock records of your corporation will be accurately kept and the transfers of stock properly handled.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

The annual retirement of a stated portion of the mortgage and the constant appreciation in value of the mortgaged property are two great factors which compel the safety of our First Mortgage Bonds.

And then we insure safety by amortization.

Nothing is left to chance.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

SAFE INVESTMENT BONDS
FOR SAVINGS
JOEL STOCKARD & CO.
Members Detroit Stock Exchange
Main Floor, Penobscot Bldg.
CHERRY 2600

A Bank with a Reputation; 70 Years of Service.
THE DETROIT SAVINGS BANK
OLDEST BANK IN MICHIGAN
MEMBER FEDERAL RESERVE SYSTEM
45-47 Fort St. West Penobscot Building. 14 Branches

Nicholson Heads Foreign Trade Bank Committee

Walter G. Nicholson, vice-president and cashier of the First and Old Detroit National Bank, has been appointed chairman of the Supervising Committee for Detroit of the Foreign Trade Financing Corporation. Roy D. Chapin, president of the Hudson Motor Car Company, will represent the commercial interests, and a prominent upstate farmer, whose name will be announced later, will represent the agricultural interests.

The immediate activities of the committee will consist in providing a market for the stock of the corporation. It is hoped to spread the stock around among diversified business and agricultural interests so widely that the corporation may have the support of many interests as soon as it begins to function.

A New York correspondent advises that arrangements looking toward obtaining guaranties by foreign municipalities of credits that may be arranged for business concerns located in various foreign cities already have been taken up, and that the committees have been given much encouragement in this direction.

MICHIGAN STOVE'S YEAR

Francis Palms, first vice-president of the Michigan Stove Company, writes that "the business for 1920 was very gratifying, eclipsing all past years in point of volume, notwithstanding the slump experienced during the last two months of the year. Stocks are not excessive, and we anticipate a very good year's business in 1921." Directors elected at the annual meeting, January 31, are: George H. Barbour, C. A. DuCharme, E. S. Barbour, H. B. Gillespie, L. B. Young, D. J. Dwyer, C. B. DuCharme, Francis Palms, C. L. Palms, R. B. Mills. H. B. Gillespie was elected to fill the vacancy caused by the retirement of Edwin S. Barbour, who will travel for his health. Other officers were elected as follows: Chairman, George H. Barbour; president, C. A. DuCharme; first vice-president, Francis Palms; general manager, L. B. Young; secretary, C. B. DuCharme; treasurer, H. B. Gillespie; vice-president and factory manager, E. J. Dwyer. Total assets as of December 31, 1920, were $4,803,932. Current assets were $1,855,913, against $963,043 of current liabilities. Preferred stock outstanding was $1,543,000, common, $1,500,000, and surplus was $797,888.

PERMANENT BONDS READY

Detroit banks have announced that they are now able to make delivery of permanent Liberty loan bonds of the fourth 4¼ per cent issue which may be exchanged for the temporary bonds issued originally. This will be welcome news to those who have been obliged to wait the deliberate action of the Government.

HALSEY NATIONAL CITY CO. MANAGER

Ralph W. Halsey, New York, is the new sales manager for the Michigan district, which comprises the lower peninsula of Michigan, for the National City Company, New York, with offices in the McGraw building, Detroit. Mr. Halsey succeeds Harvey Hughes, the former manager, who resigned December 15 to form a company of his own. It is understood that formal announcement will be made in the near future.

MICHIGAN SUGAR DIVIDEND

The Michigan Sugar Company had declared a dividend of 1 per cent, payable March 1 to stockholders of record February 15. According to Stock Exchange records the last dividend was 3 per cent, paid December 1, 1920.

Digitized by Google

Who's Who In Michigan Finance

Chester D. Masters, Cashier and Manager, First National Bank, Munising

Chester D. Masters, recently elected cashier and manager of the First National Bank, Munising, has had a variety of banking experience which fits him eminently for the position that now has been given him.

Mr. Masters is a native of Buffalo, where he attended the public schools. Thereafter he was a student in Kitchener Collegiate Institute, Kitchener, Ont., where his father is still a merchant and has interests in elevator and flour mill.

In 1909 he graduated from the Detroit College of Law and went into the First & Old Detroit National Bank, leaving in 1910 to become associated with the Cleveland-Cliffs Iron Company's bank at Gwinn, Mich., serving as



CHESTER D. MASTERS

cashier until November, 1916, when he became cashier of the First State Bank of Petoskey.

In 1918 he was made a director of the Petoskey bank and severed his connection with it January 15, 1921, to accept the position he now holds at Munising, where he is cashier, director and manager of the First National Bank of Alger County.

In June, 1918, he was given a year's leave of absence to join the army and went overseas as a private. During his service in the army he was advanced to a second lieutenancy. He was married in 1917 to Margaret Anne Murray, of Wausau, Wis., and has one daughter, six months old. Masters has always been identified with the best interests of the communities in which he has been situated; he is a clean, high grade type of man, plays a good game of golf and is an officer in Ivanhoe Commandery, Knights Templar, and in Petoskey Lodge, B. P. O. E.

PAPER MERGER AT MONROE

The Monroe Corrugated Box Company and the River Raisin Paper Company, Monroe, have been merged and the River Raisin company has increased its capitalization from $2,500,000 to $5,080,000 as a consequence.

A Service of Facts

Through contact with every phase of big business, and as a result of the exhaustive and constant study of economic conditions which is essential to the safe conduct of a great bank, the National Bank of Commerce in New York is able to render to its friends a peculiarly valuable service.

Broadly speaking, we are in a position to supply authoritative information, drawn from original sources, on practically every important matter related to commerce and industry, whether national or international.

Our friends, in this sensitive period of adjustment, are invited to employ this service to the fullest extent.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits
Over Fifty-five Million Dollars

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Bank Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

Michigan's Rate Problem of the Moment

(Continued from Page 6)

do a large amount of terminal work for their connecting lines east, south and west. This is perhaps well illustrated by the interchange with the Baltimore & Ohio Railroad. This company does not have any mileage in Michigan, either owned directly or indirectly. At the same time it does a very large business in the state, both through the Toledo gateway and through its Indiana junctions, connecting as it does with the Grand Trunk, G. R. & I., Pere Marquette and other north-and-south lines. For example, for the year ended June 30, 1916, they received (B. & O. and C., H. & D. combined) from the Pere Marquette 210,550 tons of freight, and delivered to the Pere Marquette, largely for Michigan points, 525,000 tons. On a very large proportion of this business the B. & O. received a long haul and the Michigan roads a short haul, and in order to reach the consuming points in Michigan the Pere Marquette, for example, was obliged to make three or four train movements, retailing the business out one car at a time, whereas it moves on the B. & O. largely in train loads for two junction points. This puts a heavy operating burden on the Michigan lines both in the matter of train movements and in the matter of per diem. What I have said about the B. & O. is equally true of the other roads.

It must not be overlooked that the principal roads in the territory south of Michigan, especially Ohio and Indiana, are on the great highway between the east and the west, and the north and the south. They get a large amount of business passing north and south to and from Michigan, and a very large amount of business east and west originating west of Indiana and south of the Ohio river and passing to trunk line territory east of Buffalo and Pittsburg. There is hardly a road of any size in the Ohio and Indiana territory but handles a considerable portion of through business. On the other hand, some of the Michigan railroads of considerable mileage handle very little through traffic. Take the Detroit & Mackinac Railroad for example. It handles absolutely no through traffic. The Manistee & Northeastern is another example. There are several smaller roads that are purely local switching lines, handling no through traffic and depending entirely upon the larger railroads in Michigan for their equipment and service.

Empty Car Mileage

It should also be kept in mind that a very considerable portion of traffic coming into Michigan is coal, and a large proportion of this is in open cars, very many of which are obliged to go back to junction point empty. This is especially true of the large self-clearing gondolas. This means a large empty car mileage for the Michigan railroads. It also happens that considerable of the outbound business of Michigan is made up of fruit, automobiles and other light and bulky articles, many times requiring large cars or cars with special doors, and these oftentimes have to be handled empty from the junction point to the industries in Michigan, which means a large empty car mileage.

The railroads of Michigan have so many branches that it is hard to compare their operation with that of some of the roads further south. This can perhaps be illustrated by referring to the movement of a carload of freight from Harbor Beach to Chicago, about 425 miles, compared with a similar movement on the Nickel Plate Railroad from Erie, Pa., to Chicago. The car from Harbor Beach has to move in four or five different trains, whereas a car from Erie to Chicago on the Nickel Plate would be put into a through train at Erie and kept intact to destination, there being no operating reason for setting it out at any point. This illustration can be amplified in almost any part of the Michigan territory.

There seem to be two principal factors which operate against the transportation situation in Michigan. The first is the lack of density of traffic and the second is the difficulties of operation due to the climatic conditions and the larger number of branch lines. If they cannot get the density of traffic, they certainly must have higher rates on such traffic as they do move.

No matter what rates are effective in Indiana and Ohio the operating conditions in Michigan will always be bad in comparison with these states.

With all these conditions facing the Michigan lines, it was thought that the only way to spread the burden of rate increase was slightly to raise the scale of rates in parts of lower Michigan, and three zones were proposed.

Zone A embraces all points on and south of the main line of the Michigan Central Railroad, Detroit to New Buffalo. The reason for this line was the fact that the New York Central Railroad touched Detroit, Ypsilanti, Jackson, Battle Creek and Kalamazoo, and they did not see how they could carry one basis of rates in Ohio and Indiana and another in Michigan.

Zone B extended from zone A to a line running from Port Huron through Bay City, Midland and Greenville, to Muskegon.

Zone C extended from Zone B to the Straits of Mackinaw.

When the case was explained to the Interstate Commerce Commission it not only approved the plan but separated Zone C into two zones.

To and from each of these zones the interstate rates were graded up from Zone A and the increase over the regular, or Zone A, rates went to the Michigan roads on account of their disability.

Local differences were very slight compared with the general rate increases since ordered by the Government, and I am not convinced that it is possible to determine whether or not any serious results have come from the zone system.

Crippling Michigan's Roads

The real point is this. If the revenues now derived by the Michigan roads from the zone system of rates are taken from them, what plan is to be substituted to bring the same results?

If we cripple the Michigan railroads by cutting off their earnings without also providing some way of reimbursement, nothing will be gained, because crippled railroads cannot give good service and furnish necessary facilities.

Of course, under the recent railway legislation, the Interstate Commerce Commission can fix the division of earnings; and this is, so far as I can see, the only means of protecting the carriers in this state.

It must not be taken as a foregone conclusion that the present system of divisions is wrong and that a readjustment can be had for the asking.

The New England railroads, whose rates are now as high as in Michigan, are now before the Commission in a case of this kind. If the present divisions allowed the New England roads are found to be insufficient and a readjustment is ordered, it means that roads like the Grand Trunk, Pere Marquette, Ann Arbor and other Michigan lines must back into their proportions to pay the New England lines.

If this question of the zone rates is to come up by complaint before the Interstate Commerce Commission, careful consideration should be given at the same time to the best method of protecting the Michigan roads by readjustment of percentages or divisions, for if this is not done it will simply throw them back into the same relative position as they were in 1916, when nearly every road in the state, except the Michigan Central, was in a bad way financially —and the Michigan Central would have been just as badly off had it not been for its through business and rich relations.

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
16th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Commercial Banking

service must, above all, assure accuracy based upon a knowledge of conditions and possibilities of the field in which it is rendered. Thirty-six years of successful operation has enabled the Dime Savings Bank to acquire this most essential knowledge—and this is the governing basis of all its service to banks, firms and individuals.

Capital and Surplus $3,750,000

Digitized by Google

What do the people and industries of Michigan most need from their railways?

Remember, we are running on an ebb tide in business and must not forget that the present recession is only temporary.

What may we expect when the tide turns?

The railroads are not, as a rule, buying new cars. Look at the weekly pages of the Railway Age and you will see but few of them are even making any inquiry regarding equipment.

None of the Michigan railroads, with the possible exception of the Michigan Central, is properly equipped to handle the natural increase of business in the next five years. Compared with some of the eastern roads, their facilities are very limited, and the only reason for this condition is that they have not had the money.

History will repeat itself and when the flood tide of business comes we will have worse than the former car shortages, congested yards and scarcity of power.

Flint As an Example

In Flint, for example, we need heavy expenditures by both railroads. A recent number of the Flint Saturday Night told at some length of the city's transportation needs. It will cost more than $1,000,000 to give Flint what is needed today to make our service ample.

Where is the money coming from?

There is a homely saying that "you can't get blood from a turnip," and in this instance you can't get money from railroads if they do not earn it.

No doubt some specific rates are too high and require readjustment for the mutual benefit of the public and railroads, because rates which are prohibitive never produce revenue. These can be reviewed and adjusted.

Those who worked out the zone system in 1916 knew it was not a perfect solution, but at the time it was the best that could be suggested. It took weeks of thought and careful study by the railroad people, and a long time by the Interstate Commerce Commission, to get for the railroads this partial relief.

If someone now has a better plan for helping the present general rate situation and can work out some logical way of reducing the rates and at the same time producing sufficient revenues to provide new cars and improved facilities, we should all welcome such an effort; but it should be along constructive lines with an eye always on the final results to the shipping and traveling public.

Editor's Note: The foregoing is part of an address delivered by Mr. Cyon before the Transportation Club of the Flint Board of Commerce, at the Hotel Durant, February 3.

TO FACILITATE ROAD BUILDING

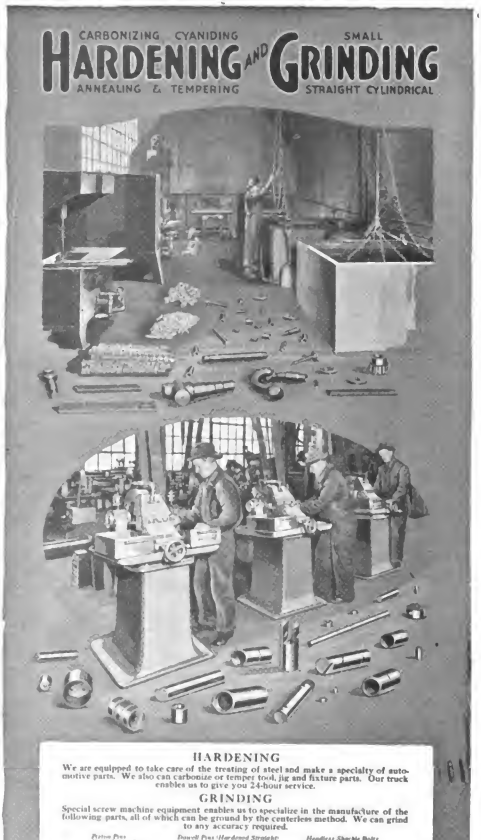
Adoption of a plan for a closer-knit policy in the construction of highways, as against the present hit-and-miss methods, is under consideration by Gov. Groesbeck.

Freight rates within the state have increased so much that they threaten road work, according to Frank F. Rogers, state highway commissioner, in testimony before the Michigan Public Utilities Commission. In some cases it costs $7,500 a mile in road construction.

Another condition that threatens road construction is the failure to sell the last $1,600,000 issue of highway bonds, only one bid at $98.50 for $50,000 being received. The 1919 law provides for $50,000,000 of bonds for trunk highway construction, to be sold at par with 5 per cent interest, but the present condition of the money market makes it difficult to dispose of them.

GALVIN JOINS MUSKEGON CHAMBER

Manager J. E. Coad, of the Muskegon Chamber of Commerce, announces that Howard E. Galvin, who has been manager and secretary of the Chamber of Commerce of Oelwein, Ia., has become assistant manager of the Muskegon chamber.



Digitized by Google



The Luxeberry Painter Says:

"There are two reasons why I always recommend Berry Brothers varnish products.

"One is that they represent the result of over sixty years of experience.

"The other is whether the order is for a can or a carload, the quality and service are the best."

BERRY BROTHERS
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan Walkerville, Ontario

STEERE ENGINEERING

Machine Shops CO. Structural Steel and Plate Shops

Detroit, - Mich.

GRATON & KNIGHT
Standardized Series
LEATHER BELTING
Tanned by us for belting use

The Correct Belt for Every Drive.

Leather Belting for power transmission, Lace Leathers, Leather Packings, Gaskets, Washers, etc. Automotive Leathers—Straps, Clutch Leathers, Fan Belts, Boots, Leather Links, Liners, Coupling Discs, Washers, Crank Holders, Robe Straps.

THE GRATON & KNIGHT MFG. CO., Worcester, Mass.

Oak Leather Tanners, Makers of Belts and Other Leather Products.

Distributors and Branches in All Principal Cities.

Why the North Dakota Failures

(Continued from Page 10)

credit in fact, however, being largely a belief in the honesty of purpose and ability of the borrower. Then there came those years of poor crops when interest was added to principal and the whole was renewed again and again on the security of prospective crops. It is small wonder with such a hountiful and persistent extension of credit that the North Dakota farmer readily embraced the doctrine that he need not pay notes if prices of crops were not to his liking.

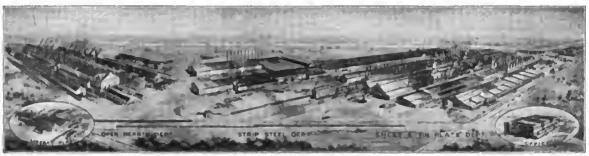
In many towns money, other than pocket change, has almost disappeared. An oversupply of banks has made each banker timid about forcing payment of notes. The well-to-do farmer is the best depositor, and if forced to sell crops he has shown his resentment by withdrawing his deposits, with the result that there has been much liquidation of loans and a corresponding drop in deposits. Thereafter this farmer has sold only such wheat as he has needed money for groceries and clothing, and instead of depositing his wheat checks in the bank he has taken them in small installments direct to the grocery and has given them over in payment for goods. To add to the banker's troubles, he has found that persons in Iowa, Minnesota and Wisconsin and other distant states, who previously had been his best depositors on time certificates, began more than two years ago to withdraw their funds in fear of Townley taxes or other ill effects of the bolshevist operations in the state. Then the Federal Farm Loan Banks cut off the farm loan supply because of laws which made bail insurance premiums and other liens prior to mortgages; and, finally, the investors in farm mortgages, which in the aggregate have been the greatest single source of money supply, began to ask for payment of mortgage at maturity instead of reinvestment of their funds, as was uniformly the custom heretofore. Now add to this loss of outside funds, the total of which is easily more than twice the normal home bank credits, an item running up into the hundred of thousands of dollars representing investment by the farmers of North Dakota in blue sky stocks, prominent among which is a cat ranch, a safety razor factory, an automobile plant, Cuban fruit ranches and scores of other remote enterprises, and it may be readily ascertained why many of the small banks have been embarrassed.

But the End is in Sight

But the worm has turned. It has been a bitter pill, but it will take more than these misfortunes to uproot the confidence which the average North Dakotan has in his broad acres. The improvements in roads, buildings, fences, stock and farming methods in the five years since the war left are astonishing. And all in spite of the millstone which has been hung around his neck. Little hamlets that used to have but one acetylene street light and only oil house lamps have complete electrical lighting systems, and the statement was made at Valley City that there are more of these single flue furnaces in the farmers' homes than stoves. Politically, a great change is on the way. The Leaguers control the state Senate by one vote, but the conservative elements control the House by three votes, and there is an easily discerned desire on the part of some of the Leaguers to switch gracefully over to the conservative hand wagon before the seats are all filled. The chairman of the House committee on banking is studying the Michigan banking law in an endeavor to find something that will put the North Dakota banks on a safe footing.

Editor's Note: This is the second of two articles by Mr. Hanna, financial editor of the Michigan Manufacturer and Financial Record, who returned late last week from a trip of investigation of banking conditions in the Northwest. The first article was published last week.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354



ELECTROTYPES ARE THE WORKING PLATES

You understand and appreciate the wireless message when the operator has accurately and skillfully performed his task. You are favorably impressed with the printed message of an advertiser when Electrotypes—the *working plates*—have proved their good printing qualities.

Michigan Electrotype & Stereotype Co.
Fort Street at Second Main 1972

MICHIGAN

ELECTROTYPES STEREOTYPES

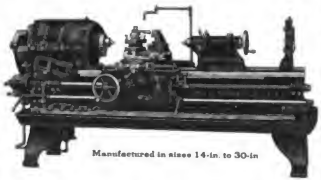
DETROIT

YOU CAN DO IT!

Hundreds of manufacturers are reducing the COST PER PIECE on duplicate parts by this method.

There is no reason why you cannot do the same by using:

LODGE & SHIPLEY MANUFACTURING LATHE



Manufactured in sizes 14-in. to 30-in

Ask us for details

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

How Steel Balls Are Made

(Continued from Page 8)

the balls being rotated between a grinding wheel and a cast iron disc having grooves in which the balls travel. The balls enter the machine, fall into a groove, travel once around the grinding wheel and come out again, the stream of balls entering at one side of the disc and leaving it through another opening continuously. This constantly changing stream precludes the possibility of one ball, perhaps a trifle larger than the rest, wearing a groove in the grinding wheel. Pressure is applied back of the disc until the balls are approximately the size required, then the pressure is gradually removed, so that when the balls are finished, they are perfectly round and all of the same size.

The balls now pass to the oil grinding machines, where the final grinding takes place. This operation removes any fine scratches left on the balls by the Hoffman machines and brings them down to within four ten-thousandths of the proper size. In this operation the balls are rotated in a mixture of machine oil and a very fine abrasive under pressure, the pressure being applied by a revolving cast iron ring or plate. After this operation they are again cleaned in hardwood sawdust and then proceed to the finishing room.

The balls are now put into tumbling barrels containing a mixture of oil and Vienna lime, in which they are rolled for a sufficient length of time to give them a preliminary polish, after which they are removed and again cleaned in a special machine of the type previously described, using hardwood sawdust. They are then put into kegs containing strips of kid similar to that from which gloves are made, in which they are rolled for from twenty to twenty-five minutes. Rolling the balls this way gives them the high polish which is the final step in the process. They are now ready for the final inspection.

Non-Ferrous Alloy Balls

Balls of brass, bronze, aluminum, nickel, monel metal and other alloys are also made in this plant, such balls being used in various forms of valves and other mechanical parts where a metal which will resist corrosive action is necessary. The general features of the method in producing these balls are the same as those employed in making steel balls, but there are certain modifications which will prove of interest.

Brass ball blanks up to one inch in diameter are made in cold-headers, while blanks for balls exceeding this size are forged. In the case of very large balls, the practice is often adopted of making the blanks hollow, which is done by casting them with a sand core which is subsequently removed. Then, in order to prepare the blank for finishing, the holes left by the core prints are drilled and tapped so that threaded plugs may be screwed in. These hollow ball blanks are then subjected to a modification of the regular process if small, and the larger ones are turned in a lathe equipped with special apparatus for this operation, after which they are polished. The small balls are subjected to a dry-grinding process which makes them approximately spherical, after which they are ground in the Hoffman machines, oil-ground, and then polished.

After receiving their final polish, the finished balls go to the inspection department, where all the defective balls are eliminated and those which pass inspection are separated into various grades according to the accuracy of their dimensions. After the final polishing the balls are not touched with the bare hands, as even the moisture from a person's fingers would be sufficient to cause rust.

The first inspection is the "plate inspection," a number of balls being placed on a glass plate which is painted black on the under side. Back of each plate is a reflector which throws light on the balls, and a strip of thin, flexible cardboard is drawn back and forth beneath the balls to rotate them and bring all surfaces into view. Such balls as have cracks, flats or other defects are picked out with the aid of a magnet.

Balls used in annular bearings must be of absolutely the same size in order to give satisfactory results. If they are not, the larger balls will support all the load, with the result that these balls will soon fail and the bearings be ruined. Automatic gauging machines are used for grading the balls according to size, for balls up to and including 3-4 inch in diameter. These machines separate the balls within a limit of 1-10,000 part of an inch, balls within this limit being considered as of the same size. These automatic gauging machines receive the balls in hoppers, the balls leaving the hopper one at a time and running very slowly down an incline over a pair of accurately set blades of predetermined angularity. When each ball reaches a certain point in the runway, it drops between the blades into a tube which conducts it to the proper storage compartments. Balls larger than 3-4-inch diameter are inspected individually by micrometers of remarkable precision. These register ten-thousandths of an inch and the inspector is able to divide the measuring units into halves and quarters without error or difficulty. All gauges, micrometers and standard balls are regularly standardized by the use of measuring blocks in a special department devoted exclusively to this work. Great care is taken to see that standard balls and production balls are gauged at the same temperature, so that the heat expansion and variation is taken care of. After this inspection, all "Microchrome," or first-grade balls are guaranteed to be accurate in sphericity to .0001 inch and all balls in a box are guaranteed to be within .0001 inch in size.

Several methods of mechanical counting have been developed which have proved entirely satisfactory. Balls up to and including one-half inch in diameter are put into the hopper of the machine, which lets them fall into a tray which holds one hundred balls. As soon as the tray is filled, it is withdrawn, and the balls emptied into a box, this process being repeated until the desired number have been counted out. Larger sizes are allowed to run from a hopper into several parallel grooves in a long board. The balls run into the grooves at one end of the board, and as soon as the grooves are filled to a predetermined length, depending upon the ball size, the balls are allowed to run out at the other end and the process repeated. Large balls are counted by hand, care being taken not to touch them with the bare fingers. After counting, the balls are immersed in a solution of rust preventative, after which they are packed in cartons lined with waxed paper and these packed in substantial wooden boxes for shipment.

The Research Laboratory

It is obvious that in the tonnage manufactured each month which has to meet such exact requirements as balls for use in high-grade annular bearings, the greatest care must be taken in the selection of raw materials and in conducting each step in the process of manufacture so that the balls produced will pass the inspection department. It is necessary that the balls not only be absolutely uniform in size, but they must also be of uniform hardness and strength. Both the preliminary and final steps in the manufacture of Hoover balls take place in the physical-chemical testing laboratories maintained by the company. The first step governs the quality of every pound of steel, brass, aluminum and other ball material received from the mills; the last is a super-inspection made on every lot of finished balls to see that the rigid standards of the production-inspection department have been maintained.

All Hoover steel balls are produced from one grade of steel, except that the chromium content of the metal is increased proportionately as the size of the ball is increased.

When the raw steel is received from the mill its composition is carefully checked by chemical analysis, in accordance with its specifications. The second step consists of an ocular examination for surface imperfections. In this test the steel is etched with hydrochloric acid, and if seams of appreciable depth are present, the material is rejected. Brinell hardness tests are made on all wire used for ball purposes to insure the final step in the raw material tests. Samples of the stock are heat treated and fractured to determine whether a correct, uniform, velvety fracture results. If the surface is decarbonized, the material is rejected. Tests are made here also of all the other materials which are used in the processes of ball-making, even the oil being tested to discover if it contains any acid which might injure the surface of the balls.

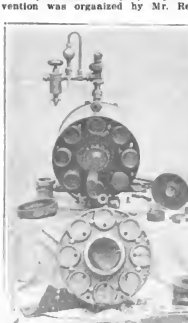
All of which goes to show that the simple process of making a round ball is not so simple after all.

Something New in Steam Engines

(Continued from Page 36)

Fisher Body Corporation Plant No. 10. In 1918 and 1919 two more engines were built.

In April, 1918, a company to promote the invention was organized by Mr. Reagan and



End view of Reagan engine, partially assembled.

others. It was known as the Detroit Steam Motors Corporation. In January, 1919, the company was reorganized under the name of the Superior Steam Engine Company, capitalized at $20,000, located at 1022-3 Detroit Savings Bank building, Detroit.

Digitized by Google

New Corporations

Farmers' State Savings Bank, Milford, Oakland county; commercial and savings bank; Arthur M. Bird, Milford; Harmon A. Smith, Wixom; Fred Childs, Milford 50,000

Decker, Davies & Jean, Inc. (F.), Wilmington, Del.; Owen P. Davies, Charles B. Decker, Grand Rapids; 2,500 shares, no par value.

Kney Packing Co. (F.), St. Louis, Mo.; M. A. Nicholson, Michigan agent, Detroit, 464 Grattot ave. 900,000

Cosmopolitan Construction Corp. (F.), Wilmington, Del.; Whitfield Farrington, 1650 W. Grand Blvd., Detroit; $25,000 preferred; 1,000 shares of common, no par value.

Holbrook, Cabot & Rollins Corp. of the State of Massachusetts, Boston; A. Pearson Hoover, 1202 Dime Bank bldg., Detroit; $250,000 preferred, 10,000 shares, no par value.

Goodrich Transit Co. (F.), Wilmington, Del.; George W. Moore, Campau bldg., Detroit 1,250,000

R. H. Hilder Co., Detroit; general building and construction business; Ralph H. and Robert M. Hilder, 37 Hill ave., Highland Park; J. T. Hilder, Mt. Pleasant 20,000

Welt & Sons Paper Co., Detroit; wholesale and retail paper, wood fiber, packing cases, etc.; L. Welt, 100 Chandler ave., Melville S. Welt, J. M. Welt, Detroit 250,000

Forty Associates, Lansing; to deal in real estate; Theodore G. Foster, Clarence S. Roe, F. Carew Martindale, Lansing 100,000

Washington Realty Co., Detroit; real estate; George G. Prentiss, Benj. F. Mulford, Highland Park; B. A. Fugh, 147 Warren ave. E., Detroit 10,000

Washington Painting & Decorating Co., Detroit; painting and decorating business; Max A. and Abe Blatt, 45 Owen ave., Detroit 10,000

Broas Galloway & Co., Bay City; to deal in clothing, hats, furnishing goods, trunks, etc.; J. Just, Lina L. and Charles L. Broas, Bay City 15,000

Interstate Millwork Co. (F.), Chicago, Ill.; W. L. Russell, 2535 Tenth st., Detroit; 600 shares common stock, no par value.

National Magnesite Stucco Co., Wyandotte; to manufacture or sell, wholesale and retail, stucco and other building materials; Frank J. Griswold, Port Clinton, O., Peter Oosterhouse, 1156 Collingwood, Detroit; Harry A. Eberts, Wyandotte 25,000

City Jitney Service Co., Detroit; jitney transportation; James C. Grace A. and James J. Donohue, 6222 Northfield, Detroit 1,000

Odessa Baking Co., Detroit; to manufacture and sell, wholesale and retail, bread and cake; Barney and Jennie Rosen, 84 Monterey, Morris Gottlieb, Detroit 10,000

A. F. Bartlett & Co., Saginaw; to manufacture and deal in steam engines, boilers, sawmill machinery, etc.; Otto Schupp, Alex M. Lemke, Hanford F. Willis, Saginaw 125,000

Marquette Knitting Mills, Marquette; to manufacture and sell underwear, hosiery and other wearing apparel; E. A. Macdonald, Ishpeming; A. Clark, H. A. St. John, Marquette 50,000

Charles Sexauer Roofing Co., Detroit; general roofing and sheet metal business; Charles Sexauer, 3954 Helen ave., Frank D. Dempsey, Andrew Sexauer, Detroit 35,000

Bullock Investment Co., Detroit; to buy, sell and improve real estate, etc.; Edward Bullock, Highland Park; James J. Trudell, 2182 Mt. Elliott ave.; Frederick Cornick, Detroit

Brown, Preston & Derrick, Detroit; architectural and engineering business; J. Martin Brown, 1922 Cass ave., Martin A. Preston, Robert O. Derrick, Grosse Pointe 30,000

Bolger & Reiter, Inc., Detroit; general merchandise business; James W. Bolger, 5469 Stanton ave., Albert J. Reiter, Ann M. Reiter, Detroit 10,000

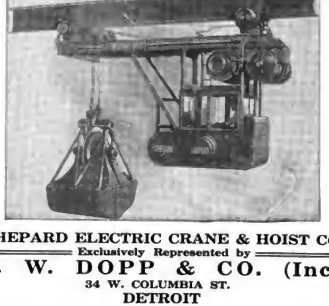
Producers & Consumers Co., Detroit; owning and operating farms, etc.; Roy L. Francis, Stewart A. Gale, J. A. Owens, Cheboygan 400,000

Pittsburgh Erie Saw Co. (F.), Pittsburgh, Pa.; H. C. Foes, agent, 2870 Humboldt ave., Detroit 100,000

Detroit Radio Laboratories, Detroit; to design, manufacture, construct, purchase, buy, sell and deal in wireless radio telephone and telegraph material; Irvin G. Dietterich, 3662 Pulford

(Continued on Page 37)

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163
CAD. 6164

ESTABLISHED 1906

Bookkeeping
Appraisals
and
Cost Systems

Audits
Income
Tax
Reports

THE
WALTER S. GURD CO.
Public Accountants
708-9 Hammond Bldg. Detroit, Mich.
Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F. C. A.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL
TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

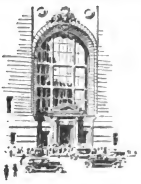
THIS IS YOUR OPPORTUNITY

For the present we will sell from our stock, Beams, Channels, and Angles at $66.00, and Plates at $70.00 base per net ton, cut to length, F. O. B. our plant.

We will also be pleased to quote on fabricated steel, no matter how small or large the tonnage, for prompt delivery, and have recently equipped a Sheet Metal Shop with the latest machinery for the production of all kind of plate work, 1-8 inches and thicker, such as stack, up-takes, etc.

RUSSEL WHEEL & FOUNDRY CO.

Joseph Campau Ave. & Belt Line R. R. Detroit, Michigan.



A BANK that deals with the fundamental enterprises of the nation and has done so for 65 years.

THE NATIONAL PARK BANK OF NEW YORK

214 Broadway

SAFE DEPOSIT VAULTS

L-XX

HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

Detroit, Mich.

Digitized by Google

ave.; Elvin B. Dietrich, Arthur L. Smith, Detroit 50,000
D. E. Kellogg Co., Detroit; to manufacture, buy, sell and deal in all kinds of millinery, store fixtures and equipment; Douglas E. Kellogg, Ida M. Taft, Plymouth; Harry D. Kellogg, 818 Pingree ave., Detroit..... 100,000
Simon Iron & Steel Corp., Lansing; trading and dealing in iron, steel and other metals; J. B. Simon, Wesley E. Cooley, Anthony Laken, Lansing.
First Bond & Mortgage Agency, Ltd., Lansing; to do a general bonding and insurance business; James I. Van Keuren, Carl H. Moelter, Bruce E. Anderson, Lansing 10,000
Southern Michigan Brass Foundry Co., Hudson City; manufacture of brass, aluminum and bronze castings; Gusse G. Taylor, William P. O'Brien, Richard Allingham, Hudson..... 5,000
Box-A-Lyne Co., Grand Rapids; to manufacture and sell bookends and combinations of type heads; Clarence C. Gilleo, William E. Borat, Avery C. Gilleo, Grand Rapids 25,000
Boland Chemical Co., Jackson; commercial rendering, buying, selling hides, furs, tallow, greases and bones and commercial fertilizers; Hyman M. and Martin W. Lammers, Joseph E. Seckinger, Jackson 50,000
Best Baking Co., Detroit; handling, manufacturing and dealing in all kinds of foods; Fred D. and Sadie Philp, Royal Oak; Neal Drabbe, 4529 Fourteenth st., Detroit 10,000
Citizens Mortgage & Loan Co., Lansing; lending of money and general real estate; Charles A. Ferguson, Ana G. Ferguson, Seymour H. Person, Lansing 50,000
Superior Stove & Stamping Co., Detroit; to manufacture, purchase and sell, wholesale and retail, stoves, furnaces and metal products; William Christian, 172 Connecticut ave., Detroit; Charles B. Talbot, Farmington; H. A. Burnett, Detroit..... 1,000
Woman's Wear Corp., Detroit; to engage in buying and selling, at retail, of women's dresses, suits, waists, etc.; Soloman Shapiro, 2535 W. Grand blvd., Albert Rosenthal, Benjamin Rosenthal, Detroit 15,000
Carl F. Pirscher, Inc., Lansing; to buy, sell and trade in new and used automobiles, trucks, tractors and accessories; Carl F. Pirscher, Floyd Link, Harold Kraus, Lansing..... 50,000
Sam L. Hirsch Realty Co., Muskegon Heights; purchasing, holding, dealing, selling, improving and maintaining real estate; Sam L. and Sadye G. Hirsch, Muskegon Heights, John W. McLaughlin, Muskegon 10,000
Potter & Allshouse, Inc., Ann Arbor; to conduct general real estate and insurance agency and brokerage business; Chester Allshouse, Harry O. Potter, 601 First National Bank; Lewis A. Stoneman, Ann Arbor..... 10,000
Krause Mercantile Co., Muskegon Heights; general mercantile business; Alexander Krause and Oscar Krause, Steve Brehen, Muskegon Heights.....
Merchants' Mortgage Corp., Detroit; notes, contracts, mortgages, etc.; John A. Peters, George Jaynes, F. A. Schneider, Detroit 100,000
Cutter Grinding Works, Detroit; to manufacture, buy, sell and salvage high speed tools; Oscar N. Naylor, 881 Euclid ave., Mark F. Landsberger, Frank J. Koch, Detroit..... 25,000
Level Road Machine Co., Stambaugh and Iron River; to promote one of Axel Wettervik's improvements; Erland Carlson, Carl Anderson, Axel Wettervik, Stambaugh 25,000
National Electric Supply & Fixture Co., Detroit; wholesale and retail electric and gas heating and lighting fixtures; Louis Sobel, 632 Holbrook ave., Karl Knapp, David Sobel, Detroit..... 50,000

INCREASES

Merchants Savings Bank of Battle Creek from $125,000 to..... 250,000
Gibson-Detroit Realty Co., Detroit, from $40,000 to 100,000
C. T. Goodsell Corporation, Lapeer, from $40,000 to..... 100,000
River Raisin Paper Co., Monroe, from $2,550,000 to 2,680,000
No. 29 Temple Ass'n of Battle Creek, Mich., Battle Creek, from $10,000 to..... 20,000
Johnson Oil Refining Co. (F.) (Ill.), Chicago Heights, Detroit, from $600,000 to 2,000,000
A. Rossellus & Co., Detroit, from $60,000 to 160,000
Patton Corns Bldg. Co., Detroit, from $4,000 to 10,000
Widdicomb Furniture Co., Grand Rapids, cap. dec. from $223,620 to $220,000 and inc. from $220,000 to..... 500,000
Hastings Printing Company, Hastings, from $10,000 to..... 15,000
Corwin Lumber Co., Jackson, from $50,000 to 100,000
Bay View Furniture Co., Holland, from $50,000 to 60,000
Kelvinator Corporation (F.) (Del.), Wilmington, Del., Detroit, from 6,000 shares to 10,000 shares, n. p. v.
Maser Cigar Mfg. Co., Detroit, from $200,000 to 400,000
Harrison Corporation, Detroit, from $60,000 to 100,000
Polker Co., Detroit, from $20,000 to..... 50,000
Soo Beverage Co., Sault Ste. Marie, from $40,000 to 75,000
Detroit Electric Furnace Co., Detroit, from $50,000 to 100,000
Columbus Land Co., Detroit, from $5,000 to 15,000

Write for Your Copy of

INVENTORY VALUATION

For Federal Taxation and Banking Purposes

Free on Request

FEDERAL Income Taxes are now engaging general interest. It was not strange, therefore, that when we published an authoritative discussion of Inventory Valuation in a recent issue, that there should have been a demand for copies which exhausted the supply and required us to prepare reprints.

The article was an extract from an address made by William M. Lybrand, President, National Association of Cost Accountants, before the January meeting of the Detroit Chapter of that Association.

The opinion and judgments of a specialist and unprejudiced observer on this important topic is presented. We want every banker, manufacturer, accountant, attorney and merchant to have a copy, which is why it was reprinted in booklet form for general distribution.

Inventory Valuation will prove helpful to those who seek or give credit, plan for the future or are concerned with the preparation of Federal Tax returns.

It summarizes principles of valuation that have stood the tests of time and that are governing in the present conditions.

Copies will be mailed free on application to

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

611 Free Press Building Detroit, Michigan

C.C. COAL COKE OREY

1908-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

RED CROWN Gasoline is made especially for automobiles. It will deliver all the power your engine is capable of developing. It starts quickly, it accelerates smoothly, it will run your car at the least cost per mile, and it is easily procurable everywhere you go.

Standard Oil Company (Indiana) Chicago, Ill.

BRASS and COPPER

Seamless Tubing

A very careful study has been given to this equipment by the

U.S. Copper Products Corporation

of Cleveland, Ohio

with a view toward modernizing production and care in the selection of men who operate this plant.

Our Extreme Effort is Quality and Service

Detroit Office

H. B. KENDAL COMPANY

Real Estate Exchange Bldg.

Telephone Main 1657-8-9

WHEN ITS ABOUT BUSINESS



PUBLISHES IT FIRST

Five Dollars a Year Issued Weekly

Digitized by Google

FEB 21 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Detroit, February 19, 1921

SPADES ARE TRUMP

(Financial Section Page 27)

Vol. 27. No. 8 *Price Fifteen Cents*

Digitized by Google



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Resources Over $125,000,000

TIMES LIKE THESE EMPHASIZE THE VALUE OF A CONNECTION WITH A BANK AT ONCE ADEQUATE IN RESOURCES, COMPLETE IN EXPERIENCE AND THOROUGHLY SYMPATHETIC WITH THE NEEDS OF BUSINESS.

OFFICERS

JAMES T. KEENA, Chairman of the Board

JOHN W. STALEY, President
F. A. SCHULTE, Vice-President
JOHN R. BODDE, Vice-President
H. P. BORGMAN, Vice-President
R. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES H. AYERS, Vice-President
AUSTIN E. WING, Assistant to President
A. H. MOODY, Cashier
D. N. SWEENY, Assistant Cashier
D. K. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
G. W. BEASLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO D. HEAPHY, Assistant Cashier
C. I. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor
RODERICK P. FRASER, Manager Foreign Department.

DIRECTORS

RUSSELL A. ALGER
GEORGE H. BARBOUR
W. T. BARBOUR
JOHN R. BODDE
H. P. BORGMAN
H. M. CAMPBELL
C. A. DU CHARME
FRANK J. HECKER
FRED W. HODGES
J. C. HUTCHINS
JAMES T. KEENA
H. B. LEDYARD
ROBERT S. MASON
FRED T. MORAN
FRED T. MURPHY
M. J. MURPHY
W. HOWIE MUIR
TRUMAN H. NEWBERRY
WALTER S. RUSSEL
HUGO SCHERER
F. A. SCHULTE
ANGUS SMITH
R. W. SMYLIE
JOHN W. STALEY
HOMER WARREN

(193)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Established 1907

CONTENTS

February 19, 1921

Page

Spades Are Trumps..... 5
Business in motor materials hereafter must be dug for, and the plant buyer will be critical. By F. W. Hersey.

Flying Ten Miles on a Gallon.. 7
Most recent developments in airplane construction in Detroit. "Ships" even becoming rivals of motor trucks. By William B. Stout.

Rosenheim Visits His Banker... 8

The Lathe Family..... 9
This mainstay of the modern machine shop traces its ancestry back to Biblical times. By Howard Campbell.

Corporation Laws Recodified.... 10

Unsold Fords Being "Cleaned Up" 12

Page

News of the Motor Industry..14-15

Transportation Matters..... 16

Truck Tax Faces a Fight..... 16

The Week's Building..... 18

A Statement by Mr. Yeoman.... 19

Editorial.....20-21

Financial Section.....22-29
The Business Outlook — Quotations on Michigan Industrial and Financial Securities — Liberty Bonds — Foreign Exchange — Bank Clearings—Weekly Federal Reserve Statement and Analysis — Public Utilities—Who's Who in Michigan Finance.

New Corporations.....35-36

Vol. 27 Detroit, Mich. No. 8

Published Every Saturday, by the Manufacturer Publishing Company
Suite 811 Free Press Building, Detroit, Michigan
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

JOHN A. RUSSELL, President and Editor
IRA W. WELBON, Secretary-Treasurer
HAROLD HIGH, Managing Editor
EDWARD R. GRACE, Vice President
ALFRED FISCHER, Circulation Manager
F. W. HERSEY, Associate Editor
JOHN P. FITZ GERALD, Second Vice-President
MARC BRAUN, Statistician
HOWARD CAMPBELL, Technical Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Five dollars a year in the United States, Canada and Mexico. On sale at all news stands, Fifteen Cents a Copy.

All advertising copy must be in not later than ten days in advance of publication date.

Advertising rates on application.

Digitized by Google

—*on being in two places at the same time*

You're wondering how you can crowd more business into one day.

You can't hold back the hands of the clock but---you *can* be in two places at the same time.

Sure you can!



You can't hold father Time

Long Distance Telephone Service enables you to sit comfortably in your office and *talk business* with customers *in another city.*

Instead of wasting time going to see an out of town prospect when it is simply a matter of "follow-up," why not let Long Distance help you?

In this way, you keep your finger constantly on the pulse of potential buyers, yet reserve full time for closing deals.

Call *up* "future prospects" and then call on the "live" ones. That's the system---and you'll find it a good one.

You'll find Long Distance Service prompt and efficient. Connections are made quickly. Conversations are readily carried on in an ordinary tone.



Tell the world

Take advantage of this modern service that doubles selling time.

Make part of your "calls" via Long Distance Telephone.

MICHIGAN STATE TELEPHONE CO.

"Our Ambition—Ideal Telephone Service for Michigan"

Digitized by Google

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

Spades Are Trump; The Purchasing Agent Deals

Which Is Another Way of Saying That Business In Motor Materials Hereafter Must Be Dug For And That the Plant Buyer Is Going to Be Critical

By F. W. HERSEY

FOR more than a decade the main problem in the automotive industry has been one of production. Stimulated by a constantly growing demand, manufacturers have accomplished truly ramarkable results in rapid-fire, quantity output, so that the opening of 1921 found the United States with more than 5,000,000 motor vehicles in daily use and a maximm production power of approximately 3,000,000 cars annually.

The manufncture of 2,241,000 passenger cars and trucks, the 1920 prodnction, called for plant facilities and buying power theretofore unbeard of in the whole industrial world. The expansion of plants, their equipment, the trailing of men and their assignment to duties, the purcbase of parts, materials, accessories, machinery, sbop equipment and supplies, called for genius in organiation, daring financial operations and vision of great breadth.

That the industry had all these, no one will deny. If the builders of this industry were weak in any one of the factors mentioned, it must have been vision, judging by recent events. Possibly this vision was just a trifle out of focus. At any rate, the unexpected happened in spite of genius, courage and vision.

Mistakes Brought Into Bold Relief

During the 10-year period the progress of the industry had been so steady, its development apparently so sound and the future date so insistent that the possibility of a reaction seemed so remote as to be negligible. Nevertheless reaction came, demand ceased and plants closed down. The cause of the sudden cessation bas been given considerable study by automotive executives, not because they were curious to learn why the public stopped buying cars, but rather for the purpose of deciding upon what basis to reconstruct their somewhat shattered conceptions of what constitutes sound manufacturing policy.

Some of them have come to the conciusion that the industry has emerged from the period of development and production into n new and indefinite period of intensive merchandising, and therefore of revised production methods and buying policies. Before arriving at this view, however, it is more than likely that retrospection brought into bold relief a few of the mistakes horn of an optimism that was in renlity a distorted mental vision.

For quite a time following the close of the war, buying for the industry was as hectic and unsound as was that of the prosperity-mad public. Price consciousness disappeared in the competition for available materials in a market as unstable as a Mexican jumping bean. Management succumbed to reports of actual and potential sales.

The production manager ruled supreme, while the purchasing agent became only a puppet in the conrt of the great god "Get." Whatever bargaining shrewdness be possessed won little recognition; for in the final analysis, what was wanted was materials, parts and accessories, not the genius of a Shylock. The man in the executive chair who viewed the world through a "field glass" imagination was inclined to become impatient with the purchasing agent who insisted on peering through the wrong end of the telescope.

John C. Howell, a purchasing agent for a large concern, speaking at a New York meeting recently, said:

"Too much profit is as bad as too little, since the insidious effect of large profits often invites risks which the sane and conservative man would avoid, breeds recklessness in expansion by unwarrantable increases in overhead, and thereby imposes a burden which cannot be speedily unloaded when the inevitable time for contraction arrives. Loose business methods only succeed in times of war when all goods are in great demand and costs become secondary and even trivial."

It was this unprecedented flow of sales and profits that distorted the vision of management. Loose buying was one of the results of the orgy of profits and an inflated mental attitude. The best illustration of an inflated mental attitude is offered in the report on estimated passenger car production for 1920 compiled from statements made by the sales departments of the manufacturers throughout the country. When these authorized statements were totaled, they placed the passenger car production alone nt 7,000,000 vehicles.

A commercial reporting agency which collected the estimates cut the figure to 3,500,000, or 50 per cent, before sending out its report. One purchasing agent the writer knows very well, cut this estimate to 2,000,000, and the actual passenger car production was 1,906,000. Had the industry's purchasing organization believed the sales department and bought on a basis of 7,000,000 car production, inventories would have well nigh wiped the business out of existence. We assume such a report was for public consumption only.

Certainly the industry did not believe its own exaggerated reports, nor did it endeavor to buy and manufacture on any such scale. The point we want to bring out is that this inflated mental attitude has and is yet permeating every branch of the automotive and allied industries to some extent, with the result that the work of re-establishing the industry upon a new basis has not really made any headway.

Industrial prosperity is not builded upon finely turned phrases or the predictions of self-appointed prophets. Its foundations have been, are and will continue to be consumption and production, two interdependent factors. Consumption of manufactured product can be cut any time the consuming public decides to do without the product. The inevitable result is a shrinkage in production.

At this time consumption is curtailed; consequently production is restricted. It is the belief in some quarters that it will take five years for the industry to recover from this shock. Other opinions favor three years. But whether the industry recovers tomorrow or in 1926 there is one thing certain, two functions in the business are about to undergo a shake-up. One is production and the other is buying.

Two Expert Opinions

In an article in System recently F. A. Seiberling, president of the Goodyear Tire & Rubber Company, wrote:

"My own experience teaches me that really sound business is founded on buying and manufacturing. It is perfectly true that if you know how to buy and make, the world will beat a path to your door. We use selling and advertising to make the path a road."

A General Motors official is quoted as having said:

"We have a long period of readjustment ahead of us. In the past the margin of profit has been big enough to allow laxities. In the future competition will be so keen that every organization to survive cannot have any division as important as the materials division inefficiently run."

Digitized by Google

It is with buying for automotive production that this article has to do. An effort has been made to get the viewpoint of the purchasing agents of the motor car manufacturing district of the Great Lakes district, comprising notably Michigan, Indiana, Illinois, Ohio and Wisconsin, on the buying policies they are likely to follow, the type of concerns which will get business and those whose past practices in a flexible market have given them a "black eye."

There are few industries throughout the whole nation that are not in some way interested in the progress and success of motor car manufacture. Its influence has spread to every corner of the country. The temporary stagnation of this industry has affected seriously many other industries, and indirectly, though not as seriously, affected others. All industry is watching the automobile barometer for signs of returning prosperity.

We have chosen to discuss only one small religion of the United States for reasons which will be explained later. Because Elwood Sampson, public relations director of the National Association of Purchasing Agents, who has just returned from a trip through the five states already mentioned and knows more of what the purchasing agents are thinking than any other man, we have asked him to explain the situation. His review follows:

"The purchasing agents of the motor car industry are doing more than sitting comfortable and not ordering. They are analyzing markets and all the various factors which influence market trend. They are studying the concerns who have sold or want to sell them goods. They know what they want, when they want to buy, and how much they want to buy. Like any other business man, they instinctively resent any attempt to dictate to them just how they shall run their end of it. Accordingly, the continuous exhortations of 'buy now' act exactly the opposite of what these various firms expect. These 'buy now' exhortations sound to all purchasing agents like a man in such a panicky state of mind that he has lost the power to reason clearly.

"Hard luck stories or begging for orders produce absolutely no concrete results, for business and charity do not mix. Granted that a salesman makes a business-like proposition to a purchasing agent, this alone is not sufficient to get an order. For, more than ever, purchasing agents will make it a point to know the kind of concern who is making that proposition—what is its financial responsibility, whether its past record is a clean, honorable one; or whether it is such as to make any responsible buyer afraid to have business dealings with it.

"The purchasing agent today is not a man who merely considers price and delivery, as is still so widely believed in the business world. In addition to all the factors which are of direct concern to him professionally, he considers the general business welfare of his company. And, accordingly, while it might be to his immediate advantage to deal with some one firm whose general business policies are destructive, he feels he must protect the best interests, in the long run of his own company.

"The purchasing agent knows what he needs for his car. He knows that his company is facing keen competition for some time to come. It is therefore up to him to more than do his part by getting the proper quality of material at such a price as to give his own company an advantage in the competition ahead. In general, he will not expect to place business at prices below the irreducible minimum. In some cases, however, he will expect business, if placed at all with certain firms, to be placed at a monetary loss to them as a reminder that sharp practices followed by them in the past do not pay in the long run.

"There is not a high grade professional buyer in the country who does not know that deflation must be completely brought about before the market will swing about again. All of the talk in the world to make purchasing agents believe anything else is falling on absolutely sterile ground. With the purchasing agent deflation means more than a drop in material prices. It means a deflation in the mental attitude which business men have come to take toward business costs and business profits.

"This deflation is one thing which is being particularly watched day after day. The purchasing agents are waiting and wondering how soon the business men of the country will bring themselves to admit that prosperity is not a bubble in the air which they must keep blowing in order to keep it from dropping and breaking; but instead that prosperity must rest upon a solid foundation which is the land—either that which grows on it or which is mined from beneath the surface.

"In watching this deflation for the psychological moment to start a real buying movement, the purchasing agent is studying each class of business—the manufacturer, wholesaler, retailer and the land owner. At the present moment purchasing agents in general recognize that in many of the raw metals and textiles, complete deflation has taken place, with the exception of the elimination of firms unable to do business at low price levels. This is particularly true of copper, tin, lead and zinc, but deflation in rents is not more than 5 per cent of what we feel must take place. The sooner that this process can be completely brought about the sooner are we going to start in a long pull through a cautious buying movement. Buyers do not hesitate to come into the market when the long swing tendency is upward. But they continually hold back and buy only for immediate day-to-day needs as long as they know that the bottom has not yet been reached.

"There is business in the automotive district through which I have traveled. The country itself has not shut down and never will so long as there is human life and human needs to be supplied. The motor car industry has a certain important part to play in the essential work of the nation. But no man or no firm is going to get this business who adopts the attitude of just sitting back and waiting until the high tide of prosperity reaches us again.

"He must first put his own manufacturing house in order; get rid of all of the excess manufacturing costs which have crept in during the last six years; tone up his organization to the point where it has true manufacturing ability in the face of keen competition. When these things have been done it will be time to send out his salesmen with their very best propositions. For with the professional buyers today, personality will not count nearly so much as it has in the past. Selling talk is the thing which every buyer is trained to disregard. The salesman must have the goods to meet and be able to present a real proposition in every sense of the word.

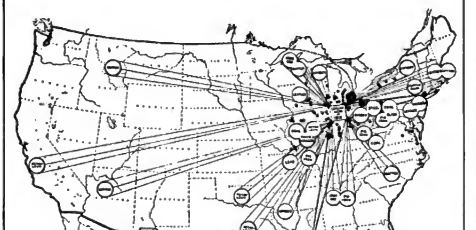
"I know that the majority of business men will feel that the purchasing agents are demanding too much in what I have outlined above. Be that as it may, there are certain firms who are getting business every day and who are running as high as 90 per cent capacity, because they have been wide awake enough to get the jump on their competitors by doing the things I have outlined above. Therefore it is certain that those who are still asleep either to wake up and show the real American fighting spirit, or else close up shop entirely."

From this view of the situation one may draw the inference that there will be no welcome on the doormat for the concern which, to pursue the glittering golden stream of profit in the epileptic market, feigned inability to respect contracts and then sold through concealed brokers on the theory that the purchasing agents would never "get wise" to them. Likewise the S. R. O. sign will be out for prophetic salesmen, mendicants and glib talkers with white elephants to park in some "easy mark's" backyard.

We have an estimate that materials and parts on hand in the automotive industry, if balanced, would last through May of this year. But as they are not balanced, every plant will be in the market from month to month for a limited amount of material, but it will be very about buying more than 60 days' consumption.

When Mr. Sampson discusses "selling right" he probably has in mind some advantageous

(Continued on Page 8)



SOURCES OF SUPPLY OF THE MOTOR VEHICLE INDUSTRY

The figures include parts and accessories plants. Dots indicate motor vehicle centers. Heavy lines show export routes. May by courtesy of the National Foreign Trade Council.

Digitized by Google

Flying Ten Miles on a Gallon

Most Recent Developments in Airplane Construction In Detroit; "Ships" Even Becoming Rivals of Trucks



—Copyright, 1926, Underwood & Underwood, N. Y.

TWO VIEWS OF THE STOUT "BATWING" TYPE OF INTERNALLY-TRUSSED AIRPLANE

By WILLIAM B. STOUT

THE LAST FEW MONTHS have brought great changes in the possibilities of the airplane industry. New figures of performance and manufacturing cost, together with operation cost, are lower than anything that the airplane enthusiast, himself, imagined could be possible a year ago.

These things have a vital bearing on Detroit, and unless this city awakens very shortly to the real industrial possibilities of the newer types of aircraft, some other locality will be well on the way toward controlling this new industry.

In airplanes of the war-time period all plane structure was carried out in the air to resist the wind, so that the planes of that period might be compared to motor boats having the keel and ribs outside of the hull and resisting the water, instead of inside, where they belonged.

The new types of airplanes are "internally-trussed"; that is, they have all of their structural parts inside, out of the wind, so that no horsepower is wasted in shoving useless resistance through the air.

This means that, with the new planes, a 200-horsepower engine carries the same load at the same speed as the old ships accomplished with 400 horsepower, but for twice the distance without having to come down.

This means that the new "internally-trussed" planes with a load of six people can make more than 10 miles on a gallon of fuel, and can be operated at an upkeep cost on a ton-mile basis comparable to that of a motor truck in long distance work. For distances over 300 miles, one is even now able to transport goods by airplane cheaper than by a motor truck of the same capacity, and naturally in far less time.

The old type biplane was also a very fussy production problem, requiring some special, select materials and workmanship, whereas the new planes, of very much stronger design and of all metal construction, are made of easily-obtained material, and with far less skill of labor required.

The announcement by the Aviation Country Club of Detroit that the Pulitzer Trophy Airplane Race would, in all probability, be held in Detroit next year has more than a usual interest, as this race will mean not only that Detroit will enjoy a spectacle of the most modern type of contest, but that those who wish may at the same time educate themselves to the real possibilities of air travel, as a solid, industrial force.

It is not generally known in Detroit that the most advanced types of airplanes yet produced for our Navy are being constructed in Detroit, and were designed by Detroit engineers. These planes will be fitted with Detroit-built engines, and although their characteristics and performance cannot be stated, as they are for government work, yet they represent the "last word" in the design of aircraft in any country.

It is very probable that more than $2,000,000 worth of airplane business will be handled in Detroit during the next year, these planes being both government and commercial craft.

In line with development of the new types of airplanes, the most recent development of the type is being built in Detroit. Only recently, flying tests were secretly carried out at the Packard Aviation Field on the Stout "Batwing" type of internally-trussed airplane, an all-veneer construction embodying some very advanced features, both of aerodynamics and structure.

The plane itself, as built at the Stout Engineering Laboratories, Inc., in Detroit, is an all-veneer job, even the wings being covered with this material.

In general principles, the plane, or "ship," as it is colloquially called, resembles a high-class motor car sedan, fitted with wings. This totally-enclosed type, built for three passengers, takes the airplane a considerable step beyond anything developed during the war, in that with this plane, one has real comfort and quietness, and yet a very remarkable speed range.

Whereas the ordinary airplane must land at about half its maximum flying speed, this plane can land at one-third of its maximum flying speed, and yet without any of variable wing curve features. It is a monoplane, as are all the newer experimental types, and, with a landing speed of approximately 42 miles an hour, may attain a maximum speed of 125.

The extreme safety of the type, and the comfort connected with travel in it, should be a very great advantage in all varieties of commercial work; whereas the fact that it operates on a gasoline economy of 10 miles per gallon, shows that there is a great deal of difference in airplanes on operating cost.

The Stout Engineering Laboratories, Inc., are now building planes of all-metal, capable of carrying a two-ton load, or the equivalent of sixteen passengers and baggage and five hours' fuel, with a maximum speed of 125 miles an hour. The cruising speed, even with full passenger load, would be about 110 miles an hour.

All-metal construction of a type entirely developed in Detroit (and a radical advance over either the foreign or American construction) again adds a large factor to the commercial value of the airplane, due to its weather-proof quality and the extreme strength and durability which can be obtained.

The Stout Engineering Laboratories, inc., are also building some large planes for the Navy in all-metal construction.

The Verville airplane which won the Pulitzer Trophy Race this year was designed by a Detroiter, Alfred V. Verville, now employed by the Government at McCook Field, Dayton, Ohio. It is rumored that certain Detroit interests are anxious to locate him again in Detroit in preparation for next year's contest, but under civilian auspices.

The sales field for airplanes seems to be almost unlimited, even at present, where planes of proper operation cost can be produced. The market includes not only Army and Navy requirements of different types, but a large number of aerial mail routes, aerial freight and passenger lines, particularly on the coast, and planes for carrying ore and supplies to and from mines, etc., in inaccessible localities.

The future of the airplane industry in Detroit will entirely depend upon the attitude taken by Detroit business men and financial interests toward the new industry, and on the quality of management which goes into its progress in connection.

FINANCING COPPER EXPORTS

Plans for financing the sale of export purposes of 400,000,000 of the 600,000,000 pounds of surplus copper in the American market were made public in New York last week with the announcement that the product was pledged as security for $40,000,000 of 8 per cent notes of the Copper Export Association to be offered for public sale by a banking syndicate headed by the National City Company and the Guaranty Trust Company of New York.

This is said to be the first public loan made in this country to be secured specifically by a certain amount of an essential commodity, as well as the first big movement by American companies to take advantage of the opportunities offered under the Webb Act to invite public participation in the financing of foreign trade.

Digitized by Google

Rosenheim Visits His Banker

[*From the Timken Magazine*]

"WELL the Greeks they eleeted that feller Constantine as King again and right away he wants to borry thirty or forty millyun dollars," remarked Meyer Goldman to his friend Max Rosenheim, proprietor of the Scoteh Woolen Mills, High Grade Men's and Boys' Clothing.

"Yes," replied Max, "and I bet he gets it, with mebbe nothing for security but the Athens city hall and a coupls lots in Crete. One of the easiest things what a King can do is to go out and borry money on his business prospects, and he don't have to morgidge his throne or leave his crown in the bankers' safe. They just say, 'Good morning King, how is Mrs. King and all the little Kings, and will you have it all in big bills, or part gold?' But when a business man needs a little capital and goes to one of them bankers he must give a detailed statement of his commercial history since 1882 and show that the fillin' in his teeth is not less than 22 karat. When you put money in a bank, all the security you get is a pass book and a ten-cent calendar, with a notice that if your account averages below a certain amount they don't want your trade. But when you want to borry a little money they take out the interest in advance and probly report to the police that you're a suspishus character and will need close watchin' for ninety days."

"But, Max, a bank makes all its profits from loans, so it stands to reason that they are glad to loan money on good security."

"Meyer, a banker is the only business man I ever saw what hems and haws and hesertates when he has a cash customer ready to pay him a profit on his commoderty. When a man comes in here to buy a suit of clothes I use the best salesmanship what I know to get him to take it, but when a banker's customer wants some o' his goods, the banker usually has nine or ten reasons why he can't make the loan, but finally is persuaded to accept a ninety-day note and an apology for botherin' him."

"A banker has gotter be careful, Max. If he makes too many mistakes, the bank examiner will be after him."

"Yes, and so has a clothing dealer or an ottermobile dealer or any other kind of a dealer gotter be careful too. If he makes too many mistakes the sheriff will be after him. The Federal Reserve Board it tells the bankers to be careful and not overload themselves with ottermobile paper, and instead of usin' common sense and makin' loans accordin' to good judgment, the bankers freeze up and say an ottermobile is a luxury and right away shut off on all loans to the dealers. Then we have a panic and anybody who wants a loan is as welcome in a bank as a burglar."

"I notice you are makin' a twenty per cent reduction on all suits, which still leaves you an average of eighty per cent profit, and with the good business what you have, you ain't got to borry money. So I guess, Max, you're lucky."

"Meyer, like all the rest of the yumerists, you think the clothing dealers are a lot of profiteers, and when you come in here last summer a-wearin' them overalls, I suppose you thought you was helpin' in bringin' down the cost of livin'. I make more profit in sellin' overalls at that time than I make in a year before. When the slump comes it ketches me with a line of goods what I bought at peak prices and the reductions I make don't get me even on ackshell eost, not countin' the overhead. Sure I have to borry money."

"Well, I bet the bank was glad to let you have it."

"If they was glad they concealed their joy so you couldn't see it. You know, Meyer, I earry an account at the First National where Abraham Fisheorn is president. When I go in there the other day old Abe rushes up to me with his hand outstretched and greets me like a long lost brother. 'Good Morning, Mr. Rosenheim,' he sez, 'glad to see you. It look like we are goin' to have a great revival in bizness. Factories are reopenin' everywhere, stores are crowded with buyers, and we can expect a steady, sensible,

(*Continued on Page* 18)

(*Continued from Page* 6)

deals made recently by automotive plant buyers. For instance, the scale on pig iron at this writing is $30 and up per ton, but at least one buyer has obtained a four months' supply at $22, and could have had more, but he wouldn't take it. Another buyer accepted copper at 11½ cents a pound, the market being 13 cents at the time.

Earlier in this discussion the purchasing agent was represented as a shrinking violet during the reign of profits. Today it may safely be assumed he is a glorious sunflower. His stock will continue to go up as he shows management a few tricks he was not allowed to use before. The reason for this change is illustrated in two Detroit plants.

One had a purchasing agent trained up to the mark. He was partial to pig iron and studied that market from every angle. In November, 1919, he contracted for pig iron at $29 a ton for a period to end in October, 1920. All efforts to coax him to lengthen the contracts failed. He said the market would break by October, 1920. Between November, 1919, and October, 1920, pig iron ran up to $50 a ton, and maybe this purchasing agent wasn't "sitting pretty!" The break came as he predicted.

In another plant where the president attempted to be everything from office boy to chief executive, and included in his special duties that of purchasing, "sales pirates" loaded him up with pig iron at $50 a ton for the whole year from March, 1920, to March, 1921. Pig iron has slumped to $30 a ton, but Mr. President has poor consolation in viewing his pile of pig iron. He had no time to study market conditions, and undoubtedly he was fired with that wonderful optimism that is as uncertain in its operation as the prohibition law.

The bulk of materials, parts and accessories sold to the motor car industry throughout the country is disposed of to plants in Michigan, Indiana, Illinois, Ohio and Wisconsin. Outside of New York and Pennsylvania, no other states in the Union produce anywhere near as many trucks and passenger cars as any one of the five states mentioned. Consequently the greatest selling effort of parts makers and materials dealers is directed at these five states.

Michigan as a Market

In 1910 Michigan produced 95 per cent of all the motor vehicles manufactured in the United States. Since 1910 motor vehicle production has increased in this state 932 per cent, while in that 10-year period 11 manufacturers of motor cars and trucks have gone out of business. Against an increase of 932 per cent in 10 years we have the insignificant reduction of 35 per cent in car production in 1920. The Detroit district alone, which includes Pontiac, Flint, Lansing and other Michigan cities in which the automotive industry is represented in a large or small way, produced 1,848,000 cars in 1920—more than all Europe turned out. The total production for the year was 2,241,000 motor vehicles, 1,906,000 being passenger cars and 335,000 commercial cars, which when compared with Michigan production gives this state 83 per cent of the total output.

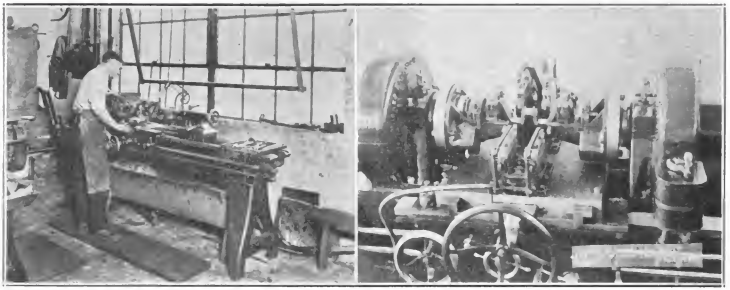
According to the National Automobile Chamber of Commerce report, there are 260 manufacturers of passenger cars and trucks in the country. Of this number, 90 build passenger cars and 170 trucks. The increase in new truck manufacturers has been much greater than in passenger car. The total investment in motor vehicle manufacture in 1920 was $1,502,302,862. The greater part of this amount is invested in properties in the five states mentioned, and no account is taken of tractors and other gasoline-driven farm machinery, the bulk of which is manufactured in those states. In 1919, the big year of the industry, the value of parts and accessories sold reached $621,722,048, and that of tires sold to car manufacturers alone was $165,000,000.

(*Continued on Page* 30)

Digitized by Google

The Lathe Family

This Mainstay of the Modern Machine Shop Traces Its Ancestry Back to Bible Times



In Figure 1, at the left, is shown a Monarch standard engine lathe in an Oldsmobile service station, and in Figure 2, at the right, a Wickes Duplex crankshaft lathe arranged for turning and filleting two pairs of pins for the Chevrolet "4-90" crankshaft. It is equipped with electric rapid traverse, turning tools in front and filleting tools in the rear.

By HOWARD CAMPBELL

THIS is an age of extraordinary mechanical achievement — so extraordinary, in fact, that new discoveries and inventions of the greatest importance have ceased to be regarded as remarkable and are accepted as complacently as is the morning coffee, and as quickly forgotten.

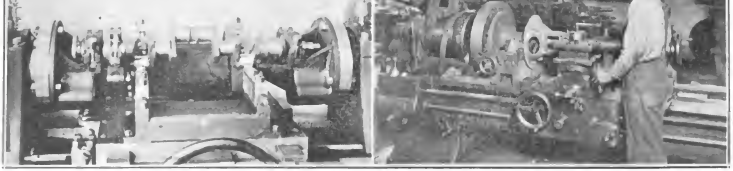
Practically everyone is acquainted more or less with the intricate machinery of the automobile. Abd the huge number of motor vehicles normally produced daily in the factories of this state are a source of pride to the people of Michigan. Yet there are comparatively few who have any knowledge of the wonderfully efficient machinery which has been developed in order to make possible this vast production.

According to history, man has always used tools of one kind or another, although it is probable that the first tools were simply stones which were used equally well in the grinding of food and the killing of prey. The first real tools were of the crudest variety, and although hand tools were improved as the centuries rolled on, undoubtedly man was quite civilized before the first mechanical tools were contrived.

The first machine of any kind was the "potter's wheel," spoken of in Holy Writ, and which was the earliest and simplest form of turning machine. From this machine was developed the lathe, in which pieces of wood could be "turned," or rotated, while a hand tool was removing the humps and corners. From this it was only a step to the metal turning lathe, which was the forerunner of all modern machine tools. The lathe undoubtedly is the most important factor in the equipment of a machine shop. Practically all of the running parts in any kind of a machine are round, and most of them are produced either in the lathe or its offspring, the screw machine.

The wheels under the street car, and the little trolley wheel which spins along on the wire overhead, were both turned in the lathe, as are also the driving wheels of a locomotive. Automobile crankshafts, pistons, gears, pushrods, and very often flywheels, are given the symmetry of the perfect circle and turned to the proper size, in the lathe.

The importance of this machine in modern manufacture is evidenced by the fact that the Ford Motor Company has approximately 1600 lathes in its main plant, Dodge Brothers has approximately 600 lathes in its plant, the Studebaker Corporation has 270 lathes in its largest Detroit unit and various other plants have proportionate numbers. The Ford Motor



In Figure 3, at the left, a Hudson Super-Six crankshaft is being turned on a Wickes lathe. Two pins are turned at a time. In Figure 4, at the right, a cast-iron transmission case is being turned in the plant of the Detroit Gear & Machine Company.

Digitized by Google

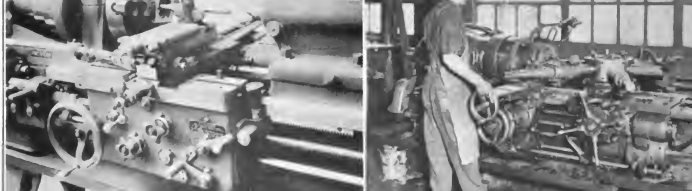


Figure 5, at the left, shows the operation of boring out a dis on an American lathe, using a Universal Relieving Attachment. Figure 6, at the right, shows an operative boring, reaming, tapping and facing a pinion carrier on a Libby turret lathe in a Studebaker plant.

Company has a school for apprentices which is fully equipped with the latest and best machinery for both production and tool-room work, included among which are approximately 80 special Reed-Prentice geared-head engine lathes, each driven from a motor in the base under the head. Other makes of lathes are being added as the shop is being enlarged, so that the potential toolmakers and executives may become familiar with a variety of types.

Two General Classifications.

Probably a greater variety of operations are performed on the lathe than on any other machine, and because of this fact, lathes are divided into several different classes, those in each class being especially designed for the work which they have to do. Practically all lathes come under one of two classifications: engine lathes and turret lathes. Engine lathes were originally intended to perform operations on work suspended between centers, but the development of the chuck removed the necessity for centers in many cases. The turret was finally developed which could be placed on the the bed of the lathe, this turret being made to hold a number of tools which could be brought into play one at a time, thus making it possible to perform the operations of drilling, boring, reaming and tapping, which obviously could not be done while a piece was swung between centers.

Various types of engine lathes possess peculiar characteristics, by which they are named, such as the gap lathe, wheel lathe, bench lathe and so forth.

The gap lathe is so named because the bed of the machine is divided near the headstock, leaving a gap which will admit of swinging a very much larger piece of work in the machine than a lathe of this size would take if the bed were not divided.

Wheel lathes are used principally in railroad shops, being designed and built especially for turning the driving wheels of locomotives. Drive wheels are not turned singly, as practically all other wheels and gears are. The two wheels are pressed on to the axle, and this whole piece is put into the machine, with the result that after the wheels are turned they are absolutely true with each other.

A bench lathe, or precision lathe, as it is coming to be known, is used for very small, fine work, and is used principally by toolmakers, jewelers, manufacturers of instruments, and others whose work is exceedingly fine and precise.

In Figure 1 is shown a standard Monarch Engine lathe which is being used in this instance for repairing a crankshaft. The shaft is swung between centers, being driven by means of a "dog" which is clamped on to the end of the shaft. This "dog" has a bent "tail" which fits into the slot in the face plate, thus forcing the shaft to turn as the face plate revolves. For many years this was the customary method of driving work in a lathe, but modern production methods have forced the development of machines into which the work can be clamped without the necessity of using a "dog." In the earlier days of the automobile business, the production of a crankshaft was a comparatively slow and laborious process, in order that the crank pins and bearing might all be turned in proper relation to each other, a set of iron blocks known as "shoes" were used. A "shoe" had a hole through the center, through which the end of the crankshaft could project, so that as the main bearings were turned, the shaft swung on its own center. In the same side of the block were two more centers, all three being in line, and each outer center being as far from the middle one as the distance from the center line of the shaft to the center line of the crank pins. When the blocks were placed on the crankshaft the shaft and blocks were lined upon a surface plate, so that the centers in the shoes came in line with the pins of the crankshaft. Then as the different



Turning Hudson Super-Six piston pins on a Porter-Cable lathe. Two hundred pins an hour is the production of this machine.

sets of bearings and pins were turned, the crank and shoes were transferred from one set of centers to the other. Only one tool at a time was used, the turning, filleting and facing the cheeks being done by separate tools.

The central section of a modern crankshaft lathe is shown in Figure 2, which is a Wickes lathe containing a crankshaft turning fixture such as is used in the shops of the Chevrolet Motor Company and many other automobile concerns. A crankshaft is put into this fixture and clamped in without any preliminary gauging. Then the two tools shown at the front of the machine are fed in, turning two pins at once. The tool block strikes against a stop when the pins are turned to the proper diameter. This block is then withdrawn from the work and the two tools at the back of the machine are fed in, forming the fillets. The whole operation takes only two or three minutes, after which the shaft is removed and placed in a similar fixture on another machine, which is so aligned that the other set of pins can be turned in a similar manner.

The Hudson Motor Car Company uses similar machines and fixtures for turning Super-Six crankshafts. The company uses three of these lathes with a set of tool blocks and a special fixture for each one of the three pairs of pins, turning one set on each lathe. A wide-nosed tool in front is used for turning, and the filleting tools are in the rear. These three machines produce approximately 100 crankshafts a day.

A Record Lathe Order

The Lodge & Shipley Company builds a machine of approximately the same size and strength which is used for practically the same class of work. The Buick Motor Company was the first concern to adopt the method of turning two crankshaft pins at one operation, two at another, and so on. The company has approximately 150 of these Lodge & Shipley lathes, 136 of which were ordered at one time. At the time these were purchased, this was the largest order for lathes which had ever been turned in at one time by a single firm. They are mostly of the 18-inch size and are fitted with multiple stops for length and diameter operations, so that once these stops are set, the desired lengths and diameters can be reproduced without having to measure each piece of work. The Buick company uses these machines also for turning bearings on camshafts.

The operation of turning two different diameters on a cast-iron transmission case in the Detroit Gear & Machine Company's plant is shown in Figure No. 4. In this instance, a Walcott lathe is being used, having an auxiliary

(*Continued on Page* 33)

Digitized by Google

The YALE Truck, with Hoist



Is a well-built, powerful outfit, which you should know about.

Yale Trucks are made in several other models, to meet various requirements.

Let us explain to you the merits of these trucks.

Yale trucks possess the same excellent quality as do Yale Hoists.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

Michigan Corporation Laws Recodified

REP. GEORGE LORD, Detroit, has introduced in the House, at Lansing, the longest bill to be placed before this Legislature. It is bound in book form, contains 113 typewritten pages and codifies and amends all the corporation laws of Michigan. The bill was prepared by the Attorney General's department and represents a study and codification of about 1,200 pages of statutes covering corporation laws.

In brief, the more important changes made in the corporation laws by this bill are:

(1) Michigan corporations are permitted to issue stock without any fixed par value.

(2) Industrial stocks intended for sale or gift to employes of the company issuing them are legalized.

(3) The limitation on capital stock issues is removed so that a company may incorporate in Michigan for any amount.

(4) Trust agreement corporations, similar to common law trusts, are authorized, but are limited to holding church, lodge, labor union and other non-profit properties.

(5) Co-operative companies are required to file reports with the Secretary of State at least once every three years.

(6) Non-profit corporations are not permitted to capitalize for more than $500,000.

(7) Corporations not required by present laws to file their articles with the Secretary of State will be compelled to file a certificate showing their location and the place they have filed their articles, so that the state will have a record of all corporations.

(8) The date for filing annual reports is changed from the first of the year to July.

The bill repeals 95 present acts, and consists of 175 sections replacing 1,500 sections of existing laws. It covers commercial, co-operative, non-profit, church, college and fraternal corporations. It does not have to do with the existing laws governing incorporation of banks, trust and insurance companies, finance corporations, building and loan companies, limited partnerships, railroad corporations, harbor improvement, cemetery, burial or cremation associations, agricultural fairs, pipe line or waterway companies under the jurisdiction of the Michigan Public Utilities Commission.

The section permitting companies to issue non-par value stocks does not allow the issuance of this kind of stock only, and such stocks cannot be given as bonus with other stocks, but must have a value not less than $1 a share. The non-par stock might be the only common stock issued, in conjunction with preferred stock of fixed par value.

Faithful service to a corporation could be rewarded by issuance of industrial stock to employes by the terms of the proposed law. The limitation of capital stock for Michigan companies to $25,000,000 has compelled many larger concerns to incorporate in other states, thus losing much revenue to this state. Such limitation is removed altogether by the bill.

For the purpose of preventing fraud the limitation on stock of non-profit companies would be made. It is pointed out that under present laws hunting, fishing and similar clubs are organized as non-profit concerns, buy up large tracts of land ostensibly for the benefit of club members, but in reality, to hold the property under exemptions of non-profit laws and later sell at profits.

At present many types of corporations file their articles with county clerks, probate judges, etc., and the state has no record of them. The new bill would compel a concise record of these concerns so that the state department would be the center for a complete record of them all.

Among the bills which have been passed by the Senate or House and are before the other legislative body, is one providing that trucks of one ton or more must be equipped with mirrors, and another granting cities of more than 50,000 population authority to bond for 8 per cent of their assessed valuation for purchase of public utilities.

Among the bills which have been introduced during the last week are the following: bill to require all lobbyists to register with the Secretary of State, giving the names of the organizations they represent, and barring them from the floor of the House and Senate while in session; heavier penalties for bank robbery; require each University graduate to pay $200 to the state during the five-year period following graduation; continuing for two years the Great Lakes Tidewater Commission; providing free peddlers licenses to former soldiers; removing the two-term limit on county treasurers.

The House has before it the joint resolution passed by the Senate urging Congress to pass the $100,000,000 appropriation granting federal aid for state highway construction, Michigan's share would be about $3,000,000 available during the next fiscal year.

D. & M. DEFICIT $152,654

The Detroit & Mackinaw Railroad Company reports a net operating deficit, after taxes, of $152,654 for the 12 months ended December 31, 1920, as against $90,292 at the end of 1919. The gross was $2,078,601, as compared with $1,687,342 for the preceding year.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Need an Elevator?

Ask LEITELT

Modern Designs
Superior Construction

LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

Unsold Fords Being "Cleaned Up"

Marked Reduction in Cars on Hand Reported The Motor Magnate Gives Out Two Interviews

DURING the last ten days Henry Ford has given out two interviews, one to the New York Tribune and the other to the Detroit Times. The facts brought out of special interest are the following:

In the Detroit Times—Wages paid the men coming back to work at the Ford plant are not being reduced, but are the same as before the plant closed in December. A rotating system has been inaugurated whereby after a shift of men has been employed two weeks it will be replaced by another shift, which will work two weeks, to make room then for still another shift, thus enabling as many Ford men as possible to have partial employment. At present the married men and those with dependents are given preference. The one thing Mr. Ford needs most he said is lower steel prices.

"But what about financing the industry; have you succeeded in getting that $75,000,000 yet?" was asked by the Times.

"I didn't know we needed it until a few loan sharks came out and tried to tell us we did," Mr. Ford replied. "But I think we proved to a few of them that we could take care of ourselves."

In the New York Tribune—Mr. Ford denied that he had sought a loan of $75,000,000, or any sort of a loan, in Wall Street, and said that he was preparing to give financial assistance to towns and villages in which he expects to locate plants in furtherance of his plan to promote industry and labor away from the congested centers.

Mr. Ford said that the company closed its works in December to dispose of stocks on hand, which included cars and materials, representing between $15,000,000 and $20,000,000. During 1921 the company intended to do comparatively as much as in 1920, when 1,250,000 cars were sold, but added that perhaps it would mean only 750,000 cars or 1,000,000 for this year.

The New York Times, which is generally regarded as conservative in its financial reports published the following on February 10:

"The Ford Motor Company, it was the expressed opinion in Wall Street yesterday, will probably obtain a loan within the next thirty days—perhaps within the next two weeks—despite the statements of Mr. Ford that neither he nor his company was in need of funds and was contemplating the arrangement of any financing, statements which were received with surprise by New York banks.

"Between now and the middle of March the Ford interests will have to raise some big sums. Loans, it is said, will be falling due within this period and in March the Ford Motor Company will reach its peak of requirements. Federal taxes are due on March 15 and will call for a large amount. The maturing loans will have to be provided for and the company will need new money to take care of its manufacturing requirements.

"It is not anticipated that Mr. Ford will experience any difficulty in arranging a big loan, so long as it takes the form of an issue of securities. These may be either notes or bonds, probably the latter. But it is considered as highly improbable that the banks, in view of the present credit stringency and the positive desire to cut down the volume of bank loans, would extend their line of ordinary credits to any great extent.

"The Ford Motor Company last year enjoyed probably the most prosperous twelve months in its history. Its net earnings before Federal taxes have been estimated at upward of $115,000,000, and after something more than $40,000,000 was paid to the Government, its net earnings were still in excess of $70,000,000. On such a statement it is believed that the company would have no trouble in marketing $50,000,000 or $75,000,000 in bonds."

The New York Tribune says: "The Street, however, disagreed with Mr. Ford's belief that he would not have to come into the investment market in quest of funds. The belief current was that within a fortnight or a month the Ford Motor Company would seek to raise funds through the sale of securities to the public. Taxes, maturing obligations and working capital are the needs which Wall Street men believe will attract Mr. Ford to this money center."

Some of the Ford assembling plants throughout the country are getting back into production. This is made possible, it is said, by the receipt of parts from the factories in Detroit and River Rouge. This is learned from news items appearing within the last few days in papers in cities where some of these plants are located. When Ford Motor Company officials in Detroit were asked for verification or denial, the answer was they did not know anything about it, nor could any information be given out on the subject.

The first of the assembling plants to re-open is the one in Cambridge, Mass., which, as far as is known, closed about the end of last year. The second factory to resume is the one in Buffalo, N. Y., which closed December 24, and which renewed operations on a four-day week basis, according to the Boston News Bureau, which adds that only about one-fourth of the usual force started work, but that the whole force was expected to return within the week. Furthermore, there was no reduction in the wage scale.

Referring to the Buffalo plant, the Commercial of that city quotes one of the local Ford officials as follows: "If all Ford branches were like this one, the Ford plant would never have shut down. We are plied high with orders, and once we get started we will do plenty of business."

The assembling plant in Kearney, N. J., is expected to re-open in a very short time, according to the Wall Street Journal, which in a recent issue says: "The Kearney assembling plant, which supplies part of the requirements of the New York branch, and which closed recently from lack of parts, is expected to reopen in about two weeks, when the Detroit plants will have resumed shipments.

"The New York branch of the Ford Motor Company, whose territory takes in New York, Connecticut and parts of New Jersey, reports business exceptionally good. Since August 1, 1920, the beginning of the company's fiscal year, business in this district is $2,500,000 to $3,000,000 ahead of the corresponding period in the previous year."

During 1920 approximately 10,000 Ford cars were sold by the 18 Ford distributors in Detroit Some of these cars were sold outside the city, since the Ford company changed its sales policy the latter part of last year, when all territorial restrictions as to dealers, territory throughout the country were eliminated. This year these distributors believe they will be able to sell 10,000 cars and even more if they can get them. However, it is the impression among a number of the distributors that they will not be able to obtain more than 66 to 75 per cent of last year's quota.

According to a number of dealers, the average daily output of Ford cars is now about 1,000. This estimate is based on the number of cars being delivered to them and according to

Digitized by Google

what they hear from other dealers. They say that they are not informed as to what is actually going on at the plant.

Sales by the Detroit dealers are better in a good many instances than they were last year at this time. One distributor stated that during the first eleven days of February he sold and delivered 32 cars, as compared with 48 during the entire month of February, 1920. Another distributor without giving figures said he had sold and delivered approximately 25 per cent more cars thus far this year than during the similar period last year. A third dealer said he had placed orders for 28 cars, all of which had been delivered except those ordered within the last 36 hours. This agent had sold 30 cars thus far this month, or nearly double of his sales during February, 1920.

The distributors state that cars are sold on the average 75 per cent on time and 25 per cent on a cash basis, which is just about the reverse of a year ago and before. Sales generally are made quickly, the prospective buyer knowing the prices and being interested only in knowing how soon he can get delivery.

It is the opinion of the local Ford distributors that within a short time the demand will come up to near normal. April, May and June they say, are the big sales months, and they believe from what they have been able to learn that production at the Ford plant will be at the rate of 2,000 cars a day or better by April and probably 3,000 before the beginning of May.

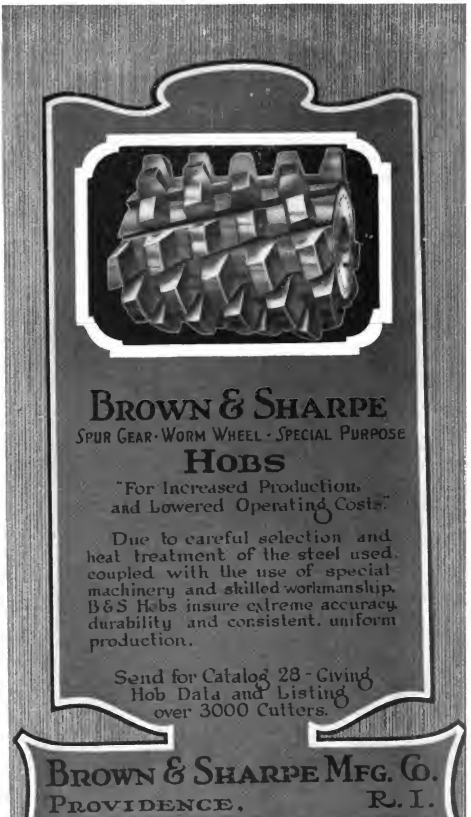
"From the little we dealers get officially in the way of what is going at the Ford plant," said one distributor, "we believe that the Ford Company with a reduced force will accomplish as much this year as it did last year, if need be. For instance, where 55,000 men were employed at the height of the 1920 season, we hear that 45,000 will be expected to do just as much this year. This is due to several important changes in plant operation, to greater efficiency and to faster work. We are told that the returning employes are given to understand that a greater effort is expected of them than ever before; that the easy-going and easy-living days of the war period must be forgotten and that owing to the very large number of men out of employment it is an easy matter to get as many employes as needed."

One of the distributors said it was quite possible that at the time the plant closed in December 125,000 to 135,000 Ford cars were unsold. It was on account of this condition, said this dealer, that the Ford company changed its sales policy making the whole country the territory for every dealer. This enabled those dealers who had many cars on hand to dispose of them to other Ford dealers who had none and needed them.

"I made one trip to a city in Ohio and got several car-loads because I could not get any cars from the factory in Detroit," said this agent. Another Detroit dealer said he had received cars from Ford dealers in Texas. As far as local dealers have been able to learn, it is not likely that there remains more than 20 per cent of the unsold Ford cars of December with the dealers throughout the country.

GRAND RAPIDS STREET RAILWAY

Gross earnings for 1920 of the Grand Rapids street railway were $1,804,293, but operating and fixed charges were $1,951,353, leaving a deficit for the year of $147,000. Compared with 1919, the gross earnings increased $232,151, but the gain was more than offset by greater operating costs. Total revenue passengers carried in 1920 was 27,813,220, compared with 26,307,032 in 1919. There was considerable new track work done during the year and nineteen one-man cars purchased. L. B. Cobb, New York, was re-elected president; L. J. DeLamarter, vice-president and general manager; W. E. Livingston, secretary and treasurer, and Charles Wygant, assistant secretary and assistant treasurer.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4038 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

CHERRY 6766
The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

STANDARD PARTS' OUTLOOK

According to a report from Cleveland, the business of the Standsrd Parts Company is increasing and February is expected to show decidedly better than for several months past. It is believed that the trend will continue from now on and that within probably less than two months, Standard Parts will be again a very busy concern. Officials, however, no not think that the activities will near normal for some time to come.

MOTORS METAL'S NEW PRODUCTS

The Motors Metal Manufacturing Company, Detroit, is placing on the market two types of oil heaters of the 8-inch and 15-inch sizes which it will produce in large quantities and distribute through a selling company—which it controls—known as the Superior Stove & Stamping Company. This line of oil heaters is in addition to the automobile sheet metal parts such as hoods, fenders, gas tanks, etc., which the company has been manufacturing the last seven years.

TRIANGLE GETS A BIG ORDER

Further evidence that the automotive industry is distinctly on the mend is to be found in the announcement of the Triangle Motor Truck Company, St. Johns, that it has been given a contract for 3,750 of its trucks by the Attick-Shoecraft Company, Kansas City, Mo. Deliveries begin this month and 750 of the trucks are to be shipped this year. The contract means, according to Glenn B. Hiller, director of sales, that the company will have to increase its working force to at least 150 men and that the plant must be enlarged. The order will keep the Triangle concern busy for an indefinite period. In addition, Mr. Hiller announced that the company has received substantial increased shipping schedules from all its dealers and distributors.

WILFORD MANAGES CENTRAL FORGE

J. W. Wilford, who has been connected with Lansing industries for the last 14 years, has been called to Detroit by the General Motors Corporation to become general manager of the Central Forge Company. For the last two years he has been manager of the Michigan Crankshaft, Lansing and Saginaw units. Mr. Wilford was first associated with the old Omega Separator Company and later with the Reliance Engineering Company. He then became manager of the Michigan Crankshaft Company. T. M. Carpenter, his assistant at the Saginaw plant, will succeed him as manager of the Lansing factory.

FRANKLIN ON 100 PER CENT BASIS

The H. H. Franklin Manufacturing Company, maker of the Franklin cars, went 1:to 100 per cent production on February 10 and is now turning out 40 cars a day. Production since the price reduction in September has been 80 per cent of normal; before that it was 40 per cent.

JACKSON DEALERS ORGANIZING

Initial steps for an organization of the automobile dealers of Jackson have been taken.

$500,000 ORDER FOR COMMERCE

George D. Wilcox, director of sales and advertising of the Commerce Motor Car Company, Detroit, announces the enlargement of the territorial operations of the Mead-Commerce Truck Company, Chicago Commerce distributors. A new contract has been signed which involves the purchase of nearly $500,000 worth of trucks, which, as fast as the factory can deliver, will be placed in the new territory among the dealer organization of the Mead-Commerce company.

FISHER FINDS BETTER OUTLOOK

F. J. Fisher, secretary and treasurer of the Standard Motor Truck Company, Detroit, has returned from a southern and eastern trip and reports that the business situation everywhere is improving. He says trade leaders with whom he talked are unanimous in the belief that the depression is about over.

CURRAN MOTOR PRODUCTS FORMED

The Curran Motor Products Company, with sales offices at 2018 Park boulevard, Detroit, is a Michigan corporation capitalized at $700,000 just organized to market automobile accessories, but especially the inventions of Dr. Edward Thomas Curran, of Detroit. The inventions include a spark plug, a priming cup device, an anto thermometer and other automobile parts. The officers are: President, Dr. Edward T. Curran; vice-president, M. N. Nahikian; secretary-treasurer, P. D. Mackey; retail sales manager, P. T. Quinn. Manufacturing, assembling and distributing headquarters will be in Detroit and distributive branches will be established in New York, Chicago, Minneapolis and Los Angeles.

WEISMAN WILL SELL H. C. S. CARS

The Weisman Motor Sales Company, 3629 Woodward avenue, Detroit, has taken over the local agency for the H. C. S., a four-cylinder car designed by Harry C. Stutz. Mr. Stutz started in the industry as a builder of transmissions and axles, then organized a company to build motor fire apparatus. Later he designed the Marion models of 1910 and 1911, and two years ago organized the Ideal Motor Car Company to build the Stutz car.

NEW HUDSON AGENCY IN LANSING

The Robson-Graves Auto Company has been incorporated with a capitalization of $30,000 and has leased the new Whitlock building, Lansing, for salesrooms. The company will handle Hudson cars. Officers are: Dwight J. Robinson, president; Joseph H. Burton, vice-president; Clark Graves, secretary-treasurer.

ATLAS DROP FORGE BUSY

The Atlas Drop Forge Company, Lansing, is now operating at two-thirds capacity with considerable motor work in sight, much of this being for the Reo Motor Car Company. The Federal Drop Forge Company also has considerable motor work on hand.

MULCH SUCCEEDS R. C. DURANT

The General Motors Corporation announces that R. H. Mulch, who has been with Chevrolet five years and who has been working out of the New York sales office, under W. C. Sills, is to become head of the Chevrolet Motor Company of California March 1 when R. C. Durant retires to join his father, W. C. Durant in Durant Motors. The Chevrolet manufacturing organization on the Pacific coast will continue to be headed by Norman Vaux.

DOUGLAS WITH JOHNSON COMPANY

The William R. Johnson Manufacturing Company, Chicago, maker of windshields and glass equipment for motor cars, has appointed Stephen A. Douglas general sales manager.

Digitized by Google

SHERIDAN CAR IN DETROIT

The latest product of the General Motors Corporation, the Sheridan automobile, manufactured by the Sheridan Motor Car Company, Muncie, Ind., is attracting unusual attention with its introduction into Detroit by the Detroit Sheridan Company, 4208 Woodward avenue, at Willis avenue. The Sheridan is presented in two distinct types, one powered by a valve-in-head, long-stroke, four-cylinder motor, and the other powered by a high-speed, eight-cylinder motor, the specifications of which place it in the highest class of finely built motor cars. The four-cylinder car is offered in four models, roadster, touring, coupe and sedan, built on a chassis which has a wheelbase of 116 inches. The eight, with a wheelbase of 132 inches, is offered in three models, a seven-passenger touring, a coupe and a sedan.

STUDEBAKER JANUARY SALES

A statement issued by the Studebaker Corporation, Detroit and South Bend, Ind., says that January sales for immediate and spring delivery exceeded those of the same month of 1920. Reports from dealers are encouraging. The plants are operating on a 50 per cent schedule.

PIERCE-ARROW BALANCE SHEET

The balance sheet of the Pierce-Arrow Motor Car Company, Buffalo, as of December 31, 1920, shows total assets of $27,356,097. Net tangible assets of $9,872,959 are equal to $49.49 a share on the 250,000 shares of common stock. Current assets were $19,754,534, and current liabilities $7,333,138, showing net working capital of $12,421,396. Bank loans amount to $5,750,000.

KELSEY MOTORS ELECTS

The following officers and directors were elected at the annual meeting of the Kelsey Motor Company, Newark, N. J.; President, Ernest B. Slade; vice-president, C. W. Kelsey; treasurer, Thomas J. Stewart; secretary and assistant treasurer, F. D. Dorman. The board of directors consists of Charles Abbott, E. I. R. Cadmus, E. J. Churchill, Charles W. Hoyt, A. E. Jennings, John R. Thomas and L. S. Tyler.

NEUMANN SHOW NEXT WEEK

William F. V. Neumann & Sons, Detroit Pierce-Arrow dealers, will hold a motor car show of their own, all next week, at their show rooms at 6022 Woodward avenue. The new line of Pierce-Arrow motor cars, in both open and closed models, and which have the left-hand drive, will be featured. The unusual interest which these recently announced models has aroused undoubtedly means a large attendance at this showing.

H. E. DODGE WILL PROBATED

Judge Edward Command, of the Wayne probate court, has admitted to probate the will of Horace E. Dodge, late Detroit motor vehicle manufacturer. Bond of $100 was fixed for the administrators, Mrs. Anna Thomas Dodge, the widow, and Howard B. Bloomer, chairman of the board of directors of Dodge Brothers.

The hearing of the case of John Duval Dodge, who is contesting the will of his father, John F. Dodge, has been postponed until March 10. It is reported that efforts are being made to obtain a settlement out of court.

ZENITH FOUNDRY READY MARCH 1

It is expected that the new $200,000 plant of the Zenith Foundry Company, Detroit, will be in operation by March 1. The company will manufacture light gray iron castings. Stanley Leech is president of the company and Alexander M. Girardin, secretary and treasurer. The superintendent of the foundry is Robert R. Snow.

HOOD LEAVES MAXWELL-CHALMERS

Roy M. Hood, who has been in charge of purchases at the Maxwell-Chalmers Corporation plant, Detroit, has resigned.



Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:30 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 6:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

MAIN 1491

SPRUNK ENGRAVING CO.

Commercial Artists and Engravers

700 MARQUETTE BLDG. DETROIT

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Washington—The House of Representatives has passed the bill of Rep. Frank D. Scott, Michigan, extending the legal summer shipping season on the Great Lakes 15 days in spring and fall and thereby making the season during which summer regulations regarding safety appliances are in force begin May 1 and end October 15.

Edward Dustin, president of the Ashley & Dustin steamer lines, characterizes the House's action as "a poor compromise which does not offer the relief needed lines to operate at a profit." He added that it would in no way influence the recent decision of his company and that of the D. & C. to curtail service.

Detroit—Traffic on the Pere Marquette Railway, according to the Transportation department's figures for the month of January and the first week of February, has not been showing up as well as was expected. Moreover, it has been decidedly out of balance. The freight movements have all been eastbound with practically no movement westbound. This makes for costly operation, since there is unusually heavy return haul of empty freight cars. The movement of freight cars homeward bound is continuous. For the first week in February 1,500 cars had returned to the home lines, which is from 60 to 65 per cent of the company's cars. This is the highest percentage attained in a long period. During the period of federal control the percentage fell below 20 per cent. With the recession in traffic many of the railroads which had been holding this rolling stock have been returning the cars to the home lines in order to avoid the payment of the per diem charge of $1 per car per day.

Washington—In the case of the Acme Cement Plaster Company, Grand Rapids, Mich., vs. the director general of railroads, as agent, the Pere Marquette Railway, et al., the Interstate Commerce Commission has decided that the rate applicable on gypsum hollow building blocks, in carloads, from Grand Rapids, Mich., to Asyinm, Tenn., are not unreasonable and has dismissed the complaint. The case, which was No. 11080 on the Commission's docket, was submitted on June 4, 1920, and decided on December 29.

Finish Fight Promised On Higher Truck Tax

Monroe county's effort to exact tribute from the motor trucking industry through Rep. George Danz's bill increasing the license fee for trucks from 35 cents to $1 a hundredweight, which has been introduced in the Michigan Legislature, has aroused a storm of protest and the Detroit Transportation Association, representing the trucking industry in Detroit and environs, has begun a campaign to defeat the measure. The Detroit Board of Commerce has been asked to register its disapproval of the bill, and the legislative committee on roads has been asked to call a public hearing on it.

While the 25 cent fee per horsepower is left as it is, the increase from 35 cents to $1 on the weight of commercial cars would mean an advance of 150 per cent, according to the transportation association.

Back of the measure is the contention of Monroe county officials that truck and trailer traffic on the Dixie Highway between Monroe and Toledo, has broken down that road. The Association replies to this charge with the assertion that the Wayne county section of the Dixie Highway was constructed years before the Monroe county section was started, despite which, the Wayne county section is in much better condition than that in Monroe. Further, it is contended that the highway through Monroe was not constructed for heavy traffic in the first place, and the moist subsoil presents an obstacle to substantial road building.

The bill is regarded as a direct and serious blow to the future of the motor trucking business. It is regarded as unfair because while directed at long hauls, it also affects short hauls within city limits. Increased license fees would have to be passed on to the public in increased haulage rates. It is estimated that not more than 10 per cent of Michigan-owned trucks used the highways in long hauls.

ARCHITECTS ELECT OFFICERS

The Michigan Society of Architects has elected Alvin E. Harley, Detroit, president. The other officers are: C. F. J. Barnes, Detroit, first vice-president; J. F. Beckbissenger, Saginaw, second vice-president; H. L. Mead, Grand Rapids, third vice-president; William C. Palmer, Detroit, secretary; H. J. Keough, Detroit, treasurer; W. G. Malcomson, E. A. Schilling, R. H. Marr, J. H. S. Steffens, George J. Haas and Harry S. Angell, Detroit; A. E. Munger, Bay City, and C. F. Cowles, Saginaw, directors.

LANSING HAS CONVENTION HALL

The Lansing Chamber of Commerce has arranged for an annex hall in the new Strand Theater building. This hall, which is 165 by 52 feet, will be provided with a stage and other accommodations, and will have a capacity for 1,200. The hall will be used as headquarters and meeting place for conventions.

700 NEW BOARD MEMBERS

Last week's membership campaign of the Detroit Board of Commerce resulted in the addition of 700 names to the roster, each new member having signed for three years. The Board thus is assured of an income of $17,500 a year for that time and in consequence will have a paid secretary. A complete reorganization will be effected within the next month.

LOADING COPPER FOR GERMANY

The Michigan Smelting & Refining Company, which smelts mineral from the Copper Range mines, Champion, Tri-mountain and Baltic, has started loading 560,000 pounds of copper for Germany. This is the first copper sold by this smelter to Germany for a year and a half and is considered a hopeful augury for an increased foreign demand for the metal.

BUSHNELL AGENCY CHANGE

The advertising and sales promotion service agency conducted by Henry D. Bushnell will hereafter be operated under the firm name of Bushnell-Mac Queen-Bushnell, the members of the organization being Henry D. Bushnell, Kenneth H. Mac Queen and James B. Bushnell. The same office location, 816-7-8 Kresge building, Detroit, will be retained.

BARIUM STEAMSHIP ELECTION

Stockholders of the Barium Steamship Company, Detroit, have re-elected directors as follows: John J. Barium, S. Lee, George B. Greening, Thomas J. Barium, Lewis T. Barium. The directors re-elected as officers: President, treasurer and general manager, John J. Barium; vice-president, A. R. Lee; secretary, George B. Greening.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON		CLEVELAND		DETROIT
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:		Atlanta	Denver	Portland
EUROPEAN:		Columbia Steel & Engineering Co., Ltd., London, Eng.		

Detroit Warehouse—1300 West Fort Street Cherry 6700

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

AUGUST N. JOHNSON MACHINE CO.
MANISTEE, MICHIGAN
MACHINE AND BOILER SHOPS
General Repairing
MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS
BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING
We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

PISTON PINS
Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production
MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2923

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Port St. E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—W. E. Wood Company, Detroit, has obtained the contract for the completion of the new state office building at a cost of $1,100,000, making the total cost of the building about $2,750,000. The work will be held up pending an appropriation by the Legislature.

Lansing—The Lansing Forty Associates Company has purchased from the Odd Fellows the property at the corner of Capitol and Kalamazoo streets at a cost of $20,000. The old Free Baptist church will be torn down and replaced by a business block with four stores and flats above. The H. G. Christman Company is preparing estimates.

Detroit—The Semet Solvay Company has awarded to the Whitehead & Kales Iron Works the general contract for the erection of a steel sitting plant and boiler house of brick construction.

Lansing—Judging from the building statistics from 56 other cities in the country, Lansing continues up in the lead in building activities. During the first month of 1921 the city showed a gain of 71 per cent over the same month last year, being second to Kalamazoo with 97 per cent. The total valuation of new building work in Lansing, however, was $49,635 as compared with $38,800 for Kalamazoo.

Rosenheim Visits His Banker

(*Continued from Page 8*)

sane and conservative volume of business which will in the end prove more satisfactory than an abnormal boom which is allus followed by the inevitable reakshun. I spose you are in this mornin' to increase your deposit. And, say, Mr. Rosenheim, it's a fine boy you have in little Abie. I take an interest in him seein' we have the same given name. Why don't you start him off this year with a Christmas savings account to be cashed in next December?"

"See, Meyer, in this line it is very thinkin' how to get your money in his bank that he doesn't reelize that a Jewish Christmas account would be like the Anti-Saloon League savin' up for a champagne banquet.

"'No, Mr. Fishcorn,' I tell him, 'what I come in this mornin', was to see about negotiatin' a loan.'

"Right away, Meyer, his face fell like he has heard bad news, and he says, 'I see, I see. Perhaps we can arrange it. But you know, Mr. Rosenheim, the outlook for business in the near future ain't what you call bright. Europe is makin' enormous demands on our resources and there is great uncertainty as to what the new administration will do regardin' the excess profit taxes, the income tax and the soldiers' bonus. Then we are worried considerable over the attetude of Japan in regard to the California alien land law, and the Irish question is causin' grave concern in finanshul circles.' Then there is Rooshy,' he goes on sorrowful like. 'Rooshy is in a state of chaos and we ain't certain just what Lennon is a going to do. And then there is China. The famine in China is sure to call for an immense expenditure of money. And the Flume Inlent ain't settled by any means just because D'Annunzio surrendered. Then you know, France needs money, Holland needs money, Sweden needs money—'

"'Never mind, Mr. Fishcorn,' I interrupts, 'we'll just admit that they all need money and let it go at that. Also we will admit that the kangaroo market in Australia is jumpy, and the earthquake district in South America is shaky, and that snails are a little slow in France, and that Ice in Greenland is low on account of overproduction. Let's get back to America and see if Max Rosenheim can borry a little money on good security, understand.'

"When I pin him down to it, Meyer, he invites me into his private office, takes a clear out of a box and then locks the box in his private safe; and then he frowns and asks me how much I want. I tell him, and he bites a pencil a few minutes and then rings for a clerk and asks for a statement of my account and a report on the clothing industry. Next he unfolds one of them funny maps what Mr. Habson sends round and studies the colors on it, until I gets so nervous that I can't keep still and I sez, 'Mr. Fishcorn, mebbe you better get Washington on the long distance and see what President Wilson thinks about this here matter, and if he's too busy packin' up, y' understand you might switch over to the Treasury Department and get Mr. Houston's ideas on the subjeck, because I'm a peace lovin' man and if my borryin' money of you is a goin' to affect the rate of exchange between here and Zanzibar or Abyssinia, why, it's all off, understand, and I'll see what I can do with Rachel's fur coat and diamonds over in Mose Morgenbaum's pawn shop.'

"And do you know, Meyer, that gonef didn't get the sarcasm at all. He just writes down, 'Wife has fur coat and diamonds' on a memrandum pad and puts it in the file. When he finally puts his O. K. on the loan I gets me out quick for fear he'll try to make me deposit it in a savings account where I'll draw four per cent on it while I'm payin' him six."

"Well, you got the money, didn't you?"

"Sure I got the money, and I knew I'd get it all the time because it was secured, and I been a depositor there for twenty years. Old Fishcorn knew I'd get it the minute I told him what I wanted.

"A bank must be conservative, Max. They must pick their customers carefully."

"They do, Meyer. They pick them carefully—and thoroughly."

PENINSULAR PAPER STATEMENT

The Peninsular Paper Company, Ypsilanti, exhibits a growth in total assets of $200,000 during the year 1920 and a growth in surplus account of $108,000. Below is presented a comparative statement of assets and liabilities:

Assets	Dec. 31, 1920	Dec. 31, 1919
Cash	$ 415.06	$ 1,661.40
Liberty bonds	.....	26,550.00
Store	5,926.07	6,470.46
Inventory	253,787.90	170,994.02
Customers' accounts	133,373.61	94,257.04
Water supply pd. in adv.	166.64	.....
Plant	443,033.95	335,774.63
	$836,113.43	$635,707.55
Liabilities		
Accounts payable	$131,474.41	$ 96,787.41
Notes payable	19,150.00	27,000.00
Bond account	300,000.00	110,000.00
Hydro income pd. in adv.	4,000.00	4,000.00
Capital stock	200,000.00	150,000.00
Surplus	131,464.97	238,647.97
Reserve for depreciation	149,228.38	76,754.39
Detroit Edison Co.	.....	2,642.78
	$836,113.43	$635,707.55

Officers for 1921 are: President, Daniel L. Quirk, Jr.; vice-president, Junius E. Beal; secretary and treasurer, Edward C. Cornwell; superintendent, John P. Cooney; sales manager, John B. Shepherd. Directors for 1921 are the above and A. C. Shaw, and Alfred A. Srere, Franklin, Ohio.

Digitized by Google

Yoeman Gives Indications Of the Industry's Comeback

An opinion as to the situation in the automotive industry, now that the two national shows are over has been given by G. W. Yeoman, vice-president and treasurer of the Continental Motors Corporation, Detroit, upon request of S. S. Meyers, general counsel of the Motor Accessory Manufacturers Association. Mr. Yeoman's letter follows:

"In reply to your letter of February 1, asking whether or not there were any signs of a revival in the automobile and truck field, I can only say you should have been at the Chicago show. All manufacturers have turned from pessimists to optimists. They are not only securing new agencies, but the agents are actually selling a large number of cars.

"This condition is further evidenced by the fact that we have been compelled to put on nearly 1,000 men in our Detroit plant, where we build automobile motors, to meet this month's demand. It is safe to say that our orders for delivery in the month of March will be from 30 to 40 per cent greater than the February demand.

"If any one tells you this is only a little spurt and that the demand will decrease, tell them that they are crazy. It is the writer's belief that the present demand for automobiles will steadily increase each month to June 1. Statistics of this industry will show that each year the sales slow up to a certain extent about June 1. This is caused by manufacturers' introducing new models at that time of the year. Next June may be an exception to the rule, but if there is any slowing-up it will only last for a short period.

"There has been too much written by people who are not posted, as to the world's demand for cars being near the saturation point, but as you well know, if the automobile manufacturers are called upon to build in 1921 only the cars for replacement, it will give them a good business.

"The business of the Continental Motors Corporation is a good barometer upon which to base your judgment. At the present time the gasoline engine stocks at the car manufacturers' plants are very low, and we are no doubt receiving the first indications of the automobile industry's comeback.

"Sixty to ninety days from now, the automobile business, through the possibilities of liquidation of large stocks of inventory, should be in a very advantageous position again to establish itself on a cash basis.

"The sale of trucks has not yet started in any volume, although we have orders in hand from about 60 per cent of our customers for shipments the latter part of February and the months of March and April. As you probably know, all motor equipment used by industrial firms has been greatly reduced, and therefore the minute other lines of business improve there will be a steady demand for truck transportation.

"Our entire organization is of a firm belief that the automobile and truck industry is built on a strong foundation and that the products are as necessary to the upbuilding of this country as the raising of foodstuffs and other so-called staple articles.

"The automobile especially is again on the way to several years of prosperity."

The letter was written on February 5.

Financial Record Open Market

Webb, Lee & Co., Detroit, will buy: Grant Oil & Gas; Commercial Syndicate; American Commercial Car; Kessler Motors; Jewett Bigelow & Brooks; Dix Theater; Doble Steam Car; Harroun Motors; Federal Discount; J. C. Wilson Truck; Michigan Mortgage & Investment; Hexagon Drill; Briscoe Motors.

Webb, Lee & Co. will sell: Kessler Motors; Michigan Mortgage & Investment; General Necessities Corporation.



A Malleable Iron Pressure Ring (12¾" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x44"—21" Swing to ⅝"x4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

EDITORIAL

DETROIT, SATURDAY FEBRUARY 19, 1921

Mr. Ford, the Big Cities and the Little Ones

OUR good friend, Mr. Henry Ford, is a sly one when it comes to getting publicity from newspapers without consulting the hellions who collect so much per inch or line for the advertising which goes through the business offices. Once in every so often the genial sage of Dearborn eliminates from his inner consciousness some quip, or crank or wanton wile, conveying some new, surprising or shocking idea to the world, whereupon the newspaper press eats it up because it is Henry's, and devotes columns of space to it, lest the world forget that Mr. Ford is the manufacturer of a staple article of transportation. If Mr. Ford himself has as much humor as we suspect he has—he being of the jocose Irish race—he sits idly by and chuckles, grins, snorts and gives other evidence of the fun he has in putting it over the advertising departments by getting into the news columns, top of the column next to reading matter, without the symbol "Adv." attached to his pronouncements and at absolutely no cost. As most of the declarations are harmless subjects, like, for instance, the synthetic cow and the gas-driven street car, no harm comes from the exploitations to the general public and a good deal of positive good does come to the flivver and the tractor.

Occasionally the sage of Dearborn slips his trolley and does put out harmful and inexact doctrine which only leads to more free advertising, but does in the last analysis lend the influence of a potent name to the dissemination of the particular economic or social heresy which is, for the time being, made the vehicle of new publicity. The other day Mr. Ford, in discussing the prospects of resumption of large scale manufacturing, declared that hereafter he would do a deal of his own work in establishments located in small places. He inveighed against the large city as a proper location for industry and generally denounced such aggregations of population as furnishing bad conditions for workers and employers engaged in production. America is so thoroughly divided into two great camps of interest, the agrarian and the urban camps, that Mr. Ford's doctrine is quite apt to fall upon inviting ground and feed up the bad sentiment which some disorderly-minded Americans entertain respecting industrial centers and the aggregations of capital which are at once their cause and their result.

The Southern editorial writers never discuss a political question without beginning at the real beginning, which for them is usually Patrick Henry or Thomas Jefferson. By the same process it may not be uninteresting to begin at the beginning of cities, notice how they came about, and how intimately their growth has been affected by the changes of method in transportation and distribution. In Britain, as the Roman armies advanced in the days of the conquest, they rested after each full day's march and made their camps, or castra, which reappeared as the "Chesters" in town names, such as Manchester, Portchester and the like. The rule of the transportation movement of those days, which was on the hoof, was a day's travel, of twenty to thirty miles. That distribution of camps, of the settlements that followed them and of the business that grew up in these settlements determined the distance from town to town just as long as transportation on the hoof continued. It marked the settlement of our own country, the multitude of night-camps or villages being so great that, of necessity, there could be no great average assemblance of population.

When transportation facilities became improved by the introduction of steam as a motive power and the railroad track as a corrective of grades and road conditions the average day's journey lengthened and we find that there grew up under this influence larger communities, each marking the end of a day's journey by the improved methods of transportation. Thus there came into being, taking New York as an example, cities like Albany, Rochester and Syracuse, and Buffalo, the trip from one to the next being an average day's journey under the primitive railroad conditions. As speed increased the length of the day's journey there came up still greater cities, fewer in number, each in its turn the end of one period of day-light travel. Thus the country is marked today, westwardly from New York, by Buffalo, Cleveland, Detroit, Chicago, Omaha, Denver, Salt Lake City, and so on, each city being, as to its nearest neighbor from eight to twelve hours of travelling distance.

The communities that thus grew up became the natural centers of production and distribution; of production because their fewness enabled them to attract much population, and of distribution, because the transportation factors that made them pre-eminent over their rivals were available in the greatest degree to assist in the processes of distribution.

Production and distribution have made the great cities and the suggestion that these processes be carried on in localities less developed is a reversal of the logic, which led to their creation, a logic which is not the creature of the brains of men, but of the inexorable processes of economic evolution.

The great city, so far from being a detriment to industry or to those engaged in it, is the natural habitat of production and producers. Based as it is upon facilities for distribution, which must be adequate both as to inbound and outbound materials, the great city affords facilities in the way of transportation which are only necessary at intervals across country, for the substitution of motive power, the rearrangement of carloads and the other incidents of transportation, and which make possible the correlative movements, such as bulk delivery, switching and classification of moving raw materials and merchandise into train units destined for another comparatively long run. These things are not needed to be done at every cross-roads, and consequently the transportation fabric of the country cannot provide the structures and organizations usually described as terminals in other than the places which are best fitted for them and which with much singularity and nicety, occur just as the Roman camps of 2,000 years ago occurred, at the end of the day's journey. For, after all, man is the dominant factor, the limit of his day's work the limit of mechanical effort on one shift, and the necessity of a place for him to lie down and rest when his day's work is done, the equal necessity for his placement of his home and of his facilities for rest.

The big city is essential to industry, because it constitutes the clearing house for labor. Production is no longer the steady and continuous demand for workers that it once was. In the olden time a body of workers, neither greater nor smaller as the years went by, constituted the personnel of the ordinary manufacturing industry. One may read that from the history of the earlier stove factories of Detroit. In each of them approximately 1,200 men were employed for ten months in the year. There were neither more nor less, neither more months nor fewer. Fathers worked and grew old, sons grew up, were apprenticed and took their father's places on the moulding floors and at the benches. That was because they were producing a staple, with a steadily increasing market, and the increases were so located that new stove factories came into existence in the newly developed areas. Today production is a creature of market conditions. When Mr. Ford's factory was running full, or anybody else's employing great numbers of men, for that matter, the figures of demand coming in through the morning's mail, determined

Digitized by Google

whether a thousand men should be put to work on the morrow or five thousand men laid off. Did not the big city provide a supply of workers when the thousand more were needed, or a supply of work when the five thousand were laid off, all the result of the operation of the law of averages, such responsiveness of production to market conditions would be impossible. If, for instance, five thousand men were laid off in some minor cities of Michigan in a single day, it would mean ruin to the communities. Were Mr. Ford's full force laid off, as it has been in Detroit, in some city of England, France or Germany, it would mean revolution.

The big cities serve as the clearing-houses for big industry in our country. The little ones have their own places in the economy of production, but being out of the problem so far as great movements for distribution are concerned, it is neither good industrial doctrine nor good popular instruction to hold them up as being superior locations for production in split-up units. The great city has its defects and its problems, which it is rapidly solving, but which are immediately supplemented by other and newer problems; but one of these defects is not a lack of adaptability for production. It was the problems of production and distribution that made the big city. It is the same problems that will force its growth and dominance.

Mr. Ford would have been a much clearer-headed man had he given some of his life-time to the study of economics; but, if he had done so, he might not have been so great an industrial leader, so that, after all, maybe things are all right as they are.

Buy Intelligently, But BUY

BUSINESS is on the mend. Factories are reopening—with curtailed forces or on reduced time schedules, but reopening nevertheless. Michigan, especially, finds encouragement in the fact that motor vehicles, one of her chief products, are beginning to sell—in smaller quantities in most instances, no doubt, but selling nevertheless. That means that the manufacturers further on down the line—the men engaged in making the materials and parts that go into automobiles and trucks—are beginning to find a market for their output.

The process of recovery will be slow. No one need expect a revival overnight. But those who think deliberately would wish a "spurt." "Spurts" by the very nature of things mundane are followed by reactions; and we do not wish a reaction. We wish to consolidate our gains as we make them, as the military men say. We do not wish to be obliged to give ground, once we have won it. The crisis is past; a panic has been avoided; now for the long pull ahead!

Business can help measurably in the process if it will follow the policy of buying moderately—not for a long time ahead, but to care adequately for current needs and for the needs that will grow just a little larger as the weeks go by. A policy of not buying at all not only contributes nothing to progress on the upgrade, but is sure, sooner or later, to bring about the inevitable reaction of prices upward. As an advertiser in these columns asks, "Would it not be better for all of us to do a moderate amount of buying and not allow the inexorable law of supply and demand to play havoc with us once again? Why not strive to keep the wheels of industry turning at least in some measure, that we may maintain a continuous market, rather than foster those eternally devastating fluctuations?"

If the wheels of industry are kept turning, they will gain momentum; it will be much easier to gain that momentum than if they are allowed to come to a standstill. An object in motion tends to remain in motion; an object at rest tends to remain at rest. Without buying, there can be no business. So buy moderately. Buy moderately not only to keep business moving, but to show the fellow whose courage may not be at any lower ebb than yours, but who can't conceal the fact quite as well as you can, that you have confidence in the future—that you have not been taken off your feet. The news that you are in the doldrums will spread quickly enough, you may be sure; and as the circle becomes wider, it won't be long before we all are in a cheerful frame of mind. The rest will be easy.

Buy intelligently, but BUY.

Short Measure Stuff

FORD'S SYNTHETIC COW STARTS SOMETHING

HENRY FORD certainly started something else when, in an interview a few days ago, he predicted the end of the old-fashioned cow and put in her place a synthetic substitute containing the nutriment of milk. We presume it will be a sort of lady bull-ion cube.

The dairy and packing interests are all het up about it. A Bovine Defense League will soon be announced, with offices in Washington and a full time secretary.

As we go to press we are in receipt of a letter from Mr. Jiggs and his good wife, Maggie, begging us to use our influence toward having Mr. Ford abandon the idea.

"What would we do for corned beef?" they wail. "It is to cabbage what ham is to eggs."

Another touching appeal comes from Jess Willard.

"I am soon to meet Jack Dempsey again," he writes. "I wonder if Mr. Ford will be able to provide a synthetic beefsteak that I can put on my eyes after the fight to reduce the swelling and take out the black. Tell him for me to have a heart."

King Alfonso cables to know if there will also be synthetic bulls available for "toreadoric" purposes.

And last night in the still small hours, our Ouija board got excited. We were paged from the otherwhere by the author of a famous jungle, who does not care to be relegated to oblivion by this bit of progress; therefore asked to make the following revision on his best known work:

"Where are you going, my pretty maid?"
"After synthetic milk," she said.
"May I steady the pail, my pretty maid?"
"We milk with a basket now," she said.

* * *

THRIFTY

A thrifty soul
Is Maggie Grumm;
She always saves
Her chewing gum.
—Detroit Free Press.

A saving man
Is Henry Bright;
He always stops
His watch at night.
—Canton Daily News.

A thrifty man
Is Hiram Peery,
He uses hotel
Stationery. —Warren Tribune.

A crafty cuss
Is brother Jules;
He borrows all
His neighbor's tools.

* * *

ADEQUATE

"What are you giving up this year during Lent?"
"Everything I can. I am paying my income tax in that period."

* * *

Miss Christobel Pankhurst inserted an ad in a London paper the other day asking for work. The Blue Law boys ought to sign her up.

* * *

THE FIRST ROBIN

This column hereby announces the First Robin Sweepstakes. Open to anybody in Michigan. Who will be the first one to spot the first robin? Send in your entry as soon as you spot him. We will award a handsome plate glass toothbrush to the first one who spies the dear little birdies. Other prizes to be announced later.

All accounts must be accompanied by affidavits and the signatures of at least two character witnesses.

Now then, all together.

* * *

Honest now, isn't business just a little better?

—A. F.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

IF there is any one individual in the United States in position to observe all the trends of our complex business and financial changes, it is Governor Harding, of the Federal Reserve Board. He stated to Congress February 16 in the Board's annual report that business was on the upgrade, and in his remarks we may find much of comfort as regards the course of business in 1921.

But by going further into the report one finds a qualification which must not be overlooked, and that is the reference to business conditions in the remainder of the world and to what extent the curing of these troubles depends on the United States. The essence of the problem as pointed out by Mr. Harding is that unless we can continue to finance the shipment of raw materials to Europe so Europe may continue in the manufacture of goods which we import, we may find our foreign trade vanishing almost down to exchange of necessities. This danger often has been emphasized in the last six months and it is of utmost importance that American business get squarely behind agencies such as the Foreign Trade Financing Corporation, not only morally, but by taking stock in liberal amounts. The benefits to come from the success of this financing corporation are of such import that nothing short of a campaign similar to the Liberty Loan drives should be put on to get the stock sold, and sold quickly. Forty million dollars went into the copper syndicate loan in a twinking and the capital of the new bank has $100,000,000, which should come readily when the benefits are fully comprehended.

Getting back to Detroit and Michigan, the trend seems to continue slowly upward. Unemployed are somewhat more in evidence on the streets the last week, but it is not clear whether this is due to the fine spring weather or more unemployment. Reports from industrial plants are that about 3,500 more men are at work this week than last. Wholesale houses report increasing orders from up-state customers, but as spring draws near the conviction grows that it will be fall before any abrupt and sustained buying takes place.

HAYES WHEEL COMPANY

ASSETS	Dec. 31, 1920	Dec. 31, 1919
Land	$ 83,341	
Buildings	1,013,277	
Machinery and equipment	1,732,993	
Office furniture and fixtures	34,313	
Automobile equipment	35,103	
	$2,920,132	
Less reserve for dep'n	556,018	
	$2,364,114	$1,924,023
Investments at cost	56,333	158,192
Inventories of raw and worked materials and supplies on hand and in transit, at cost or market	3,467,501	2,537,377
Notes and accounts receivable, less res.	810,782	1,886,096
Cash value of insurance	32,320	
Cash on hand and in banks	229,932	185,220
Unamortized discount, etc.	43,115	
Prepaid interest, ins., rent, etc.	45,081	
Expense on leased building	41,488	139,185
	$7,194,587	$7,831,504
LIABILITIES		
Capital stock outstanding	$1,632,320	$1,632,320
Ten-year 7 per cent bonds	450,000	928,000
Land contract	128,300	
Notes and acceptances payable	1,572,847	1,360,000
Accounts payable	674,267	1,486,876
Accrued pay rolls, interest, etc.	126,256	217,967
Reserve for federal taxes	240,000	610,000
Reserve for inventory shrinkage	250,000	
Surplus	1,725,917	1,599,340
	$7,194,587	$7,831,504
Surplus at beginning of period	1,599,340	802,780
Plus net profit for period	874,746	1,501,564
	$2,474,086	$2,304,344
*Less reserves set aside	490,000	
Less dividends paid	163,332	58,499
	$ 653,332	
Surplus at end of period	$1,820,755	$1,599,340

*Complete earning figures for 1919 not available.

CARO BANK IN NEW BUILDING

The State Savings Bank, Caro, will hold a formal opening ceremony on Washington's birthday, February 22, in its new bank building, and regular business will be transacted in the new quarters beginning Wednesday, February 23. This paper has not been furnished with the data concerning the new building, but from the picture which J. McNair Ealy sent, it would appear that the building is going to be unusually attractive. J. McNair Ealy is president; Grant H. Slocum, vice-president; Louis Wean, cashier, and C. R. Myers, assistant cashier. The board of directors is comprised of the officers mentioned, together with several old associates of the Ealys, including the following: Peter C. Pardee, C. W. Stacy, D. J. Evans, John W. Quinn, Walter S. Wixson, William P. Campbell, Henry P. Bush, Amos L. Kinney, Lee R. Stewart and Frank B. Campbell.

Current Investment Offerings

PAINE, WEBBER & CO., DETROIT

Milwaukee Coke & Gas Co. 1st. mtge. col. bds.	7½	2-1-32	98.00	7.75
Gulf Oil Corp. sinking fund debenture bonds	7	2-1-33	98.00	7.25
Tulsa, Okla., school dist. bonds	5	5-15-33	96.58	5.50
Port Arthur, Ont., bds.	5	1-1-34	82.25	7.12
Lt. Co. 1st & ref. bds.	7	2-1-51	92.00	7.68
Brazilian Int'l Sterling loan bonds	4		350 per £200	

C. W. McNEAR & COMPANY, CHICAGO

Henderson Co., Texas, bonds	6.00		5.75
Miami, O., Conservatory Dist.	5.50		5.75
Custer Co., Mont., Highway	6.00		5.85
Rockingham Co., N. C., road and building	6.00		5.85
Drumright, Okla., water	6.00		6.00
St. Paul, Neb., gen. oblig.	6.00		6.00

BOGERT, MOSSER & WILLAMAN, DETROIT

Name	Rate	Maturity	Price	Yield Pct.
Mingo Drain. Dist. of Stoddard and Wayne Counties, Mo.	6	1930-39	6.25 to 6.50	6.50
Okeechobee Co., Fla., Rd. and Bridge	6	1923-44	6.10	
Pima Co., Ariz., Road	5½	1932-36	5.75	
Morrison Hotel, Chicago, 1st. lst & ref. mtge.	6	1922-30	7.00	
Wisconsin Chair Co., secured gold notes	7	1922-24	8.00	
Beckley, W. Va., Common. reg. gold coupon notes	6	1928	8.00	

AMERICAN TRUST & TRUST CO., DETROIT

The Bomb-Robinson Co.	6	1926-27	6.00
Clayton & Lambert Mfg. Co.	7	1924-30	7.00
Morris Zack	6	1924	6.00
Coplin H. Colwell	6	1924	6.00

HALSEY, STUART & CO., DETROIT

Copper Export Assoc. acc. notes		1922-25		8.00 to 8.30
Gulf Oil Corp. S. F. deb. bonds	7	1933	98.00	7.25
Penn. Pr. & Lt. Co. 1st & ref.	7	1951	92.00	7.76
Southw. Bell Tel. Co. notes	7	1925	96.50	8.00
State of Minn. Soldiers' Bonus bonds	5	1924-26		5.55 to 5.65
Province of Ontario	5½	1925	94.41	7.14

CORRIGAN COMPANY, GRAND RAPIDS

Michigan Road Bonds			6.00
Detroit & Northwestern R. R.	6	5a	6.55
Bell Tel. Co.	6	1925	6.00
Copper Exp. Assn. Inc.	8		8.25

HOOVER SURPLUS GAINS $325,770

A statement as of December 31, 1920, of the Hoover Steel Ball Company, Ann Arbor, shows a gratifying increase in surplus when compared with the statement of July 31, 1919. Book value, nearly $31 a share.

ASSETS	Dec. 31, 1920	July 31, 1919
Cash on hand and in bank	$ 73,573.54	$ 39,642.91
Liberty bonds	1,150.00	1,150.00
40 in receivables	129.10	
Accounts receivable	230,834.27	262,280.46
Inventories	1,474,802.26	622,147.41
Plant and equipment	892,482.01	734,927.32
Deferred items	10,650.26	
Other assets	25,812.20	7,300.27
	$2,219,464.64	$1,608,758.98
LIABILITIES		
Capital stock outstanding	$1,221,580.00	$1,247,580.00
Reserves, taxes, depreciation, etc.	300,998.87	71,846.52
Accounts payable	322,126.77	270,713.27
Surplus	374,649.00	18,579.19
	$2,219,464.64	$1,608,758.98

UNION MORTGAGE STATEMENT

Stockholders of the Union Mortgage Company, Detroit, at the annual meeting January 24 re-elected the 1920 board of directors and elected the following officers: James A. Hoyt, president; Ralph Aldrich, vice-president and secretary; George H. Kirchner, treasurer. The statement follows:

ASSETS	Dec. 31, 1920
Cash on hand and in banks	$ 104,639.96
Liberty bonds at cost	10,312.95
Notes and sundry accounts receivable	17,971.77
Stock subscribers' accounts	1,647,661.28
Accrued interest receivable	34,101.25
First mortgage real estate bonds	442,000.00
Sundry mortgages and collateral loans	1,088,529.41
Land contracts	2,932,788.77
Land and buildings	156,782.86
Furniture and fixtures	4,837.90
	$6,441,716.18
LIABILITIES	
Accounts payable-sundry	$ 8,729.06
Accounts payable-deferred balances on loans	220,256.84
Accrued interest payable	18,569.88
Notes payable	100,000.00
Mortgages payable	1,125,000.00
Preferred stock outstanding	4,125,860.00
Undivided profits	514,630.54
	$6,441,716.18

Common stock outstanding, 361,198 shares.

KRESGE SALES

January sales of the S. S. Kresge Company, Detroit, were $3,215,299, compared with $3,951,585 a year ago, a gain of 5.36 per cent.

Digitized by Google

Michigan State Banks Still In Billion Class

Total resources of the 547 state banks, two industrial banks and 11 trust companies chartered under the Michigan law, at the close of business December 28, 1920, were $1,043,305,087. On June 30, 1920, resources of 544 state banks, all classes, totaled $1,064,774,752. Total deposits December 28, 1920, were $839,469,463, as compared with $885,009,280 on June 30, 1920. New banks opened since September 8 report of the commissioner were as follows:

Mattawan State, Mattawan	$ 20,000
Wayne County & Home, Highland Park	100,000
J. W. Free State, Paw Paw	30,000
First State, Maple Rapids	20,000
Center Line State Savings, Center Line	60,000
Baroda State, Baroda	20,000
Atlanta State, Atlanta	20,000
Peoples State, Stanton	20,000
Trout Creek State, Trout Creek	20,000
Bank of Cement City, Cement City	25,000
Continental, Detroit	700,000
Dime Savings, Hamtramck	100,000
Farmers' State Savings, Milford	50,000
Perrinton State, Perrinton	20,000

FEDERAL TRUCK STATEMENT

ASSETS

	(Cents omitted) Dec. 31, 1920	Dec. 31, 1919
Cash	$ 163,292	$ 177,884
Notes receivable and acceptances	83,040	.....
Accounts receivable	160,770	895,130
Securities	192,595	266,155
Plant accounts	1,382,248	811,293
Merchandise inventories	2,497,398	2,302,412
Prepaid expense	60,083	.....
	$4,525,340	$4,452,976

LIABILITIES

Notes and accounts payable	$ 352,734	$ 448,781
Dealers deposits	31,843	40,595
Land contract	233,360	75,000
U. S. government claim	359,091	458,888
Reserves for depreciation, etc.	577,649	476,003
Accrued expense	61,847	72,845
Capital stock	2,000,000	1,000,000
Surplus	806,812	1,883,863
	$4,525,340	$4,452,976
Total sales	10,629,742	10,526,265
Profit for year	746,878	1,281,706
Federal taxes estimated	206,000	420,000

Except for an increase in plant account of $572,000, against which may be offset the land contract liability increase of $260,000, thereby cutting down the net plant increase to $302,000, this is one of the few statements of motor manufacturers which has not shown an abnormal gain in plant and inventory account at the expense of liquid assets. It is also noteworthy in that the current payables show a decrease of $93,000 rather than an increase. Surplus and capital combined stand practically as a year ago, the only difference being that the large surplus of a year ago is now represented by stock. A net gain, estimated, of $545,000 (against $860,000 for 1919) should be acceptable to stockholders in view of business conditions the last four months of 1920, and the fact that current assets December 31, 1920, were only about $560,000 less than at December 31, 1919.

COST ACCOUNTANTS MEET

The Detroit chapter of the National Association of Cost Accountants has now become a full-fledged chapter, as its charter was received from national headquarters this week.

The next meeting will be held in the Board of Commerce building, Thursday, February 24, at 8 p. m., when the election of permanent officers will take place. A paper on an interesting phase of cost accounting will be presented by William F. G. Ross, of Marwick, Mitchell & Company.

All who may be interested in the work of the Association are invited to be present. There will be no charge for admission.



Protect Her Now

Your wife is your partner. Together you plan for the well-being of the family.

She cannot, however, become familiar with many of the details of property and business management. She is busy with other family matters.

But life is uncertain. Some day—any day she may be suddenly thrown upon her own resources. Where then will she turn for help? As her life partner you should know the answer to this question now.

The answer is simple. A Living Trust, established for you, and naming a competent, never failing trustee is a reasonable solution. A Living Trust may include all or part of your property. It may provide for other members of your family also.

By it your wife and family will receive without trouble the income from the Trust you establish. They will know too that their property is in safe, skilled hands. A Living Trust may be so made that you will receive the income during your life, if you wish.

We have published a book entitled "Living Trusts" which gives interesting facts and stories. As a business man you will appreciate it. Let us send a copy to you without obligation.

First Trust Company in Detroit

Union Trust Company

Detroit, Michigan.

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

MANAGED BY MEN YOU KNOW

Where Able Business Men Fail

Men recognized as capable managers and executives often fail in an important duty to their families by neglecting to make wills.

At death the law steps in, their property is parceled out by statute, heirs inexperienced with finances receive lump inheritances, and quarrels, waste and unhappiness often result.

Attend to this duty now. Our booklet, "Descent and Distribution of Property," makes valuable suggestions. Send for free copy.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan

CAPITAL AND SURPLUS: $450,000.00

MATTHEW FINN

High Grade Municipal
and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

	Feb. 11, 1921	Feb. 4, 1921	Feb. 13, 1920
RESOURCES			
Total reserves	$2,347,108,000	$2,376,127,000	$2,662,513,000
Bills discounted—Sec'd by Gov't war obligations.	1,011,677,000	1,017,152,000	1,469,562,000
All other	1,282,839,000	1,415,721,000	853,872,000
Bills bought in open market	178,872,000	167,821,000	542,600,000
Total bills on hand	2,581,389,000	2,600,591,000	2,826,035,000
U. S. Government bonds	25,849,000	25,849,000	26,775,000
U. S. Victory notes	13,000	13,000	43,000
U. S. Certificates of indebtedness	263,574,000	259,570,000	290,217,000
Total earning assets	2,870,831,000	2,886,729,000	3,153,190,000
Bank premises	18,972,000	18,244,000	11,103,000
Uncollected items, other deductions gr. deposits	567,478,000	567,980,000	1,057,333,000
5% Redemption fund against F. R. Bank notes	12,267,000	12,868,000	12,114,000
Gold aboad in custody or in transit	3,800,000		
All other resources	7,500,000	7,105,000	4,122,000
Total resources	5,822,491,000	5,849,053,000	6,285,375,000
LIABILITIES			
Capital paid in	100,557,000	100,228,000	89,674,000
Surplus	202,036,000	202,036,000	120,120,000
Government deposits	48,457,000	50,372,000	24,218,000
Due to members—Reserve account	1,740,259,000	1,742,762,000	1,937,865,000
Deferred availability items	423,613,000	423,623,000	880,451,000
Other deposits, including foreign gov't credits	32,602,000	26,243,000	57,644,000
Total gross deposits	2,226,131,000	2,243,011,000	2,839,578,000
F. R. notes in actual circulation	3,050,416,000	2,975,750,000	2,959,687,000
F. R. Bank notes in circulation—net liability	198,178,000	197,210,000	245,810,000
All other liabilities	23,173,000	30,819,000	31,106,000
Total liabilities	5,822,491,000	5,849,053,000	6,285,375,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	49.6%	49.3%	43.2%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	57.6%	56.9%	48.2%

Banks and Bankers

NEW BANK AT CEDAR SPRINGS

The Farmers and Merchants State Bank has been incorporated at Cedar Springs to do a commercial and savings business. The capital is $25,000 and the principal incorporators Melvin E. Sanford and George Arnold, Cedar Springs, and James E. Hanna, Solon township, Kent county.

CONTINENTAL'S DEPOSITS

The new Continental Bank, Detroit, reports deposits in excess of $1,250,000 at the close of the first two weeks' business. This augurs well both for the bank and for the general condition of business.

MANISTIQUE ELECTIONS

The following bank elections are reported from Manistique:

First National—Officers: William B. Thomas, president; V. I. Hixon, vice-president; W. C. Crowe, cashier; Paul Baldwin, assistant cashier. Directors: Wm. B. Thomas, V. I. Hixon, W. S. Crowe, L. Rosenthal, John Falk.

Manistique Bank—Officers: Chas. D. Orr, president; O. G. Quick, vice-president; E. H. Jewell, cashier; C. E. Kaye, assistant cashier. Directors: C. R. Orr, O. G. Quick, E. H. Jewell, R. B. Waddell, E. W. Miller.

State Savings—Officers: Leo C. Harmon, president; Benjamin Gero, vice-president; Wm. J. Shinar, cashier. Directors: L. C. Harmon, Benjamin Gero, W. J. Shinar, G. S. Johnson, E. R. Westcott, August Carlson.

EMPLOYES PUT ON A CONTEST

Employes of the Capital National Bank, Lansing, staged a contest for new business from November 15 to January 15 that was interesting and a business greeter for the bank. Two teams were chosen and "pep" meetings held every few days. Each team reported its progress at the end of 30 days and then the final report came at the end of the contest. A schedule of points for the different classes of accounts was worked out and the winning team came out ahead by 3,000 points.

The bank paid the employes a stated amount for the accounts obtained and at the banquet furnished by the losing team, the place cards were unique in that they were cashier's checks for the amount earned by each employe in the contest. Special prizes were awarded by the bank for the largest number of accounts, largest single account, and highest average.

The result of the contest was gratifying, several hundred accounts being added.

E. D. FISHER'S PLANS

It is reported that Edmund D. Fisher, formerly deputy controller of the city of New York, and who resigned recently as vice-president of the Bank of Detroit, will announce soon an important connection with a large eastern bank.

George B. Judson who was recently elected to the board of directors, becomes senior vice-president, and C. H. Haberkorn, Jr., a director, has been elected vice-president in an advisory capacity.

CLEARING HOUSE ELECTION

Charles H. Bender has been elected president; L. Z. Cauklin, vice-president; T. William Hefferan, secretary, and A. H. Brandt, treasurer of the Grand Rapids Clearing House Association.

General Financial News

COURT FIXES PAR BASIS

Petition for rehearing in the case of the Detroit Mortgage Corporation, asking that the Secretary of State be mandamused to accept its offer of a franchise fee to do business in Michigan on a basis of $10 a share for non-par value common stock, has been denied by the Michigan Supreme Court. This means that hereafter all foreign corporations entering this state must pay a franchise fee to be computed on the basis of the value fixed for no par stock in the state where they are incorporated. The Detroit Mortgage Corporation is a Delaware

Digitized by Google

corporation with its non-par stock value placed at $100 as a basis for fixing the franchise fee, but offered to pay in this state on a $10 value. The decision of the appeal board went to the supreme court. The decision practically abolishes the appeal board, holding that it has no judicial power in such matters, its authority being limited to minor affairs. There are many foreign corporations now who have paid under protest or not in full, which will be required to pay in accordance with this decision or have their franchises suspended.

SHERWIN-WILLIAMS COMPANY

The Sherwin-Williams Company, Cleveland, which absorbed the Acme White Lead & Color Works, Detroit, last year, declared February 8 the regular quarterly dividend of 2½ per cent on the $25 par value common stock. This is payable February 15 to stockholders of record February 14 and is the 145th consecutive quarterly dividend paid on the common stock. The company has never passed a dividend and for the last 23 years the common dividend has not been below 10 per cent per year. G. A. Martin, vice-president, is quoted as follows:

"Our finances are in splendid shape. We have recently reduced the price of prepared paints $1 a gallon. We were the last to feel the depression and will be among the first to recover if present orders are any indication. Our plants are now operating on a 75 per cent basis. Reports indicate that dealers' stocks are low and as the spring demand comes to the trade, we expect a rush to take care of the business."

McCORD CREDITORS' MEETING

At the creditors' conference held Friday, February 11, at the Detroit Board of Commerce about 90 per cent of the bank and merchandise creditors of the McCord Manufacturing Company, Detroit, assented tentatively to an extension of from six to twelve months in maturity of their claims. Joseph T. Schlack, former vice-president of the McCord company, was retained as general manager and Lot M. Hamlin was continued as secretary and treasurer. It is reported that the entire property is to be placed in the hands of the creditors' executive committee, which is comprised of John Fletcher, vice-president of the Fort Dearborn National Bank, Chicago; Lewis H. Jones, president, Detroit Copper & Brass Rollings Mills, and Walter L. Dunham, vice-president of the Dime Savings Bank, Detroit.

WESTERN KNITTING MILLS

At the annual meeting of the Western Knitting Mills, Inc., earnings of $278,785.27 were reported for the fiscal year ended November 25, 1920. Total sales were $1,796,045.65, compared with $1,815,000 for the year previous. New equipment valued at $214,000 was added during the year, which brings the capacity of the factory up to $5,000,000 a year. The report states that the earnings practically cover a period of only eight months on account of the business depression. Officers elected are: Chairman, Joseph Weissenhach; president, G. C. Strauss; vice-presidents, W. C. Chapman and Stanley G. Miller; secretary and treasurer, Wallace G. Kay; assistant treasurer, G. J. Taylor.

WILLYS STOCKHOLDERS ORGANIZE

Holders of the first preferred and second preferred stock of the Willys Corporation are reported to have arranged to finance the completion of the new plant at Elizabeth, N. J. The committees proposed will also include the merchandise creditors.

PERE MARQUETTE INCOME

Gross earnings of the Pere Marquette Railroad Company for December amounted to $3,301,663 and net operating income was $203,928, compared with income of $83,324 for the same month in 1919. For the year the earnings were $40,722,268 and net operating income, $1,746,877.

Did you get your copy of our new booklet—

"Why Corporations Appoint

Security Trust Company

Register and Transfer Agent

For Their Stock"

We will gladly deliver you a copy, in person, or upon mail or phone request.

SECURITY TRUST COMPANY

FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Our First Mortgage Bonds are the obligations of responsible Detroit men, secured by property worth at least twice the mortgage and backed up by the seven millions of dollars of assets of this successful corporation.

Could any investment be safer? Yet these bonds pay 6% interest—a rate which makes no premium charge for all this safety.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

TRADING DEPARTMENT

Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.

JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation, 70 Years of Service.

THE DETROIT SAVINGS BANK

OLDEST BANK IN MICHIGAN

45-47 Fort St. West, Penobscot Building. 14 Branches

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE FEBRUARY 15th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com	95	96	100	95½ - 99	204 - 55	4%	4%	Quarterly	Feb. 1, 1921	1%	1¾%	1%		$23,271,900
Do., pfd			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,226,900
Auto Body Co	5¾	8½	10	5¾ - 4½	12½ - 5¼				Jan. 20, 1917		25%			$1,074,000
Do., pfd	7	10	10		10½ - 10¼	8%		Semi-Ann	Feb. 1, 1921	2%		2%		$127,900
Bower Roller Bearing Co	15	19	10		29½ - 10	Varies		As Decl'd	July 1, 1920	10%				$600,000
Chatoral Iron Co. of America, com	2¼	2½	10	2¾ - 2	5½ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd	2¾	3½	10	3½ - 3¼	5½ - 3¼				July 1, 1919	3%				$5,217,250
Cities Service Co., com	234	239	100		353 - 230½	*6%		Monthly	Jan. 1, 1921	1½%	1¼%	1½%	1¼%	$40,698,248
Do., pfd	70½	72½	100		70 - 65	6%		Monthly	Jan. 1, 1921	½%		½%		$75,465,864
Cosmos Lead & Zinc Co		14	1	16 - 16	25 - 6	Varies		As Decl'd	Mar. 15, 1917	50%				$800,000
Columbia Sugar	11¾		10	14½ - 10½	20¼ - 11½	12%		Quarterly	Jan. 3, 1921	3%		3%		$3,000,000
Commerce Motor Car Co	7¾		10	7¾ - 7¾	18¼ - 7¾	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pr. Ry. & Light Co., com	14	16	100	16 - 16	45½ - 10½	4%		Quarterly	Nov. 1, 1917	1%				$18,885,900
Do., pfd			100		93 - 83	6%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,932,200
Continental Motor Co	6¾	6¾	10	7½ - 5¾	14¼ - 5¾	4%		Quarterly	Dec. 20, 1920	1%				$9,447,969
Do., pfd., XD		91½	100		100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,781,700
Detroit & Cleveland Navigation Co	74	78	10	75½ - 71	90 - 61	5%		Quarterly	Jan. 15, 1921	1¼%		2½%		$4,629,600
Detroit Creamery Co		24½	10	25¾ - 22½	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,600,000
Detroit Edison Co., XD	96¼	96½	100	98 - 96¼	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,883,900
Detroit Brass & Malleable Works	95	98½	100	98 - 98	96 - 93	6%		Monthly	Feb. 1, 1921	1%		1%		
Detroit United		90	100			8%		Quarterly	Dec. 1, 1920	2%				$18,000,000
Edmunds & Jones, com	12½	15	None	14½ - 13½	34 - 9¼	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$40,000 shs.
Do., pfd	75	85	100		78 - 78	8%		Quarterly	Jan. 1, 1921	2%		1¾%		$800,000
General Motors	14		10	16 - 14½	42 - 12¾	25c		Quarterly	Feb. 1, 1921	25c		25c		20,563,358 shs.
Federal Truck	20	22	10	21½ - 18½	82 - 16¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	250	255	100	264 - 230	460 - 210	Varies		As Decl'd	July 15, 1920	10%				$2,000,000
General Alum. & Br. Mfg. Co., com	13	14½	10		14½ - 11	Varies		As Decl'd	Oct. 1, 1920		5%			$1,062,750
Gladys-Belle, com., XD	58	60	100	73 - 58	122 - 56	16%		Quarterly	Jan. 15, 1921	4%		4%		$6,407,980
Do., pfd	68	69	100	80 - 63	114 - 61	16%		Quarterly	Jan. 15, 1921	4%		4%		$2,000,000
Godchaux Sugar, com	20	23	None		59¾ - 39½									$70,000 shs.
Do., pfd	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$3,500,000
Hanna Furnace, com	27		10	26 - 26										$1,985,900
Do., pfd	96	99	100											$750,000
Hall Lamp Co	14½	15½	10	15 - 14¼	32½ - 16	Varies		As Decl'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com	3½	4½	10	4½ - 2¾	8½ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1½%				$1,500,000
Holland-St. Louis Sugar Co	10		10	11 - 9¾	24½ - 9¾	1.20		Quarterly	Oct. 15, 1920	30c				$2,500,000
Iron Silver Mining Co	25		20		42 - 42	20%		Semi-Ann	July 1, 1919	10%				$2,500,000
B. F. Kroger, com	130	138	100	90¾ - 90¾	154 - 75	3%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd	97	102	100			7%		Quarterly	Jan. 2, 1921	1¾%		1¾%		$2,000,000
Lindeman Steel, com	12	14	10		24½ - 15½	6%		Quarterly	Jan. 1, 1921	1½%		1½%		$1,066,000
Lincoln Motors, Class A	19¾	20	50	21½ - 17¾	50¾ - 13½	$5.00		Quarterly	July 30, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co	6		40		13½ - 5				Dec. 1, 1914	50c				$750,000
Michigan Drop Forge, com		40	None		50 - 38½	$4.00		Monthly	Feb. 1, 1921	25c		50c		$12,500 shs.
Do., pfd			100		90 - 90	7%		Quarterly	Feb. 1, 1921	1¾%		1¾%		$250,000
Michigan Stamping Co., com	17½	18½	10	17¾ - 17¾	30 - 16½	9%		Monthly	Jan. 1, 1921	¾%		¾%		$1,309,000
Michigan Sugar Co., com	8½	8¾	10	9 - 8¾	13½ - 7	4%		Quarterly	Dec. 1, 1920	1%				$7,471,200
Do., pfd	31½	33	10	33½ - 31½	39½ - 9¼	12%		Quarterly	Jan. 15, 1920	1½%				$3,703,350
Miles-Detroit Theater Co	15½		10		21 - 15¼	*16%		Quarterly	Jan. 10, 1921	4%		4%		$350,000
Motor Products	42	44	None	42 - 42	50½ - 21				Feb. 1, 1921	$1.25		$1.25		$ 400,000 shs.
Motor Wheel	11½	11¾	10	11½ - 8½	13½ - 8¾	*8%		Quarterly	Nov. 20, 1920	2%				$4,500,840
Murray Jig			10		34 - 33	12%		Monthly	Feb. 15, 1921	1%		2%		$732,450
National Grocer Co	8½	9	100	9¼ - 8½	156 - 156	*8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd	88	92	100		107 - 87	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd	121	124	100	1 20-1 10	2 00-1 05	*18%		Quarterly	Jan. 1, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com	11	11¼	10	11 - 9¾	28¼ - 9¼			Quarterly	Oct. 31, 1920	2½%				$11,885,100
Do., pfd	75½	76½	100	79 - 69	96¾ - 67	7%		Quarterly	Dec. 15, 1920	1¾%				$15,222,800
Paige-Detroit Motor Car Co	18¾	18¾	10	18¾ - 14¾	45 - 13¾			Monthly	Dec. 15, 1920	2%				$2,000,000
Parke, Davis & Co	NN		25	97 - 89	117½ - 95	*16%		Quarterly	Jan. 3, 1921	8%		8%		$11,538,850
Penberthy Injector, pfd	99	100½	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$500,000
Reo Motor Co	22½	22½	10	23¾ - 17½	29¾ - 16¾	10%		Quarterly	Jan. 1, 1921	2½%		2½%		$6,837,350
Scotten-Dillon Co	18½	19	10		55 - 33	12%		Quarterly	Jan. 3, 1921	3%		3%		$2,000,000
Timken Axle, com., XD	32	34	10	33 - 26½	83¾ - 26	12%		Bi-Month	Jan. 15, 1921	2%		2%		$3,000,000
Do., pfd	89	93	100		93½ - 84	7%			Dec. 1, 1920	1¾%				$5,000,000
True Con. Steel Co., com., XD	26	28½	10	28½ - 27¾	29 - 24¾	8%		Quarterly	Jan. 15, 1921	2%		4%		$1,450,250
Do., pfd	94½		100		98¾ - 94¾	7%		Quarterly	Dec. 1, 1920	1¾%				$1,632,260
U. S. Radiator, com	13	17½	100		31½ - 20½									$6,000,000
Do., pfd	75	83	100		95¾ - 80	7%		Quarterly	Jan. 25, 1921	1¾%		7%		$2,800,000
Warning Hat Co., com		25	None											
Do., pfd	92		100			8%		Quarterly	Jan. 1, 1921	2%		2%		
Western Knitting Mills	10		None	11 - 8½	30¾ - 8½	$2.00		Quarterly	Nov. 22, 1920	50c				$1,040,950 shs.
White Star Line		42	50		50½ - 50½	7%		Aug. & Nov	Aug. 22, 1920	3½%				$750,000
Wolverine Portland Cement Co	2¼		25	2¾ - 2	5¾ - 2¼				Dec. 15, 1917	5%				$1,000,000

*Old $90-$70; new 6% - 27 $7 ... in 1911, 7 ... in 1920, only dividends were organized. †Extra dividend. ‡Scrip. § Book value, $959,409. Ed. & J. ¶ Book value, $3,219,337, Godchaux. Book value, $2,622,795.00, Western Knitting Mills. ‖ Book value $5,994,450, Motor Products. ¶Old. ††Taken from other exchanges

Foreign Exchange

Country.	Par	Jan. 5, 1921	Feb. 2, 1921	Feb. 16, 1921
Canada	1.0000	.85	.8500	.8775
London	4.8665	3.6725	3.8500	3.9175
Switzerland	.1930	.1529	.1692	.1655
Paris	.1930	.0549	.0746	.07485
Belgium	.1930	.0625	.0715	.0782
Holland	.4019	.2162	.3375	.3445
Italy	.1930	.03165	.0266	.0375
Greece	.1930	.0763	.0735	.0747
Spain	.1930	.1228	.1393	.1421
Vienna	.20262	.00?3	.0028	.00258
Berlin	.2382	.01315	.0158	.01475
Denmark	.2680	.1765	.1840	.1840
Norway	.2680	.1595	.1860	.1765
Sweden	.2680	.2045	.2180	.2215

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Feb. 15, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	91.14	93.56	90.00	91.08	99.20	98.76	99.54	99.82
U. S. Liberty 1st 4s	86.94	85.56	85.52	85.60	92.00	94.80	93.00	96.12
U. S. Liberty 2nd 4s	86.16	86.30	84.10	85.00	91.58	93.84	93.04	94.10
U. S. Liberty 1st 4½s	87.36	86.35	85.56	85.18	92.46	95.14	96.50	....
U. S. Liberty 2nd 4½s	86.90	86.26	84.34	85.00	92.20	94.06	95.70	....
U. S. Liberty 3rd 4½s	90.10	90.04	87.20	88.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	87.10	86.16	84.96	85.36	99.76	100.10	....	....
Victory Bonds, 4¾s	97.22	96.48	94.80	93.50	94.80	95.04	95.32	98.22

Digitized by Google

Detroit Bank Stocks

Name	Last Published Statement			Dividends		Detroit Stock Exchange					
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Low	Range 1920 High	Low	Last Sale	Feb. 15, 1921 Bid	Ask
American State	150	$1,000,000	$15,980,346	10%	J-A-J-O 1st	221	215	226	200	221	...	221
Detroit Savings	257	1,500,000	23,862,200	12%	5 Jan-Jul 1st 2 Ex Jan							
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly 1 Jan-Jul	260	258	259	250	259	258	
First and Old Detroit National	194	3,000,000	69,889,082	(*12%	J-A-J-O 1st	271	271	275	268	271	260	
Central Savings Bank	142	1,000,000	17,615,136									
First State	160	1,000,000	12,789,601	10%	J-A-J-O 1st	...	...	...	...	...	...	...
Highland Park State	198	1,000,000	14,287,348	20%	J-A-J-O 1st	...	...	298	285	295	...	275
Merchants National	167	2,000,000	9,789,997	8%	J-A-J-O 1st	149	149	163	142	149	145	...
National Bank of Commerce	231	1,500,000	22,274,487	10%	J-A-J-O 1st	...	...	210	190	210	...	...
Peninsular State	158	2,500,000	31,523,787	12%	J-A-J-O 1st	...	...	220	215	215	...	...
Peoples State	282	2,000,000	100,703,805	12%	J-A-J-O 1st	360	360	355	305	355	...	...
United Savings	157	500,000	6,832,934	12%	Monthly	208	208	215	209	208	200	...
Wayne County Home	259	1,000,000	74,072,277	16%	Monthly	...	...	347	306	347	348	...
American Loan and Trust	134	300,000		6%	J-A-J-O 1st	...	...	155	155	155	...	127
Bankers Trust	117	500,000		8%	J-A-J-O 1st	...	...	...	...	...	...	...
Guaranty Trust	174	300,000		8%	J-A-J-O 1st	...	...	148	...	148	...	160
Detroit Trust	417	1,000,000		14%	J-A-J-O 1st	...	...	...	...	...	2275	2300
Security Trust	338	500,000		12%	J-A-J-O 1st	...	...	...	...	...	2700	190
Union Trust	190	1,000,000		8%	J-A-J-O 1st	180	180	197	195	195	1172	190
Commonwealth-Federal	124	750,000	10,328,127	10%	J-A-J-A 1st	...	...	130	...	...	1105	112
Bank of Detroit	160	1,000,000	9,469,153			...	...	...	...	200	1192	200
Continental Bank	120	700,000				...	...	...	...	...	...	...
Michigan State	110	250,000	2,190,838	6%		...	...	...	...	...	1120	125
American State, Dearborn	125	100,000	321,163	6%	Jan-Jul	...	...	...	...	...	...	...
American State, Highland Park	122	200,000	2,098,452	8%	J-A-J-O 1st	122	122	122	116	122	116	122
Peninsular State, Highland Park	120	100,000	1,964,556	12%	J-A-J-O 1st	...	...	...	...	...	...	...
Rouge State Bank	118	50,000	352,845			...	...	...	...	...	...	...
Industrial Mortgage Plan	119	500,000	900,789	8%	J-A-J-O 1st	...	...	...	...	...	...	...

*Under one ownership—stock combined.
†Nominal quotations.
‡Investment Certificates

Unlisted Stocks

Name	Bid	Ask	High 1920	Low 1920	Last Sale 1921
Columbia Motors	5	5¾	14	4	5
Hoover Steel Ball	14	15	24½	18	15
Liberty Motor (new)	6¾	6¾	...	...	5¾
Noble Oil, com	63	66	130	58	66
Mich. Cop. & Brass	15	17	26	19½	16
Great Lakes (new)	11	14	...	...	...
Great Lakes (old)	55	65	...	...	...
Un. Mtg. 100% com.	19½	11½	...	...	...
Un. Mtg. 90% com.	19	...	...	...	...
Federal Discount	7	11	...	...	...
Det. Mort., com	12¾	...	...	...	2¾
Det. Mort., pfd	15¾	6¼	8½	6¾	6¾
Det. Dep. & Brass	115	25	...	...	...
Wilson Truck	15½	8¾	...	...	8¾
Mecford Mfg., com.	17	7¾	...	...	...
Mecford Mfg., pfd.	44	52	...	...	...

*Ex-dividend. †Nominal.

Lansing Stocks

Closing quotations on the Lansing Stock Exchange, Tuesday, February 15, are reported by G. N. Murchey & Company, as follows:

	Bid	Asked
Auto Body Co	5	6¾
Ben Motor Car Co	22	22¾
Capitol Truck Co	6	12
Hatz & Edmonds Motor Co	...	15
Motor Wheel Corp	11½	11¾
First B. & M. Mortgage Co	30	35
Michigan Mortgage Co	8½	9½
Michigan Screw Co	30	40
Lansing Co	35	45
Atha Stamp Forge Co	24	28
Federal Forge Co	8	10
Novo Engine	25	27

Interested in: Peerless Portland Cement, Peninsular Portland Cement, Federal Discount, Columbia Motor.

MISCELLANEOUS MOTOR STOCKS

	Bid	Ask
Reliance Motor	12	12½
Chalmers Motor	7	8
Curtis Aeroplane	7	10
Fisher Body	81	82
Goodrich, com	38⅝	40
Harroun	⅛	¼
Lee Tire	21¼	21⅞
Nash	275	300
Pierce	24½	25
Republic Truck	21½	22
Saxon	4¾	5
Stromberg Carb.	38⅛	39½
White Motors	38¼	39¾

LIFE UNDERWRITERS' CONVENTION

The Detroit Life Underwriters' Association will hold a convention, Tuesday, March 1, in the ball room of the Hotel Statler, at which more than 1,000 members and delegates are expected. An invitation has been extended to all life insurance salesmen in the vicinity of Detroit. Delegations are expected from Flint, Pontiac, Mount Clemens and from Chatham and London and Sarnia, Ont.

The chief attraction of the convention will be a speech by Orville Thorp, president of the underwriters' national association, on the subject of "Insurance to Cover the Inheritance Tax. Mr. Thorp is from Texas. Charles W. Scott, past president, also will address the meeting.

COPYING THE MICHIGAN LAW

A bill now pending in the state of Washington provides for segregation of deposits and resources of the savings business of banks and trust companies in that state. The general provisions of the bill are quite similar to those of the Michigan law, in that savings deposits are required to be invested in high grade bonds and securities. In case of liquidation the savings department would stand on its own feet and the apparent preference as to assets is offset by giving the bank a right to require notice of withdrawal. The bulletin goes on to state that the need for this new provision recently was forced upon the attention of the legislature by the failure of a large state bank which catered especially to savings depositors.

CONSUMERS POWER-MICHIGAN LIGHT

A comparative statement of 1920 earnings of the Consumers Power Company, which statement includes the Michigan Light Company, as filed with the Detroit Stock Exchange, shows gross earnings of $1,301,364 for December, 1920, compared with $1,141,829 for December, 1919. Surplus after dividends on preferred stock was $248,812 compared with $260,289 a year ago. For the 12 months ended December 31, 1920, gross earnings were $14,157,453, comparing with $11,439,094 for the preceding year. Balance after expenses, charges and preferred dividends was $1,427,256, against $1,762,632 at the end of 1919.

Detroit Bank Clearings

Week of Feb. 16, 1921	70,021,932.28
Week of Feb. 9, 1921	$ 76,836,462.35
Week of Feb. 2, 1921	$ 87,995,925.10
Week of Jan. 26, 1921	$ 79,018,607.01
Week of Jan. 19, 1921	$101,986,893.70
Week of Jan. 12, 1921	90,179,447.74
Week of Jan. 5, 1921	$107,362,994.95
Week of Feb. 16, 1920	101,192,702.92
Week of Feb. 9, 1920	$101,049,306.36

Grand Rapids Stocks

Close February 15, as reported by Corrigan Company:

	Bid	Asked
Cities Service, com.	252	264
Cities Service, pfd.	70	70½
Cities Service, Bankers	29½	29⅝
Cities Service, Debenture "B"	132	138
Cities Service, Debenture "C"	97	98
Cities Service, Debenture "D"	84	87
United Light, com.	32½	24
United Light, pfd.	53	59
Commonwealth, com.	13	15
Commonwealth, pfd.	34	36
American Light, com.	95	96
American Light, pfd.	78	81
American Public Utilities, com.	7	10
American Public Utilities, pfd.	18	22

*Extra dividend

Detroit Listed Bonds

Name	Feb. 8, 1921 Bid	Ask	Feb. 15 Last Sale
Cons. Pow. Co.—5s, 1936	80½	81½	81½
Detroit & Flint—5s, 1921	...	...	93
Det. Ft. W. & B. I.—5s, 1927	80½	88	78
D. M. & T. Short Line—5s, 1933	80	81	...
Det. & Northw.—5½s, 1921	97½	98	93
Detroit & Pontiac Ry.—6s, 1922	95	99	95
Detroit & Port.—6s, 1926	...	34	...
Det. & Ft. Huron S. L.—5s, 1960	...	...	...
Detroit Railway—5s, 1924	...	88	...
Det. Ypsi. & A. A.—6s, 1924	...	100	...
D. Y. & A. A. Jackson—6s, 1926	...	83½	...
Det. United Gen.—6s, 1932	...	...	...
Detroit Edison Co.—5s, 1933	85	...	...
Det. Edison 1st & ref. 5s, 1940	77	80	...
East Mich. Edison—5s, 1931	82	84	...
Detroit Edison deb. 5s, 1923	96	98	...
Detroit Edison deb. 7s, 1929	96½	97½	98½
Detroit Edison deb. 7s, 1936	95	97½	99
Detroit Edison deb. 5s, 1940	100⅜	101¾	100⅝
Detroit Rock Salt 6s, 1932	...	...	...
D. C. Gas Co. 1st M. 5s, 1912-23	93½	...	...
D. C. Gas Co. P. L.—5s, 1923	94⅝	94⅞	...
Detroit & Sub. Gas Co.—5s, 1928	89	...	...
Mich. State Tel. Co.—5s, 1924	88	90	...
Tol. Fremt. & Norw'k—5s, 1920	...	...	...
Wyan. & Det. River—5s, 1918	...	...	...
Ry-Prod. Coke Corp.—6s, 1930	...	...	...

Digitized by Google

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. M. Dunham, Representative.

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks

Investment Houses

Trade Associations

IRENE WILLIAMS

104 South Michigan Avenue

CHICAGO

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building

524 Griswold Street

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

NAPOLEON MOTORS

(Cents Omitted)

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Cash on hand and in banks	$ 1,111	$ 8,280
Liberty bonds and W. S. S.	2,114	26,207
Accounts receivable	24,724	4,046
Notes receivable	39,154	14,879
Advances on contracts	.....	5,970
Merchandise inventory of raw material, trucks in process, finished trucks and service parts at cost or market	489,674	155,376
Real estate, building lease, machinery, tools and equipment less depreciation	67,476	60,492
Prepaid expenses and supplies chargeable to future operation	176,525	98,494
	$801,001	$373,904

LIABILITIES

Accounts payable	$ 25,188	$ 17,845
Notes payable	85,929	19,874
Dealers deposits	.....	964
Capital stock, preferred	19,300	.....
Capital stock, common	578,676	297,087
Partial payments on stock	25,320	18,790
Surplus	69,588	19,347
	$801,001	$373,904

Company reports that the annual meeting January 28 was attended by more than 300 stockholders. Directors elected are as follows, with officers indicated: President, W. J. Chase, Traverse City; first vice-president, W. G. Rath, secretary-treasurer; C. D. Peet, general manager; E. G. Arntz, L. W. Smith, Frank Brooker.

A noteworthy feature of the comparative statement is the growth in assets from $373,904 to $801,001. Current assets are five times current liabilities. Napoleon was fortunate that it increased capital stock rather than bank loans. The regular preferred dividend on the basis of 8 per cent will be paid in cash, while a dividend of 10 per cent on common was paid in the form of 8 per cent stock and 2 per cent in script, the latter payable August 1, 1921.

D. & C. STATEMENT

Following is a condensed comparative balance sheet of the Detroit & Cleveland Navigation Company. Cents have been omitted:

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Vessel property	$ 5,121,003	$ 5,112,035
Real estate, buildings and wharves	1,706,582	1,756,834
Repair shop tools, wharf and office equipment and supplies	236,574	196,532
Cash on deposit	56,750	118,848
Securities, notes, etc., owned	4,325,581	3,169,266
Accounts receivable	119,100	72,482
Deferred assets	129,528	122,465
Total assets	$11,698,059	$10,547,136

LIABILITIES

Capital stock	$ 4,625,000	$ 4,829,400
Funded debt	65,000	116,000
Accounts and vouchers payable	217,242	112,507
Accrued liabilities not due (taxes)	441,456	284,094
Special contingent reserve account of income tax	150,000	.....
Deferred items	4,753	3,325
Reserve for accrued depreciation	3,441,468	3,058,072
Reserved to amortize improvement to leased property	31,592	.....
Other reserves	144,047	126,761
Profit and loss	3,184,497	1,906,976
Total liabilities	$11,698,059	$10,547,136

GRANGE LIFE ELECTS OFFICERS

The annual meeting of the Grange Life Insurance Company was held in Lansing last week. Reports showed more than $5,500,000 worth of new business for 1920. The officers are: N. P. Hull, president; Frank Coward, Bronson, vice-president; C. H. Bramble, secretary; S. H. Clink, Muskegon, general counsel; Dr. J. W. Glover, Ann Arbor, consulting actuary; Dr. H. A. Haze, medical director; Maude Gitchell, auditor; Doris McDonald, resident actuary; I. D. Wallington, superintendent of agents. J. Edward Roe and R. Bruce McPherson were added to the executive committee. The directors were re-elected.

EDMUNDS & JONES STATEMENT

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
	(Cents omitted)	
Cash on hand and in banks	69,315	194,893
Accounts receivable, less reserve	292,711	495,194
Inventories	842,621	843,687
Victory bonds and other investments	18,066	22,900
Plant accounts, less depreciation reserves	990,940	960,558
Patents	1	1
Deferred charges	36,726	25,529
Other investments	.....	1,316
	$2,347,382	$2,358,080

LIABILITIES

Accounts and notes payable, etc.	$ 492,925	$ 325,498
Reserve for federal taxes	39,821	14,234
Uninvested balance of reserve for redemption of preferred stock	12,026	7,950
Capital, preferred, less redeemed	843,200	856,100
Surplus, being book value of 46,000 shares of common stock, without par value	959,409	1,016,997
	$2,347,382	$2,385,080
Surplus at beginning of period, Jan. 1, 1920	.....	$1,016,997
Add profit for the year	.....	37,768
Less taxes in dispute reserved	$ 14,782	$1,114,766
Reserve for pref. stock redemption	304	.....
Preferred dividends paid	60,870	155,857
Common dividends paid	80,000	.....
Surplus carried forward		$ 958,909

President Edmunds states in his annual report that profits as shown were made not withstanding the loss absorbed in pricing inventories on a conservative market value. The year's profits are slightly less than for 1919, but dividends have been paid at the regular times on both preferred and common, and $47,200 of preferred was purchased for redemption, making $156,800 total redeemed to date. He summarizes the situation by saying "with a revival in trade the possibilities are as good as ever they were."

FREE FACTORY SITES

At Harbor Springs, Michigan.

On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

$10,000 to $15,000 to Invest.

Party at present serving as Sales Manager for large company, will invest with services in an established prosperous business. Large successful business experience and best references. Must be clean and bear investigation. Box J. D., Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

Addressograph For Sale

Motor Driven Model B, in good condition. Prints direct from ink. Has "lister" attachment for running off lists from address plates. A bargain buy. See Mr. Grimm or Mr. Walker, Security Trust Co., Detroit.

Digitized by Google

Who's Who In Michigan Finance

George B. Judson, Vice-President, Bank of Detroit

George B. Judson is the son of a locomotive engineer and has risen to his present position by means of hard work and plenty of it. Born in Butler, Ind., a railroad town, he spent his grade school days at Ashley, Ind., and then came to Detroit, where he graduated from high school. The next few years were spent in various clerical jobs around the city, but it was always a consuming ambition of his to be a banker; so when the Highland Park State Bank was opened in 1909 he applied for a position as a clerk, which was obtained. During the next three years he worked at various positions in the Highland Park bank and was made branch manager of the Richton branch in 1912. In 1915 he was elected assistant cashier of the Highland Park State Bank. Judson has a way of hanging on to things he wants, which drew the attention of the directors of the then Highland Park State Bank of Detroit, and in December, 1917, he was made cashier of the latter and subsequently in March, 1919, vice-president. At the annual meeting for 1921 election of directors he was added to the board.



GEORGE B. JUDSON

In looking back over his banking career Mr. Judson puts much stress on the many hours of reading which he has done as accounting in large part for his success.

S. S. KRESGE STATEMENT

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Land, buildings, machinery, etc., at depreciated values	$ 1,796,432	$ 741,897
Inventories	7,351,020	6,296,350
Accounts receivable, etc.	198,248	134,658
Liberty loans bonds at market values	583,100	1,306,250
Furniture and fixtures and permanent improvements on fixed properties	7,980,852	4,764,826
Leaseholds, organization, etc. (including $139,359 good will of subsidiary company acquired for cash)	6,124,767	5,989,467
Cash on hand and in banks	1,157,921	666,582
Deferred charges; rentals paid in advance, unexpired insurance, etc.	901,557	572,381
	$26,101,915	$20,471,884

LIABILITIES

Preferred stock, 7 per cent cumulative, par 100	$ 2,000,000	$ 2,000,000
Common stock, 200,000 shares, par 100	10,000,000	10,000,000
Outstanding stock of subsidiary company	20,650	.....
Mortgages payable	582,000	300,000
Notes payable, serial issue	2,000,000	500,000
Current notes payable	557,500	.....
Current accounts, liens tax provisions	2,545,241	2,295,357
Accrued interest, taxes, etc.	56,701	50,211
Surplus at beginning of period	5,236,315	3,786,114
Net profits for year, less taxes, etc.	2,753,508	2,190,201
Less pref. div. $140,000, com. div. $600,000	740,000	740,000
Surplus carried forward	7,239,823	5,236,315
	$26,101,915	$20,471,884

PACKARD DIVIDEND

The Packard Motor Car Company, Detroit, has declared the regular quarterly dividend of 1 3-4 per cent. payable March 15, 1921, to stockholders of record February 28.

THE OLDEST HOUSE IN MICHIGAN

FOREIGN INVESTMENT BONDS

The discerning American investor today has an exceptional opportunity to purchase from foreign investors, issues of government, provincial and railway bonds which were sold in Europe prior to the war. The loans made in Sterling and Francs which were sold in England and France yield a higher return than the dollar loans recently placed in this country and they further offer attractive profits from constantly rising exchange. These bonds have an active market, and interest and principal may be collected as easily as that of any domestic issue. We have four issues of this kind which will prove interesting to the conservative investor.

H. W. NOBLE & COMPANY

Bond Department

318 Dime Bank Building — Detroit, Michigan

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

SIXTY-SECOND SEMI-ANNUAL STATEMENT

The National Loan & Investment Company

of Detroit, Michigan, January 15, 1921

ASSETS

Real Estate Mortgages, Trust Deeds & Contracts	$4,368,052.31
Stock Loans	2,985.00
Real Estate	54,491.98
Home Office Building	120,000.00
Due on Stock	17,165.85
Unexpired Premiums, Fees & Taxes	2,050.81
Furniture & Fixtures	Charged off
Due from Agents and others, including stock in course of collection	15,906.58
U. S. Liberty Bonds	50,700.00
War Savings Stamps	1,768.00
Cash on hand and in banks	105,699.47
	$4,738,820.00

LIABILITIES

CAPITAL STOCK		
Paid in	$4,437,607.40	
Undivided Profits	154,372.46	
		4,591,979.86
Advance Dues & Interest		2,666.46
Coupons Due and Unpaid		1,767.24
Matured Stock Unpaid		1,200.00
Due Borrowers & Stockholders		24,006.97
Mortgages Payable		7,050.00
Bills Payable		40,000.00
Reserve		70,149.47
		$4,738,820.00

This Company is a Mutual Savings Institution, and is under State supervision.
Its funds are loaned only on First Mortgages on Homes. No loan is made for more than half the value of house and lot.
It has helped to build more than 13,000 homes.
Money invested with this Company is always worth One Hundred Cents on the Dollar.
It pays 5% on Savings if left 90 days.
In 32 years it has never asked an investor to wait a minute for his money, but has always paid withdrawals on demand—panic or no panic, war or no war.
It pays its investors more than a Quarter of a Million Dollars a year in Dividends.
Anyone may open an account with $1.00 or more.
Ask for booklet illustrating our Four savings plans.

COMPARATIVE STATEMENT OF ASSETS

January 15, 1916	$2,985,972.82
January 15, 1917	3,307,488.14
January 15, 1918	3,432,472.01
January 15, 1919	3,862,645.15
January 15, 1920	4,338,710.70
January 15, 1921	4,738,820.00

OFFICERS:

Joseph G. Standart, President. Fred P. Todd, Vice-President.
Linens I. Halsey, Secretary. Edward H. Burmeister, Treasurer

420 FARWELL BUILDING

We Are Prepared to Negotiate

A Ten Year Lease

for the buildings and warehouse recently occupied by the wholesale hardware house of

Buhl Sons Company

Located on Woodbridge St. and Cass Ave.

Available floor area, 135,764 sq. ft.; covered dock space, 20,000 sq. ft.; double sprinkler; auto call and vacuum carrier service; five elevators, two heating plants. Ready for immediate occupancy.

James S. Holden Co.

500 Holden Bldg. Cherry 4870

Spades Are Trump

(*Continued from Page 5*)

These figures are sufficient to give an idea of the purchasing power of the automotive industry, and by comparing the car ouput of the five states mentioned on the one hand, and of Michigan alone, on the other, the concentrated purchasing power is revealed in its amazing volume. The extent to which these automotive plants were overloaded with materials, parts and accessories in 1920 as a result of the sudden damming of the buying tide may never be known, but the figures undoubtedly would show one very good reason for slow purchasing for 1921 production.

The peculiar concentration of the motor car, truck and tractor industry in the district comprising Michigan, Wisconsin, Ohio, Indiana and Illinois gives this district world importance. It may almost be said that its entrance or exit from the materials market gauges the general industrial situation.

Figures From Other Quarters

The survey of the National Automobile Chamber of Commerce for 1919 gave the total number of motor vehicle manufacturers in the country as 346, located in 31 states. The leading states were as follows:

Michigan, 66; Illinois, 54; Ohio, 40; Indiana, 34; New York, 31; Pennsylvania, 31; Wisconsin, 14; California, 11; New Jersey, 9; Missouri, 7. The other states were as follows: Colorado, 3, District of Columbia, 1; Georgia, 3; Iowa, 5; Kansas, Kentucky and Louisiana, 2 each; Maryland, 1; Massachusetts, 6; Minnesota, 6; Nebraska, 2; Texas, Virginia and Washington, 2 each; New Hampshire, North Carolina, Oregon, South Carolina, Vermont and West Virginia, 1 each; Oklahoma, 4.

As will be seen by the figures, Michigan, Indiana, Illinois, Ohio and Wisconsin together had 208 of the 346 manufacturers, or 60 per cent. The Automobile Trade Directory for 1920 gives a total of 456 manufacturers of passenger cars, trucks and tractors in the United States, 251 of them being located in the five states before mentioned, and allotted as follows: Michigan, 68; Illinois, 57; Ohio, 55; Indiana, 39, and Wisconsin, 32, which gives these states 55 per cent of all the truck, passenger car and tractor plants in the United States.

In almost every state in the Union there is produced some raw material or semi-finished or finished commodity directly or indirectly used in motor vehicle manufacture. Therefore it is not going far afield to say that at least 50 per cent of the selling effort of the makers of parts, accessories and materials will be directed upon the district comprising these five states, and the position of the purchasing agents of the automotive plants in these states consequently is not to be underestimated. What they will expect in prices, policy and quality from the concerns selling them goods will set the mark for the whole automotive industry.

The sellers of materials, parts and accessories for cars, trucks and tractors can ill afford to leave any stone unturned in winning a firm foothold in this field. The fight will be bitter for two reasons: First, the increase in competition resulting from a lessened demand for product following curtailed production of vehicles will have the same effect as would result if the number of concerns providing materials suddenly increased two-fold, and, second, the mental attitude of the purchasing agents themselves.

1921 Production Estimates

To what extent the demand for materials will be cut is open to conjecture. One purchasing agent well qualified to speak estimates a 60 per cent production compared with the 1919-1920 output, but is not at all sure of so high a figure. Motor Age estimates the replacement requirements in the truck and passenger car market at between 1,000,000 and 1,100,000 vehicles in 1921. If the 60 per cent estimate

Digitized by Google



Machinery and Power Equipment



Our Aim is to Render Service

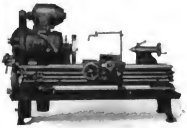
Complete Exuipment

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Repair Shops, Heat Treating Plants, Wood - working Plants, Iron and Metal Foundries.

We Positively Carry the Largest Stock in Michigan

Phone Us When in the Market for Equipment and our Representative will be glad to call

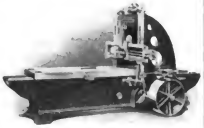


We Purchase Your Entire Plant Let Us Quote You

Riverside Machinery Depot

251 ST. AUBIN AVE.

Phone Edgewood 1581-82-83-84



IN STOCK IN LANSING

Immediate Delivery

Kalman Deformed Square and Round Reinforcing Bars.

Self Sentering, Ribplex, Diamond Mesh and Herringbone Metal Lath.

Cold Rolled Furring Channels.

Bayley-Springfield Ventilated Steel Sash.

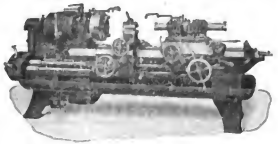
* * * * *

Our Engineering Service Department will detail your concrete work, cut and bend bars, make complete shop drawings of the reinforcing steel, and advise generally with your Architect or Construction Superintendent. We specialize on materials for non-inflammable construction such as WeiSteel Toilet Room Partitions, Duplex or Ideal Steel Column Caps and Bases, Steel Joist Hangers, Pressed Steel Joists for light load construction, Sidewalk Vault Lights, Wiremesh Metal Corner Bead, Concrete Road Reinforcing, Metal Picture Mould and Base, Face Brick, Hollow Tile, Brixment, Steel Cores for Concrete Floor Construction, etc.

THE BRIGGS COMPANY

Flint. Lansing. Grand Rapids.

NO. 3 CINCINNATI ACME UNIVERSAL FLAT TURRET LATHE



Equipped for Chuck Work

Before purchasing turret machinery, it will pay you to investigate the complete CINCINNATI ACME line, embracing all sizes and styles so that you can get the machine most particularly adapted to your requirements.

Our Engineering Department is at your service.

SEND BLUEPRINTS OF YOUR WORK

THE MOTCH & MERRYWEATHER MACHINERY CO.

MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

A Detroit Investment Yielding 7%

One of the big advantages in investing in the **Clayton & Lambert Manufacturing Company's** First Mortgage Bonds is that this is a local company which has been in business here for thirty years—consequently, it is well known and its securities are easily investigated.

When you invest in these Bonds you are not put to the necessity of obtaining information from out-of-town sources. The land and buildings, machinery and equipment are where you can easily see and judge them for yourself; also, the men at the head of the concern are well known in Detroit.

The bonds mature in from two to ten years and can be purchased at a price that will yield 7% on your investment. The Bonds are Tax Free in Michigan and the 4% Federal Income Tax is paid by the borrower. The denominations are $100, $500 and $1,000.

For details—call, 'phone or write

AMERICAN LOAN AND TRUST COMPANY

Total Assets More Than Five and One-Half Million Dollars

Griswold and Larned Streets Detroit, Mich.



In line with the action of leading Photo-Engravers throughout America, the revolutionary Weeks Electrical Etching Process is now being installed in our Plant.

Everton Engraving Co

Sixth Floor Marquette Building, Detroit Telephone Cherry 2821

DIME SAVINGS BANK
FORT & GRISWOLD STS. DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davisen
Sherman & Chene
Dix & Artillery
Military & Michigan

Speed and Accuracy

are demanded nowadays in banking almost as insistently as safety. The Dime Savings Bank recognizes and provides for all modern requirements of an essential and beneficial character. We regard it a privilege to confer or correspond with financial institutons or business houses regarding their Detroit and other Michigan banking needs.

Capital and Surplus $3,750,000

holds good, then the 1921 production will not exceed 1,344,600 cars; and if Michigan continues to manufacture 83 per cent of the total, it is not difficult to imagine the character of the selling campaign necessary on the part of every concern that has something to sell the industry.

Some of the figures on raw materials used in motor car manufacture are interesting. They are taken from Iron Trade Review. The average copper per car is 36 pounds, the total amount used by the automotive industry being about 4 per cent of the entire production. The amount of brass used in 1919 was 75,000,000 pounds, or 7 per cent of total production. Aluminum leads all the metals, more than 60,000,000 pounds, or 50 per cent of total production being used in motor vehicle construction.

Despite the fact that a certain make of car is often called a "Tin Lizzie," the most of this metal used in any car is 7.5 pounds, the total consumption being about 13 per cent of the total amount imported. There are 10.5 pounds of manganese used on an average, while from 925,000 to 1,150,000 tons of steel and iron are fabricated into motor cars. The zinc content runs about 7 pounds to a car, or 1.5 per cent of total production.

Aside from the raw materials, parts and accessories used by the motor car industry there is the enormous volume of machinery, shop equipment and tools. During the period of high production and plant expansion a great quantity of equipment was purchased, probably enough to last for some time. Replacements, however, are constantly necessary. Changes in models call for new tools and equipment, while the wear and tear on machinery is heavy. Therefore, even with a reduction of 50 per cent in production, the demand for parts, supplies and accessories will continue to be great.

Competition in this field is keen because the success of the automotive industry has brought into existence any number of metal, wood, cloth and rubber working industries, which to the motor vehicle industry are like the tail pieces of a kite. They will stay up so long as the kite stays up. There are kites without tail pieces which have no difficulty in flying. Apparently inventive genius discovered that tail pieces were not necessary to a kite.

The merger of motor car companies into huge combines, which seems more than probable as the years go by, will tend to narrow purchases. Poor salesmanship and bad practices will make hard sledding for parts, materials and supply concerns, so that survival in this fertile field will depend entirely upon a scheme of reconstruction of manufacturing and sales policy, although, of course, fundamentally on aggressive lines.

Digitized by Google

The Lathe Family

(Continued from Page 10)

tool rest. While one diameter is being turned automatically by the tool of the carriage, the other diameter is turned by hand with the auxiliary tool, producing a completed piece in the time of doing the one operation.

Figure No. 5 shows how a tool is held in the tool post of an engine lathe for boring a hole. In this particular instance a Universal Relieving Attachment is being used to bore and relieve a die. This attachment is not used, however, when a straight, round hole is to be bored. If the hole is to be reamed, the reamer usually is forced through the hole by means of the center in the tailstock. This is a rather laborious operation and work which has to be bored and reamed usually is done on a turret lathe. Probably no one machine deserves greater credit for helping along the movement toward rapid production and consequently the reduction of cost of manufactured articles than this machine. Its characteristic feature is found in the turret, which is made to bring in quick succession a number and variety of cutting tools to act on the piece which is held in the chuck. The turret is mounted on a slide parallel to the line of the spindle of the machine, and occupies the same position as that of the tailstock on an engine lathe. It is made to slide on the base, either automatically or by a hand wheel. After the tool, which is held in one of the radial holes of the turret, has performed an operation on the piece, the turret is moved back, and is made to rotate automatically, thus bringing another tool in line with the work. The Warner & Swasey Company, Cleveland, is one of the country's formost manufacturers of turret lathes.

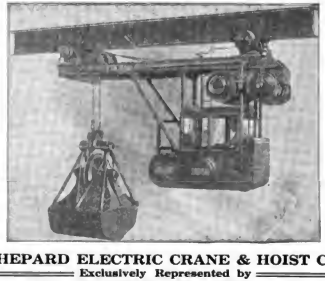
Figure No. 6 shows the operation of machining a differential carriage on a Libby lathe in the Clark Avenue plant of the Studebaker Corporation, in Detroit. The piece is bored, tapped and faced in this operation, the boring and tapping tools being held in the turret and the facing operation being done by a tool on the cross-slide. Approximately 60 of these pieces are turned out on one machine in a day, which is probably ten times as many as could have been produced on the machines of 20 years ago. Valve plugs, piston pins, radiator caps, hub caps, carburetor parts and various other parts of automobiles and other machinery usually have one or more operations performed on them in the turret lathe.

High-Speed Machines

The necessity for the production of smaller parts such as valves, pushrods, piston pins and similar parts in large quantities has resulted in the development of small but sturdily-built high-speed machines. The Multi-Cut lathe made by the R. K. LeBlond Machine Tool Company is a good example of this type of machine. While these machines are semi-automatic, they are essentially lathes in every respect, for they have the lathe characteristics and use lathe tools of the simplest form. The closest operations can be performed on them and the class of operator required can be easily replaced. The work may be centered, held on mandrels or in chucks on either the pneumatic or hand-operated. On work that has been previously bored, reamed or rough-turned on the turret lathe or automatic, leaving an operation of finish-turning or facing to be done, the Multi-Cut lathe finds its legitimate field. Gear blanks, bevel gears, pistons, piston pins, steering knuckles, small shafts and similar parts are rapidly turned and faced. Lathes of this description usually are operated in "gangs"—that is, one operator tends two or more machines. The automatic operation of the turning and facing slides and automatic trips make this readily possible, the operator loading extra mandrels while the cut is in progress.

The Reo Motor Car Company, Lansing, uses a number of Multi-Cut lathes for turning aluminum alloy pistons. One operator runs two machines, one roughing and one finishing. The

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.

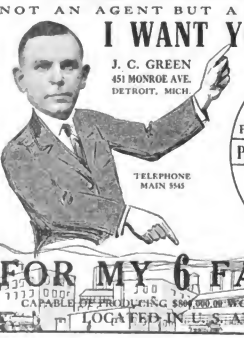
Exclusively Represented by

J. W. DOPP & CO. (Inc.)

CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

NOT AN AGENT BUT A MANUFACTURER

I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.

TELEPHONE MAIN 5545

MAY I SERVE YOU?

CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES

Production Machine Work

PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS

SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES

CAPABLE OF PRODUCING $500,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

GRATON & KNIGHT

Standardized Series

LEATHER BELTING

Named by us for belting use

The Correct Belt for Every Drive.

Leather Belting for power transmission, Lace Leathers, Leather Packings, Gaskets, Washers, etc. Automotive Leathers—Straps, Clutch Leathers, Fan Belts, Boots, Leather Links, Liners, Coupling Discs, Washers, Crank Holders, Robe Straps.

THE GRATON & KNIGHT MFG. CO., Worcester, Mass.

Oak Leather Tanners. Makers of Belts and Other Leather Products.

Distributors and Branches in All Principal Cities.

Digitized by Google

Smith-Kinchman and Grylls

Architects and Engineers

"Incorporated 1903" Detroit, Mich.

We specialize in the following

McCord Mfg., com. and pfd.
Truscon Steel, com.
Paige Motors, pfd.
Ford of Canada
Lincoln Motors
Edmunds & Jones Corp., com. and pfd.
S. S. Kresge Co., com. and pfd.

BONDS { *Foreign Government* / *Public Utilities* / *Industrial* / *Railroad* / *Municipal* }

Direct Private Wires to
New York, Chicago, Cleveland, Lansing, Grand Rapids, Rochester, Youngstown

TRADING DEPT.

MERRILL LYNCH & CO.

Offices in	*Members*
New York	New York
Chicago	Chicago
Denver	Cleveland
Los Angeles	Detroit
Milwaukee	Stock Exchanges

1056 Penobscot Bldg., Detroit

H. S. DODSON

R. V. CARD

Financing, Designing, Contracting

of

POWER PLANTS, FORGE SHOPS

AND

INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

A REAL OPPORTUNITY

A manufacturer having equipment, sales organization, etc., to handle a first-class patented automobile bumper on a royalty basis, has a real opportunity knocking at his door. Bumper already established in eastern states. Actual cost figures available to show its possibilities.

Address

QUALITY ACCESSORY CO.

711 Union Trust Bldg. DETROIT, MICH.

C. C. COAL COREY COKE

1303-4 MAJESTIC BLDG. DETROIT, MICH.

pistons are roughed all over, and ring grooves are cut in the first operation, which takes 30 seconds. The piston is then removed from this machine and put into the second lathe. Here it is finish-turned and the ring grooves are cut to the proper depth and corners squared. This takes 20 seconds, so it is obvious that two roughing machines can keep one machine busy on the finishing operation. This company has six of these machines on this operation, producing approximately 2,800 pistons a day, which is the number required for the normal output of Reo automobiles.

The Porter-Cable Lathe is another lathe of small but exceedingly strong construction for the production of interchangeable parts in large quantities. The Hudson Motor Car Company uses this machine for turning piston pins. These pins are made of 3½ per cent nickel steel and are drilled through the center, rough turned and cut off before coming to the lathe department. They are finish turned in the Porter-Cable lathe at the rate of 15 seconds each, or 200 an hour. The tool travels across the piece at a rate of 1-32 inch per revolution of the pin, and the pin revolves at a surface speed of 360 feet a minute. Considering the high grade of the metal used in these pins, this is an extraordinary feat.

The Reed-Prentice lathe is another machine of this description. The Ford Motor Company, which is not given to taking unnecessary time in the production of automobile parts, has a number of these lathes which it uses for turning bronze bushings. Four men and three lathes constitute a "gang" in this instance, working as follows:

The first man picks up a bushing, places it on an arbor and presses the arbor into it a definite distance, using a No. 2 Ferrachute pnnch press for this operation. He drops this bushing, containing the arbor, into a gravity conveyor, on which it rolls to the first turning operation. Here the operator puts it into the lathe and rough turns it, after which he drops it into another gravity conveyor, down which it rolls to the next machine. The operator here puts it into the machine and finish turns it, passing it along to the man on the next machine, who faces the ends, using a gang tool which is never moved from its position. The fact that the arbor was pressed a certain definite distance into the bushing simplifies this process greatly. The bushing is now transferred back to the press operator, who removes the arbor. The interesting part of the pressman's job is that he always has two bushings under the press, one having an arbor pressed out and one having an arbor pressed in. These bushings are of bronze, two inches long and 1½ inch in diameter. These men produce 400 complete bushings an hour, or 3,200 a day.

STEARNS' YEARS' BUSINESS

At the annual meeting of the stockholders of Frederick Stearns & Company, Detroit, last week, Willard Ohliger, general manager, reported that sales for 1920 exceeded all previous records and the net earnings were equal to those of 1919. In addition to the regular dividends, a stock dividend of 66 2-3 per cent was paid to the common stockholders during the year. Directors elected were: Frederick K. Stearns, Willard Ohliger, David M. Gray, Frederick S. Stearns, Standish Backus, Earl Warner, H. M. Avery, J. R. Worden, J. C. White, C. M. McClure, and C. E. Jamieson.

Officers: President, Frederick K. Stearns; vice-president and general manager, Willard Ohliger; second vice-president and treasurer, Frederick S. Stearns; secretary, D. M. Gray; assistant treasurer, Earl Warner; auditor, M. Graham.

GENERAL MOTORS ACCEPTANCE CORP.

The balance sheet of the General Motors Acceptance Corporation, as of December 31, 1920, shows assets of $35,560,780, as against $16,540,423 a year ago, and surplus of $947,203, as compared with $500,884 on December 31, 1919.

Digitized by Google

New Corporations

FOR WEEK ENDED FEB. 12, 1921

Family Department Store, Detroit; general mercantile business; Benedy and Edmund B. Krotkiewcz, 1891 E. Grand Blvd., Detroit; L. A. Nowodworski, Ann Arbor ..... $ 150,000

Home Leather Co., Inc., Detroit; to deal in leather, findings and shoemakers' supplies; Vincent Elias, 337 E. Farnum, Royal Oak; Anton Martin and Olin A. Bullock, Detroit 50,000

Harry S. Graves, Inc., Detroit; manufacturing, buying and selling mechanical equipment; Harry S. Graves, 121 Farrand Park, Ella H. Hobart, Howard H. Campbell, Detroit 10,000

Hugh Shutt Co., Detroit; to conduct general contracting and constructing business; Hugh W. Shutt, 2717 Wreford Ave.; Arthur F. Jones, Gardner G. Shutt, Detroit 15,000

Hole in the Wall, Detroit; to deal in automobile accessories; Edmund M. Hloman, 173 McLean Ave., Highland Park; Alfred Garrett, Lillian S. Hamburg, Detroit 1,000

Homel Shirt Mfg. Co., Ludington; manufacture and sale of shirts, overalls, wearing apparel; Ben L. Homel, Ludington; Peter L. Homel, Hart; Morris L. Homel, Chicago 125,000

Muskegon Heights Furniture Co., Muskegon Heights; manufacturing, dealing and buying in all kinds of furniture, carpets, etc.; Ernest J. Heutechel, Muskegon; Charles J. Vander Veide, Muskegon Heights; Harry A. Morris, Muskegon 50,000

United Marketing Co., Wilmington, Del. (P.), Karl H. Reynier, Michigan Trust Bldg., Grand Rapids: $250,000 preferred, 2,500 shares common, no par value

General Utilities Corp. (F.), Wilmington, Del.; L. T. Wilcox, president, Jackson, Mich. 1,000,000

Continental Western Realty Co. (F.), Marinette, Wis.; M. E. MacMartin, Menominee, Michigan agent 1,000,000

Carney Equity Co-operative Assn., Carney, Menominee county; wholesale and retail butter, cheese and groceries; Adolph Seymour, Nadeau, Peter Jacobs and Wm. Anderson, Carney 10,000

Lion Mercantile Co., Detroit; to manufacture, buy, sell and deal in all kinds of merchandise; Nathan and Sarah Lawenthal, 1551 Calvert Ave.; John A. Milotte, Detroit 10,000

Robert Hartenstein Agency, Detroit; general insurance, real estate and loan agency; Bertha Hartenstein, 714 Baldwin Ave.; Oscar C. Jud, Charles J. Loos, Detroit 10,000

Farmers & Merchants State Bank, Cedar Springs; commercial and savings bank; Maivin E. Sanford, Cedar Springs; James E. Hanna, Solon township, Kent county; George Arnold, Cedar Springs 25,000

Curran Motor Products Co., Detroit; to make and sell any article of merchandise; Edward T. Curran, Peter D. Mackay 100,000

Universal Headlight Controller Co., Detroit; to manufacture and sell, at wholesale and retail, automobile parts; Stella, G. H. and A. F. de Vicea, 1078 James Campau Ave., Detroit 5,000

Fremont Creamery of Omaha, Neb.; Voyle D. Rector, 18 E. Market St., Detroit 6,000,000

Radio X Supply Co., Detroit; to manufacture and deal in radio active compounds and preparations; H. F. Carpenter, J. C. Hoover, 295 Woodward Ave.; R. C. Burns, Detroit 50,000

Co-operative Express Co., Detroit; general trucking and expressing; James S. S. J., John W. Churchill, 1928 Mark St., Detroit 5,000

Kearsarge Store Co., Philipsville, Houghton county; general store; Matt and Charles Tassava, Kearsarge; Anton Pietila, Allouez 50,000

Samuel Fogelman & Co., Inc., Detroit; to deal in machinery, steel, contractors' equipment; Samuel Fogelman, 574 Palmer Ave.; Charles Goldstein, Ernest N. Pennas, Detroit 10,000

Reiber-Kolb Co., Adrian; to carry on business of manufacturing and selling automobile fixtures, etc.; Edward W. Reiber, Albert J. Kolb, Theo. M. Joslin, Adrian

Ensley-Stern Co., Detroit; to deal generally in automobiles, new and second hand; Sadie Stern, Jac Stern, Chicago; Arnold B. Ensley, 9321 John R. St., Detroit 5,000

Duffy Mfg. Co., Holland, Ottawa county; to manufacture, buy, sell and deal in automobile accessories; J. Frank

Write for Your Copy of

INVENTORY VALUATION

For Federal Taxation and Banking Purposes

Free on Request

FEDERAL Income Taxes are now engaging general interest. It was not strange, therefore, that when we published an authoritative discussion of Inventory Valuation in a recent issue, that there should have been a demand for copies which exhausted the supply and required us to prepare reprints.

The article was an extract from an address made by William M. Lybrand, President, National Association of Cost Accountants, before the January meeting of the Detroit Chapter of that Association.

The opinion and judgments of a specialist and unprejudiced observer on this important topic is presented. We want every banker, manufacturer, accountant, attorney and merchant to have a copy, which is why it was reprinted in booklet form for general distribution.

Inventory Valuation will prove helpful to those who seek or give credit, plan for the future or are concerned with the preparation of Federal Tax returns.

It summarizes principles of valuation that have stood the tests of time and that are governing in the present conditions.

Copies will be mailed free on application to

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

611 Free Press Building Detroit, Michigan

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

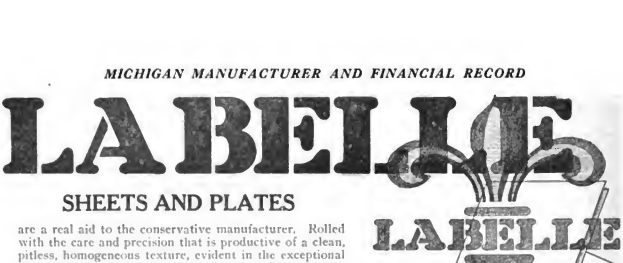
NATIONAL TWIST DRILL & TOOL

Digitized by Google

LABELLE

SHEETS AND PLATES

are a real aid to the conservative manufacturer. Rolled with the care and precision that is productive of a clean, pitless, homogeneous texture, evident in the exceptional surface of every length that leaves our mills. Greater tonnage per shipment—no waste or discard due to bad spots—is the reputation that follows LaBelle shipments.



La Belle Iron Works

"From Mine to Market"

General Offices:
Steubenville, O.

Plants:
Steubenville, O., and Wheeling, W. Va.

Duffy, Chicago; J. A. Kelley, B. P. Donnelly, Holland .....

Illinois Machine Plow Co. (F.), Moline, Ill.; C. N. Carlmark, Jackson, Mich., gas agent .....

Leitch-Nelson Co., Detroit; manufacture of automobile accessories and parts of airplanes; Anthony Nelson, 646 Hanenck Ave. W.; Judith H. Leitch, A. H. Haastrom, Detroit .....

Wright Super Battery Co., Detroit; to manufacture and deal in, at wholesale and retail, electric storage batteries and parts of automobiles; Eliz. W. Holdridge, 1764 Baldwin Ave.; Paul R. Wagner, William L. Austin, Detroit .....

Dowell Furniture Co., Detroit; retail furniture dealer; Arthur P., Charles W., Stanley C. Dowell, 4810 Ivanhoe, Detroit .....

Tausend & Moliere, Inc., Grand Rapids; to deal generally in all farm products; Pauline V. and William H. Tausend, Vic J. Moliere, Grand Rapids

R. Granville & Son, Saginaw; to take over all the stock and book accounts of R. Granville & Son, a co-partnership; William H., Edward W. and Earl R. Granville, Saginaw .....

Berthold Co., Menominee; worker in sheet metal and installing of heating plants and plumbing; Herman C. and Clarence O. Berthold, Charles W. Hutchinson, Menominee .....

Central Michigan Gravel Co., Lansing; to conduct and operate gravel and sand pits; E. T. Larson, C. C. Labadie, Lansing; H. E. Robinson, Jackson .....

Earth Concrete Co., Grand Rapids; to use and sell certain patentable cementation compositions; Alvah Brown, R. S. Greenwood, Carrie Eble, Grand Rapids .....

Douglas Lake Land Co., Detroit; to buy and sell land; Lavinia B. Donaldson, 144 Clifford St.; Julia Bloss, Ann C. Craig, Detroit .....

Dragoon Exchange & Steamship Ticket Agency, Detroit; to deal in steamship and railroad tickets to and from foreign countries; Leonard A. Seltzer, 1151 Kensington Road, Grosse Pointe; Jessie J. Ellmann, Highland Park; Nish Dragoon, Detroit

McClelland Co., Detroit; to design, build and repair residences, buildings; general contracting engineering work; Chas. W. McClelland, 5518 Brush St.; Geo. W. Brandhorst, William J. Schroeder, Detroit .....

10,000

50,000

100,000

10,000

5,000

25,000

25,000

5,000

15,000

1,000

16,000

1,000

10,000

10,000

Miniature Detroit Salon A 1921 Show Week Feature

Detroit is to have a 1921 motor car salon in miniature, as well as a show, three representative makers of automobiles having taken lobby space in the Hotel Statler, where they will exhibit special body jobs, in addition to their displays at the show, the week beginning March 19.

Thirty-nine members of the Detroit Auto Dealers' Association have drawn allotments of space at the show, which will be held in the new Morgan & Wright manufacturing building, in Jefferson avenue. Only one member of the Association did not take space. The remaining floor room will be apportioned among other passenger car and truck dealers and accessory manufacturers.

The firms drawing space follow: Acason Motor Truck Company, Baker-Fisk-Hugill Company, Bemb-Robinson Company, W. D. Block Motor Company, Buick Motor Company, Cadillac Motor Car Company, Chevrolet Motor Company, Denby Motor Truck Company, Detroit Electric Car Company, Detroit-Oakland Company, W. J. Doughty, Thomas J. Doyle, Ford Motor Company, Frank M. Foster, Frank P. Gmein Company, Knight Motors, Inc., Lafayette Distributing Company, Michigan Oldsmobile Company, Miller-Judd Company, L. F. Mullin Company, A. H. Murray, Nash Distributing Company, William F. V. Neumann & Sons, Owen & Graham, Packard Motor Car Company, Paige Sales & Service Company, Potts Motor Sales Company, Reo Motor Car Comany, Scripps-Booth Corporation, Ralph F. Schneider, Seizel-Zeckendorf Company, Simcoa Sales Company, Smith-Glines Sales Company, Studer-Stone Company, Inc., Studebaker Corporation, Thompson Auto Company, Wagner Bros., Inc., Weisman Motor Sales Company, Williams & Hastings, Inc., Harvey G. Wilson, M. A. Young and George H. Zuver Company.

TRAINING FOR PERSONALITY

The Indiana Manufacturers' Association has appropriated $3,000 to the engineering schools of Purdue University, Lafayette, Ind., for "the development of student character and personality," according to announcement made by Dean A. A. Potter, of the schools of engineering. The first check for $1,500 has been received and work begun to put in operation the system for which the fund is desired.

An association committee recently visited the engineering shops and laboratories, talked with various professors and saw how the instruction had a direct bearing on the prosperity and comfort of Indiana people. The members were especially impressed with the interest taken by the professors in the welfare of each student and the great amount of personal attention given each man, which was limited in certain ways because of the lack of funds. Because of this, the Association made the gift.

In the new rating on personal traits, the following factors will be considered: accuracy, co-operative ability, disposition, industry, initiative, judgment, leadership, mental caliber, personal appearance, physique, popularity, sense of responsibility, speed, system and tact.

BROWN, PRESTON & DERRICK

Robert O. Derrick, architect, formerly with Murphy & Dana, architects, New York, has been admitted as a partner to the firm of Brown & Preston, architects and engineers, Detroit.

The firm has been incorporated under the name of Brown Preston & Derrick, architects and engineers. J. Martin Brown, is president; Robert O. Derrick, vice-president, and Martin A. Preston, secretary-treasurer. Wm. E. Irving, for some time connected with the firm, has been made director of business promotion.

The present offices will be retained at 406-407-408 Empire building, Washington boulevard, at Clifford street.

Digitized by Google

...AL LIBRARY
...OF MICH...

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

LIBRARY
OF MICH
CIVIL LIBRARY
1-32



Fifteen Cents a Copy

Five Dollars a Year

Borrower versus Banker
The Legislature and the Motor Trucks
Investing in Prosperity
A Skin Game That's Legitimate

DETROIT, SATURDAY, FEBRUARY 26, 1921

Volume 27

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

Number 9

Digitized by Google

LONG
COOLING SYSTEMS

The Recognized Standard for Tractor, Trucks and Motor Cars.

Illustration is a recent design created for Graham Brothers, Evansville, Indiana.



19 years experience

Submit your radiation problems to us.

LONG MANUFACTURING CO., DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines

Digitized by Google

MICHIGAN MANUFACTURER AND
FINANCIAL RECORD

Borrower vs. Banker

In Which the Defense's Case Is Submitted to the Jury; An Explanation of the Load Carried to Sustain Industry

By PHIL S. HANNA

EVERY FEW DAYS there appear in the press encouraging statements about the condition of the money market. In the main the statements come from individuals who are in a position to know true conditions, but unfortunately it is seldom brought out, in connection with the remarks quoted, that while there is much improvement money-wise and that fundamentally our financial fabric is on the mend, the equilibrium which permits our banks to make new loans is not yet established. It is true beyond doubt, as Governor Harding, of the Federal Reserve Board, has pointed out often of late, that the danger of a money panic has passed and that in fact the crisis has passed, but a study of the figures brings out the fact that there is yet the necessity of much liquidation of loans already existing or the people must make new and increasing deposits before the banks of Detroit will be in position to take up in any volume the financing of building and other new enterprises.

The bankers testify that every time the statements about improved financial conditions appear in the press they receive immediately an avalanche of applications for mortgage and building loans and that they must then go into long and tedious explanations. Often the customer goes away with the feeling that the bankers are not sincere and the sentiment has been expressed in some cases that the banks are purposely withholding credit in order to get high rates and the like. Another element, hardly learned that the banks may borrow from the Federal Reserve Bank, urge that such borrowing should be continued, and it is not clear to them why new loans are refused inasmuch as the banks belong to the system and have recourse to borrowings and rediscounts at the reserve institution. Yet in spite of the fact that the principles of safe banking have not changed since the fourteenth century, many would have the banks change the rules of safety which have been wrought out of six hundred years' experience in lending the other fellows' money.

Law of Averages Fundamental

In the beginning a banker merely gave a receipt for hard money and his function was strictly one of safekeeping. So he found that his customers would not ask for the return of their money at one time and that he could lend out a part of the hard metal and yet have enough on hand at all times to meet the withdrawals of those who called for the return of their metal or coins. Experience taught the banker of those days that there was a certain law of averages beyond which he could not go in lending the money left with him, and the banker who kept within the established law of averages was a good banker, and he who took a chance and loaned out too much was a poor banker. Then came the use of checks and book credits, but nevertheless the law of averages continued. Today this law is determined by Congress and the state legislatures, and it is noteworthy that the law has been changed from time to time as experience has dictated that reductions in reserve percentages might safely be made. Experience also pointed out that there must be an emergency source of money in times of widespread disturbances, and after thirty years' study and effort Congress created the Federal Reserve Banks. The title of the bill creating the system of reserve banks reads something like this: "In order to provide a more elastic currency," etc. Well, the country got just exactly what was needed, i. e., an elastic currency, and along came the war and currency began to stretch. After the Armistice there was a slight contraction, but it was not for long, for with the wild expansion of business which began about the first of 1919 there had to be additional currency and, as prices mounted, still more was needed, until a few men not interested primarily in private profits began to wonder whether the elasticity of the reserve system were not stretched about as far as it was safe to stretch it. So those men ran up a storm signal and also applied the restraint known in older countries than ours as higher discount rates. And again there was, and continues, a misunderstanding about the function of increasing discount rates.

It is the writer's belief therefore that a lucid delineation of the problems that have beset the banks during the last two years, told from the banker's point of view but with a good conception of how the situation has looked to the borrower, and supported by figures of loans, deposits and borrowings by the banks, will go a long way toward setting the average business man right as to the motives of the banker, and will, moreover, be of much assistance to everyone who is groping around in the dark, so to speak, for a guide to the future.

There is much difference of opinion among economists as to the part that credit control plays in industrial crises, for banking is far from being an exact science, but with every crisis that has occurred during the last six hundred years the same lesson has been brought home, and that lesson is that every so often the people want to see the color of their money. If they find they can get it, they don't want it. If it is refused, they want all the more. But, thanks again to the Federal Reserve System, it hasn't been necessary, except in a few instances (and those are a long way from Detroit) to refuse anyone the return of his money on demand. Nevertheless there has existed since along in the latter part of 1919 a good reason why new loans should be refused, notwithstanding the urgency of the housing situation all these months and in spite of the fact that during that period coin and currency was always available.

But, you will say, during the last six or eight months of depression we have always been able to see the color of our money, and still business has not improved and we can't get new loans. Yes, that is true, and for a good reason. The Federal Reserve machinery removed the occasion for anyone to become excited, because it actually keeps in hard money enough to supply any emergency and it also has the power to issue money, but when the amount of promises to pay held by the banks gets out of proportion to the amount of deposits the people have in banks, and when the proportion of hard money falls below a percentage based on six hundred years' experience, as a safe limit, then the automatic governor begins to work. Its operation is precisely like a centrifugal brake on an elevator and its power of prevention of worse consequences than a sudden jar is also quite similar. If everyone were as mindful of the financial lessons of history as a safe banker is required to be, inflation of credit would never occur to any extent. Mr. Borrower would study the Federal Reserve reports and upon noting that the gold reserve ratio to notes in circulation and deposits had dropped below 40 per cent he would call on his banker and say: "John, I had intended to expand my factory, but seeing as how the gold ratio is running off, I'll put off borrowing until the people save more money or until some other fellow pays his loan." And everything would be lovely indeed.

But He Doesn't Do It

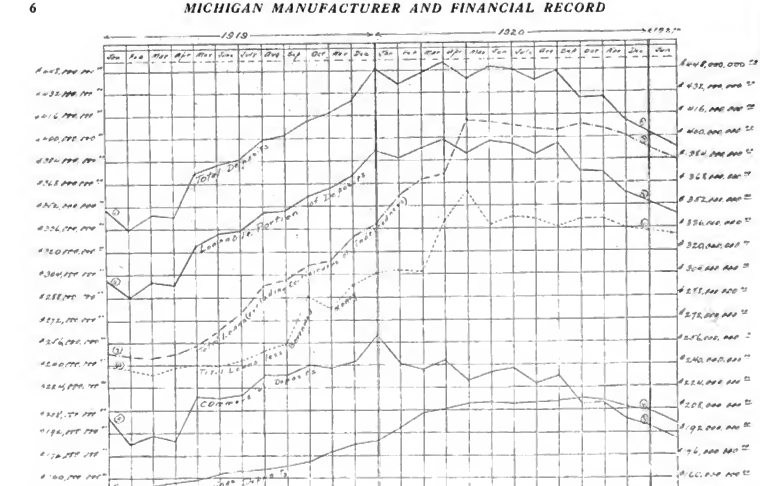
But those things never happen. Mr. Business Man sees a chance to make money by borrowing, so he wants to borrow and doesn't care a hang about reserve ratios so long as he can get the money. The bank is open and doing business, and what is a bank for, anyway, he says!

Yet don't forget that the banker wants to make money, too, and he can't make it if he doesn't lend to you; but when reserves start down and loans start up he begins to weigh the profit in the loan against consequences, and fear of consequences is the one thing in banking that steers the banker away from consequences. It is one of the chief reasons why banks outlive the average business enterprise and why bank stocks as a class are safe and enduring investments.

So much for stating the case. The managing editor, who in this entitled cause of action plays the part of the judge, has not so far restricted our remarks. And to the readers, who are the jury, we shall now address arguments in defense of our clients, the bankers.

Better to illustrate our arguments, we have prepared the accompanying graphs, which show, 1, the amount and course of total deposits; 2, the amount of deposits which were loanable after deducting an average of about 15 per cent for reserve (including legal reserve with the Federal Reserve Bank); 3, the amount and course of loans (excluding U. S. Certif-

Digitized by Google



cates of Indebtedness); 4, a graph to show what the loans would have been had the banks been unable to borrow as they did from the Reserve Banks; 5, the amount and course of commercial deposits; 6, the amount and course of savings deposits, and, 7, the amount and course of borrowed money obligations. Aside from defending our clients against the allegation that credit has been arbitrarily withheld, we intend to show the jury that there can be no general granting of new loans until the equilibrium between deposits and loans is restored and the stretch that was taken out of the banking machinery put back in again so there will be some available expansion for the next emergency some seven years hence.

Beginning at the left hand margin January 1, 1919, we find the Detroit banks with $351,000,000 of deposits and $249,000,000 of loans and only $10,000,000 borrowed from the Reserve Bank. The loans were actually somewhat higher due to holdings of U. S. Certificates of Indebtedness which are not included in these figures, but the point is that there was no strain to speak of on the credit of the banks and there was a comfortable margin between total loans (Graph 2) and the amount of loanable deposits (Graph 2). This was the period following the Armistice, when all looked for poor business, and, until February 1, 1919, as the course of Graphs 1 and 3 show, the tendency was downward. Then came revival and throughout the remainder of 1919, except in March, deposits (1) and loans (3) raced upward. Borrowed money likewise went upward (7), but the influence was due in the main to the preferential Federal Reserve Bank rate on loans secured by U. S. Certificates of Indebtedness. The Government was putting out large batches of certificates which the banks were asked to take, but instead of using their surplus funds to carry the certificates, the banks commonly took them over to the Federal Reserve Bank and borrowed nearly enough on them to pay for them and at a rate which practically made the interest from the certificates pay the interest on the loan. When the certificates came due the loans were automatically paid. Thus during most of 1919 the Federal Reserve Banks in many instances took the load of carrying certificates off the hands of the banks and the banks were enabled thereby to lend an equal amount to their customers, without cutting into reserves.

Curves 1 and 3 follow substantially the same trend throughout the year and the margin between total deposits and loans to customers remained practically constant. Note total deposits January 1, 1919, $351,000,000, against total of the same, January 1, 1920, $449,000,000, a gain of $98,000,000 and a gain in loans of $90,000,000 between the same dates. But the first two months of 1920 saw a slight recession in deposits and simultaneously there was an abrupt loan demand (see curve 3), loans went up $32,000,000 while deposits went down $4,000,000, and at this point the banks were obliged to borrow to take care of their customers. During March deposits came back a little, but on April 1 the real show began. During April

(Continued on Page 34)

Digitized by Google

The Legislature and the Trucks

Some of the Bills Recently Introduced at Lansing Would, if Enacted, Put Hobbles on an Industry

ALTHOUGH 60 per cent of the motorized commercial vehicles manufactured in this country are made in Michigan, 75 per cent of the state's production is sold and used within the commonwealth and thousands of Michigan residents derive their livelihood directly or indirectly from the manufacture or use of these vehicles, some of the state's legislators apparently are determined either to legislate the motor truck out of existence or hobble it with costly and unnecessary restrictions.

Several bills directed at the motor trucking business already have been introduced in the present Legislature and no one knows how many more are to appear before the end of the session. Had the promoters of some of these bills deliberately set out to kill a business by halting the use of its product, they could have chosen no better time to attack the motor truck industry.

However, there is no evidence of malicious intent to curb the use of motor vehicles in the state. It is more likely that ignorance of their economic value and the conditions necessary to their encouragement and development are responsible for the attempts to encumber them with inimical legislation. Also it is apparent that the men in question have forgotten how important the success of the motorized commercial vehicle is to the industrial welfare of this state, and the economic reaction upon the public which surely must follow economic hardships thrust upon manufacturers and users.

Two Factors Enter

Legislative action so far asked is prompted by two factors which have come into controversial prominence since the advent of the motorized commercial vehicle. One is the destruction of highways which never were constructed for heavy duty vehicular traffic, but which, if they are to be of economic value to the districts through which they pass, must carry utility as well as recreational traffic. The other factor is born of the desire on the part of some people for unrivaled and undisturbed possession and use of the highways by passenger cars. There is in this phase of the problem an element which smacks of social distinction. The motor truck, no matter how well appearing, powerful and useful, is still a "cart" in the minds of so many tourists who have in their thoughts only the pleasurable use they can make of their motor vehicles.

These two causes stand out prominently. If there is in the background an encouragement for inimical legislation arising from threatened competition between the commercial vehicle and other units of transportation, it is well concealed.

In 1919 motor trucks moved 1,200,000,000 tons of freight, becoming second only to the railroads in tonnage. Much of this tonnage the roads could not move; some of it they undoubtedly lost because of the quick transportation provided by motor equipment. Up to a year ago a railroad in Michigan handled from four to five less than carload lot daily shipments between Detroit and Pontiac. Before the present industrial depression changed the aspect of things, this railroad was handling only one L. C. L. shipment every other day between these points.

Had this railroad, or any of the other roads, desired to take a tuck in the creeping ambitions of the trucking business, they could have asked no better weapon than House Bill No. 142, introduced by Rep. Danz, of Monroe, which increases the weight license fee on trucks from 35 cents a hundredweight to $1, an increase of more than 150 per cent, and increases the trailer fee from 50 cents to $1 a hundredweight. The fee of 25 cents a horsepower is left intact.

The only reason for this bill, so far as the printed word shows, is the fact that trucks have cut up the Dixie Highway within the confines of Monroe county. The county officials are much wrought up about the damage to the road between Monroe and Toledo, the blame for which they lay exclusively to the motor truck and trailer. Under the guise of making the trucking business pay for road construction and repairs, the Monroe agitators desire to punish the trucking business. While such a tax would, in a measure, be retribution to the trucks and trailers that traveled over and perhaps damaged Monroe's soft-soil, inadequately constructed road, why should all the trucks and trailers throughout the state be punished?

A Contrast in Roads

Wayne county's piece of the Dixie highway was built long before the Monroe section, yet Wayne's stretch seems to have stood up well under the traffic, which leads to the assumption that there is a great difference in road building, and Monroe has suffered by comparison. It also would seem wise to ascertain to what extent tractor and farm machinery contributed to the destruction of the Monroe highway. They are not considered conducive to road longevity.

It is estimated that not 10 per cent of the trucks and trailers in use in the state travel the highways in long-haul work, and not that percentage have as yet "crammed up" Monroe's piece of road. Consequently most of the trucks and trailers must traverse roads within city and town limits; in fact the great majority of them are used by commerce and industry within a 10-mile radius. Why then should the truck and trailer the most useful and economic short-haul medium? Why should every person who sets himself up in the motor transportation business because there is a demand for his services in that capacity be so taxed that he cannot make a living?

As was said before, if any man desires to kill off an industry, no better time could have been chosen. Truckmen with motor equipment are lingering on the edge of despair at this time. Some of them cannot meet the notes on their equipment; many who had a prosperous business months ago have little or no business now; some have not been able to pay their license fee. These men, and thousands of others like them, have made and will help to make the motor truck manufacturing industry of Michigan possible, provide work for labor for money and facilities for ready distribution unless a few legislators succeed in throttling them.

What Really Is Needed

What is needed is not legislation to tax the truck business out of existence to provide money for roads for passenger vehicles, but a change in roadbuilding methods that will lead to the construction of the kind of substantial highways this country and state need to meet new transportation conditions. Owners of motor trucks already pay more than $15,000,000 a year in taxes of one kind or another, and these levies do not include state and municipal taxes. Rightly treated, the trucking industry

(*Continued on Page* 38)

SPECIFICATIONS
On the New Ford Cow. Also a Cartoon



—Reid in the New York Mail

THE NEW "LIZZIE"

(H. I. Phillips in the New York Globe)

MR. FORD is very reticent about his Tin Cow, which will retail, probably, at $375 and up, F. O. B. Detroit, completely equipped, but with the usual charges if the buyer desires a spare set of udders with his cow and a deep bass moo-o-o. Our own correspondent has secured a Ford catalogue giving plans and specifications for the Ford cow. They follow:

1. Plain water fuel system. 2. Mileage: five quarts of milk to a gallon—of water. 3. Self starter for those wishing plain milk. 4. Cranking device for those wishing whipped cream. 5. Left or right-hand drive as preferred. Both hands, if you're a fast milker. 6. Special upholstery in the usual shades of cowhide. 7. Borden magneto. 8. Van Camp carburetor. 9. Two horns with each cow. 10. Complete tool kit, including hay fork, halter, stool, pail and switch. 11. No oil necessary except citronella on farms in regions where mosquitoes are apt to annoy the cow.

Guarantee—1. Each cow will be guaranteed for ninety days. 2. Any cow lolling apart before that time will be replaced. 3. Any cow found to have missing parts within that period will be provided with them upon receipt of complaint from the cow or from the owner.

Warning—1. To get plain milk, drive Ford cow on smooth road. 2. To get milkshake, drive at high speed over unpaved streets. 3. To get butter or cheese, drive Ford cow over a cobblestone road.

Important Note—The Ford Cow may not be authentic. It is possible it is just "bull."

Digitized by Google

Investing in Prosperity

Purchase of Securities of Foreign Trade Financing Corporation Will Help Avoid Business Demoralization

By DR. J. T. HOLDSWORTH
Vice President, the Bank of Pittsburgh, N. A.

PRELIMINARY estimates by the Department of Commerce indicate that our foreign trade for the calendar year 1920 will show more than $8,000 million of exports and approximately $5,400 million of imports, leaving the year's balance of trade in our favor at about $2,700 million. In 1919 our total exports were $7,920 million and our imports $3,900 million, giving a favorable balance of $4,000 million, or almost 48 per cent above the estimated balance of the last year. It appears that the value of our total exports will be strictly in excess of those for 1919, while our imports will show an increase of almost 50 per cent. These foreign trade totals should be compared with those of a typical pre-war year, say, 1913, when our total trade aggregated slightly more than $4,000 million, with exports of $2,400 million and imports of $1,800 million, giving us a favorable trade balance of about $500 million.

As was the rule before the war, our trade balance against Europe exceeds that of the rest of the world. Despite the recent heavy decline in exports to Europe, 54 per cent of our exports are to that continent and 76 per cent of our imports are from other quarters of the world. In other words, our best selling markets have been where we bought the least and our largest purchases where we have sold the least. Prior to the war the United Kingdom absorbed the larger part of our European trade balance and during the war our sales to Great Britain equaled those of all the rest of the Continent. Last year, however, the Continent took the larger part of our exports —an indication that Great Britain has reduced to a minimum its purchases in America while the rest of the world is still very largely dependent upon us.

An Analysis of Exports

An analysis of the groups of commodities entering into our foreign trade in 1920 shows that in our export trade crude materials for use in manufacturing have been steadily growing in importance since 1917, although the percentage is still considerably lower than that of 1913. It appears also that exports in foodstuffs in crude condition and food animals showed a percentage of almost twice that of the year 1913. Foodstuffs partly or wholly manufactured dropped to about the same level as in the pre-war year. On the import side, a striking characteristic is the heavy increase in the value of foodstuffs partly or wholly manufactured, sugar playing an important role in this group. Imports of manufactures for further use in manufacturing and foodstuffs in crude condition show a similar percentage in 1920 than in preceding years. The striking fact emerges, however, that in the year 1920 the value of merchandise imported from Europe was nearly twice that of the preceding year and four times as much as in the corresponding period of 1916. The approximate total of one billion of total imports of manufactures ready for consumption is chiefly European. It also appears that in the raw material for manufacturing groups Europe is returning to its pre-war practice of accumulating the crude products before sending them to the United States.

Though the foregoing summary does not attempt an accurate analysis of the foreign trade situation, and lacks the sureness of completed statistics for the year, it points to the inference that in our future trade more emphasis must be placed upon the export of manufactured articles. Foreign demand for foodstuffs will, of course, be more or less continuous and for some time to come war-scarred Europe will need our foodstuffs as formerly. But with the ever-increasing home demand accelerated by the movement of population from the country to the urban center, the quantity of foodstuffs available for export may be expected to decline. The same conclusion may be drawn regarding crude materials used in manufacturing.

In the main and making reservations as to particular sections and peoples, Europe's recovery during the year 1920 has been fully satisfactory and it may be assumed that 1921 will see further economic improvement. With the recession of price levels all over the world, the total value of our foreign trade in 1921 no doubt will decline. Whether such decline shall bring with it decreased profit or sustained prosperity to the American manufacturer and to American business will be determined largely by our own sound business sense and acumen, and specifically by steady economic production and the extension to Europe, especially, of adequate credit to enable it to continue its industrial and commercial rehabilitation.



DR. J. T. HOLDSWORTH

DR. HOLDSWORTH is a noted economist who recently forsook the teaching of finance in the college classroom for the practical application of it as head of the Bank of Pittsburgh, N. A., of which he is now one of the vice-presidents. He has been in turn a member of the faculties of the Summer School of the South, Knoxville, Tenn.; Drexel Institute, Philadelphia, and the University of Pennsylvania. He was dean of the School of Economics, University of Pittsburgh, for several years prior to his becoming associated with the Bank of Pittsburgh.

Dr. Holdsworth, who is regarded as one of the authorities on the financial side of foreign trading in the Middle West, will be one of the principal figures in the convention of the National Foreign Trade Council, to be held in Cleveland next May 4, 5, 6 and 7.

"One fundamental concept of foreign trade must be borne in upon the American public, namely, that international trade is in the long run an exchange of products for products and that to maintain our export trade at high levels we must expect a higher level of imports. In this country our foreign trade thought has turned almost entirely upon exports and we have given little consideration to the encouragement of imports. But if we want to continue selling goods to Europe on a large scale and expect them to repay the enormous debt of 15 billion dollars they now owe us, we must be ready to accept freely their goods and services in return.

The Tariff Problem

It is highly important, therefore, that the whole tariff question shall be given the most thoughtful consideration and that our tariff policy shall be determined strictly upon the basis of economics and without political or partisan bias. We must keep in mind the fact that as we artificially cut off our imports by the imposition of high or discriminatory tariffs, we shall correspondingly reduce our exports. Of course we cannot lose sight of the service of the tariff as a revenue measure, nor can we disregard the advantage, if not the necessity, of imposing protective duties upon certain foreign articles, like chemicals and dyes, which would compete with our young, warborn industries entitled to the opportunity to justify their continuance in peace times. But in a general way it must be recognized that the war has left us in a new economic position and that as a creditor nation with exports enormously in excess of imports, a new attitude toward tariff and our import trade has become essential.

In this connection we may remind ourselves that as a consequence of international trade disturbances due to the war, there already exists, with no probability of early removal, an involuntary "tariff" against American exports in the form of highly unfavorable exchange rates against practically all foreign markets. Admitting frankly the improbability of a return to par of such exchanges as the ruble, the Austrian crown, even the mark and the lira, we must recognize our own important stake in the early restoration of the exchanges of those countries which are solvent and are normally large customers of ours.

The increasing difficulties in foreign trade—cancellations, moratoria, slow collections and the like—have discouraged some concerns with but slight or recent foreign trade experience. Such concerns have been prone to vote the whole business a failure and to withdraw within the supposed safety of domestic trade, ignoring the fact that our domestic business is undergoing the same painful processes of readjustment as have appeared in foreign com-

(*Continued on Page* 40)

Digitized by Google

A Skin Game That's Legitimate

Leather Produced in Large Quantities in Michigan; The State Has 32 Tanneries, Investment $15,000,000

By HOWARD CAMPBELL

ACCORDING to Scripture, the first article of clothing was composed of one or more fig leaves, but from all available information this material was soon superceded by the skin of an animal, Father Adam probably having discovered that a good fit could be had with but little alteration, and that the quality was far superior. From that date to this, the manufacture of leather has held a place of ever increasing importance in the industrial world.

There is no doubt that the use of leather was a result of the natural inclination of man to employ the most available materials, and the treatment of animal skins to fit them for useful purposes is a practice which seems to have been followed wherever mankind existed. A granite carving, probably at least 4,000 years old, is preserved in the British Museum, in which several workmen are shown engaged in the making of leather. One is taking a tigerskin from a tub or pit, a second is employed at another tub, while a third apparently is stretching a skin upon a table. Embossed and gilt leather was found on a mummy of the ninth century, B. C., and other articles of goat leather which were made about the same time are still in a state of comparatively good preservation.

In China the manufacture and use of leather dates back to the remotest era of ancient history, and even among the natives of America and Australia the curing of skins was found to be well known and widely practised; in fact, there has been no race of people but has had some knowledge of this art.

Although it is certain that the process of vegetable tanning is exceedingly ancient, it is almost as certain that the curing of skins by smoke and by treatment with oils and fats was even more primitive. Processes such as these are still in use in many of the less civilized parts of the world, leaving us in little doubt as to the origin of leather manufacture.

For centuries the methods of tanning leather have varied but little, but the last hundred years have seen remarkable development along this line. The application of chemistry to leather manufacture and the introduction of modern machinery have transformed an art into a scientific industry, manufacturing a valuable commodity on a production basis. Quality has not suffered, however; indeed leathers are now being turned out which are of a finer quality than any ever produced by the more ancient and laborious processes.

Michigan is well represented in this industry, having thirty-two tanneries within its borders, some of which produce leathers that are known the world over for their excellent workmanship and fine quality. One of the largest of these, as well as the most noted, is the tannery of Carl E. Schmidt & Company, Inc., Detroit. This concern specializes in the finest grades of calf leathers, its product winning the Grand Prize at the Panama-Pacific Exposition. This company was formed in 1897, the first man employed being also the man who built the machinery, as all old-time tanners were taught to do. Since that time the business has grown until there are now 300 employes on the roll, turning out approximately 1,000,000 calfskins a year. These skins are worth approximately $5,000,000, at current market prices.

Michigan Investment $15,000,000

One of the oldest tanneries in the state is that of Traugott Schmidt & Sons, also in Detroit. Traugott Schmidt was of the twelfth generation of tanners in his family. He came to America in 1849 and started a tannery in Detroit in 1852, establishing himself in his present location in Monroe avenue in 1855.

Sole leather is produced in large quantities at the tanneries of the Alpena Hide & Leather Company, at Alpena. The average capacity of this plant is about 1,000 "sides" of leather a day, a side being the half of a cow hide. This plant was built in 1892, starting operations with a very small working capacity, and has gradually developed until it has reached its present proportions, producing 7,000,000 pounds of leather annually.

The thirty-two tanneries in the state represent an investment of approximately $15,000,000 and give employment to about 5,000 persons. The products of these thirty-two plants range from boot soles to kid gloves and there are wide divergencies not only in the processes employed but also in the materials used and in the principles of their application. For many years leather was tanned or cured by the use of vegetable tanning materials, such as sumach and the bark of such trees as willow, oak, hemlock, birch, pine, and in Europe, mangrove, chestnut and other European and Asiatic trees and shrubs. The "tannin," or tannic acid, which is contained in these barks is extracted by various methods. In any case the bark is chopped and crushed, after which it is thoroughly soaked, the acid from it passing into solution with the water, forming what is known as the "liquor."

After extraction the liquor is allowed to settle in tanks, after which is is run into a decolorizing plant, which consists of a deep vat containing a coil of steam pipes and a mechanical stirring device. Here some such substance as lead acetate, alum, casein, oxalic acid or some similar agent is mixed with the liquor, precipitating the coloring matter. After standing an hour or two the clear liquor is run off gently, by means of taps fixed at different heights in the sides of the vats, and passed into the evaporating plant, where the sediment is run off separately and passed through filter presses which yield more liquor for evaporation. The evaporation is carried out in steam heated vacuum pans in order to keep the temperature low and to prevent oxidation.

Before the actual tannage can take place much has to be done which is essential to the success of the final result. If the hide or skin is fresh from the butcher, the first step is to cleanse it from dirt, blood and salt by a few hours washing in clean water. Alkaline solutions are also very generally used, but weak acids, such as formic or sulphurous, are still more efficient. This soaking process enlarges the glands in the skin and loosens the hairs, which are then removed by scraping with a knife, either by hand or in a machine.



LEATHER MANUFACTURE IN THE TANNERY OF CARL E. SCHMIDT & COMPANY, DETROIT

The machine shown in the left-hand photograph removes the hair from the skins. The spiral knives, which can be seen in the machine, revolve rapidly, applying just enough pressure to the hide to take off the hair without cutting the skin. Fine calf leathers are dyed by putting them, together with the dye, in the cylinders shown at the right, and tumbling them until the skins are thoroughly soaked.

Digitized by Google



MAKING BELTING IN THE PLANT OF THE DETROIT OAK BELTING COMPANY, DETROIT

The photograph at the left shows the shaving machines, which remove the rough flesh. At the right are shown the circular cutting knives, with gauge attachments for cutting stock to size. The leather is sorted and graded before the cutting process begins.

In nahairing it is important not merely to remove to hair but also to remove as much as possible of the hair root sheaths and fat glands, which are often deeply colored with the pigment of the hair. The hair having been removed, the skins are thrown into soft cold water, where they swell slightly. As the skins have to be free from lime before tanning, however, they have to go through a deliming process, which also reduces the swelling. This is necessary because skins tanned in a swollen state produce hard leather.

After the deliming process, they undergo the further operation of "fleshing," which is the removal of adhering portions of flesh from the inner side. This is done with the same kind of knife as is used for removing hair, except that the tools have sharper edges. So far, the treatmeat has been similar in principle, although differing slightly in detail, perhaps, for the different classes of leather, but from this point onward there is greater divergence.

Oak Bark Used Largely

All the processes so far described have for their object the removal of hair and such flesh as has adhered to the skin and the cleansing and purification of the skin for its actual conversion into leather. The problem now is to render it soft, porous, imputrescible and sufficiently resistent to water, all of which can he done in a variety of ways. The tannin-yielding materials are very numerous, but the oldest and formerly the most important in this country is the bark of the oak, usually stripped in spring when the sap has begun to rise, because at this time the bark is more readily separated from the trunk.

Oak tannin has the advantage that good leather of all descriptions, both light and heavy, can be made by its use. The tanning process which follows consists in soaking the hides in the tannin solution, which has the power of combining with the skin fibers and converting the hide into leather. If at first strong tannins were used, they would act too violently on the surface of the skin, hardening and contracting it, so that the subsequent tanning of the interior would be impeded and the outer surface would be drawn and wrinkled. This is avoided by the use at first of very weak infusions, which have already been used on goods in a more advanced stage. In the latter part of the process much stronger solutions are employed, and the hides frequently are dusted in them with ground tanning material.

In the case of sole leather, these processes may require from two to twelve months for completion, after which the leather is dried, smoothed and compressed by mechanical means. It is then ready for use. Dressing leathers, from calfskins to harness hides, receive a much shorter tanning, and the subsequent treatment is with fats and oils, which together with mechanical manipulations constitute "currying." The thin film of grease distributed over the surface of the fibers renders them supple and to some extent waterproof. The lighter fancy leathers, such as morocco, are dyed, and undergo many complex processes to fit them for their required purposes and improve their appearance.

Many skins, such as calf, glove and glace kid, are not tanned, but "tawed" by a solution of alum and salt, which is often supplemented with mixtures of flour and egg-yolk to fill and soften the leather, or according to more recent processes, by means of salts of chromium.

The first chrome tanning process was patented in Europe in 1879 by Heinzerling, although Carl E. Schmidt had not only solved the secret of chrome tanning, but was using this method in his tannery in Detroit. Chromium is a gray metal derived from iron ore, much resembling iron and containing oxides of both chrome and iron. This is converted by suitable chemical processes into chrome alums and chromates. The skins are put through a bath of this solution, which has the effect of preserving the animal substances of the skin and rendering it immune to the action of the air.

The finishing of chrome leathers is a somewhat complicated process. For box calf the skins are stretched either on a table or with a machine; partly dried, and shaved or split before dyeing. Black dyeing is done either on the table by brushing or in a vat by alternate treatment with logwood and iron solutions assisted by coal-tar dye, and colors may be produced by hot dyewood solution, although only the acid coal-tar colors will dye on chrome leather directly. The skin is now dried and glazed by friction under a smooth cylinder of glass held in the arm of a glazing machine, which presses the glass cylinder heavily on the leather as it moves away from the workman, but lifts on the return stroke. Thus is produced the fine, smooth finish which is so desirable for footwear of the finer quality.

Making Leather Belting

The manufacture and use of leather belting is a very important item, considering the place which Michigan holds in the industrial field. Probably the largest belt manufacturing plant in the state is that of the Detroit Oak Belting Company, which takes the oak-tanned hides as they come from the tannery and transforms them into the various widths and kinds of belting necessary to the operation of machinery.

The Detroit Oak Belting Company was established in 1893 on the site formerly occupied by the Croul Brothers tannery. The tannery was built in 1854 by Jerome and William Croul, and the decision to make belting from leather instead of making the leather was the result of an increasing demand for high-grade belting. The best of oak-tanned leather is used for this purpose, this leather being made in the South, where oak bark is available in large quantities. After the hides are received here, they are soaked over night to remove whatever extract they may still contain, after which they are put into a large cylinder called the "wash-wheel," where they are tumbled about and washed in water. After this operation they are scoured perfectly clean and then the water is pressed out of them. They are then dried and passed to the shaving machine, where such flesh as still clings to the hides is removed. The leather is now in a hard, dry condition. To soften the hides so that they will absorb the grease, they are dampened again and put into large boxes, where they lie over night, during which time the animal heat in the skins co-operates with the water to soften them.

Best Grades From the Center

Upon removing the skins from these boxes, they are put into large wooden cylinders called "stuffing-wheels," into which hot air is forced until the temperature is about 125 degrees, F., where they are tumbled again for approximately half an hour in hot grease. They now go to a set of five stretching machines, where each skin is held at the ends and stretched, the process being aided by a set of iron ribs which rub or knead the skins as the tension is applied. After fifteen minutes of this they go to another machine where the fibres are spread while being soaked in water, after which each skin is worked by hand to be sure that every fiber is stretched to its utmost capacity. They are now put on stretching frames and allowed to stand for two days, after which they are given a final rubbing and then hung up to dry until needed.

The first operation in the actual making of the material into belting is that of cutting the ends and sides to width. The center section of the skin is now cut out, these centers forming the best grades of belting. The centers and sides are now cut to the widths required and

Continued on Page **38)**

Digitized by Google

Road Building Conference at University of Michigan

It has been conceded by highway builders and promoters that any ambitious program for the development of a system of highways suitable for heavy transport work, for which the motor truck is so well adapted, must be preceded by and will be dependent upon a thorough knowledge of how highways should be constructed to meet the new transport conditions. The debatable statement has been made by Prof. C. J. Tilden, a recognized engineering educator, that with all the data on hand concerning the business of building roads, there are few if any engineers who know just how to build the kind of roads now called for.

As a result of an apparent majority opinion that Prof. Tilden is correct, a movement has been started by the Government and highway interests to formulate a course of instruction in the science of road-building suitable for present and future needs, and have this course introduced into colleges and universities.

A group of engineers, highway men, educators and leaders in the automotive industry has been formed into what is known as the Permanent Committee on Highways and Highway Transport Education, with headquarters in Washington. This committee is holding conferences at the larger universities having engineering schools in an effort to gauge general opinion on the course proposed.

Such a conference was held February 23 at the University of Michigan, Ann Arbor. The sessions opened at 10 o'clock in the morning and occupied the entire day and evening. Dr. P. P. Claxton, United States Commissioner of Education, presiding, spoke on "The Highway and Social and Economic Welfare." State Highway Commissioner Frank E. Rogers welcomed the delegates for the state, and Dr. Mortimer E. Cooley, dean of the College of Engineering, welcomed them for the University. Prof. Tilden, of the department of engineering mechanics at Yale University, and director of the permanent committee, outlined the activities of that body. Roy D. Chapin, president of the Hudson Motor Car Company and vice-president of the National Automobile Chamber of Commerce, discussed the economics of highway transport. Highway and highway transport education in secondary schools was treated by George C. Diehl, chairman of the good roads board of the American Automobile Association. Harriet E. Beard, supervisor of safety education in the Detroit public schools, discussed safety education.

The afternoon program was opened with an address by Thomas H. MacDonald, chief of the United States Bureau of Public Roads, on "The Measure of Highway Accomplishment." Col. Mason M. Patrick, United States Engineers, followed with "The Army's Highway Transport Problem." The inter-relationship of waterway, railway and highway transport was the subject of an address by Henry E. Riggs, professor of civil engineering, University of Michigan. Charles J. Bennett, highway commissioner in Connecticut, discussed the problem of snow removal from transport routes. The subject of "Economic Value of Highway Transport Surveys," was assigned to Dr. Arthur H. Blanchard, professor of highway engineering and highway transport at the University.

An informal dinner preceded the evening session, at which Dr. Marion Leroy Burton, president of the University, spoke. William C. Redfield, former Secretary of Commerce, spoke on "The Trinity of Transportation." Tom Snyder, secretary of the Indiana Highway Transport and Terminal Association, pointed out the relation between highway transport and industry, and its relationship to the back-to-the-farm movement was outlined by A. R. Kroh, of the development department of the Goodyear Tire & Rubber Company.

STRAIGHT LINE METHODS

Survival of the Fittest

This law is just as immutable in Business as it is in Nature, and just as desirable. All progress is based upon it. In such times as the present it is *the one great Law.*

Fitness is a matter of method and management. The well organized, well managed enterprise plans its work and works its plan, gaining strength as it marches forward on broader missions to larger profits. The loosely knit, inefficient and unmethodical, falter and fail.

That business enterprises may be fit,

That waste may be eliminated and competent organization built up,

That the executive may have at all times the comprehensive and dependable facts and figures which are the only premises of correct conclusions, the only basis of intelligent, progressive action—

Ernst and Ernst offer the services of tried and experienced staffs of business engineers and expert accountants in the individual application of

Straight Line Methods

of System, Organization and Business Control

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON
CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY
CLEVELAND, BUFFALO, PITTSBURGH
CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND
NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Selling the Automotive Industry To America as a Transportation Utility

Representative Supreme Co-ordinate Council Needed To Speak and Act With Authority for the Business

By EZRA W. CLARK

Advertising Manager, Clark Equipment Company, Buchanan

Extracts from an address delivered before the recent meeting of the Advertising Managers' Council of the Motor & Accessory Manufacturers' Association, at the Hotel Astor, New York.

I HAVE BEEN ASKED to suggest how we should sell the automotive industry to America, and I suggest as one of the first steps in this plan that we should first thoroughly understand that we are worthily building something worthy, intended for a worthy purpose. Then and then only will our feet be planted on firm ground, and then and then only will we be able to stand the shocks of adversity as well as to go forward aggressively to greater triumphs of prosperity.

Conditions in the automotive industry are not what they should be. We are passing through a period of readjustment that was inevitable and the hardships and trials of this period will undoubtedly be of far-reaching and lasting benefit to the industry. Often in a family or in a community it is necessary to make an example of a spendthrift in order to teach a wholesome lesson to all other members of the community, but no one likes to be singled out and pilloried as the horrible example. Yet that was just what happened last year to the automotive industry.

Selling on a Sound Utility Basis

Credit is the life blood of the industry and when the powers that be discovered last spring that the blood pressure of industry was alarmingly high, they took drastic means to remedy the condition and an embargo was placed on automotive credits. Why? Because the men controlling credit conditions—the Federal Reserve Board, the banks and financial interests—had not been sold on the essential character of the automotive industry, but had been given a false impression of its merits by misleading, misdirected and misworded advertising which for a long time had formed the basis of its sales propaganda.

Automobiles have been sold to America for years on appeals to pride, on appeals to woman's vanity and on points of luxury such as the luxuriant cushioning effect of springs, the comfortable ease of soft cushions, the mirror-like reflections of fourteen coats of varnish, and a multitude of intimate personal refinements. Sales also had been made because high grade cars had been associated with scenes of rowing, fishing and swimming, and clever men had linked the name of a particular car with ideas of pleasure. The cars of America have been sold on the basis of vanity and recreation rather than on the basis of utility or necessity.

Yet we have the word of Charles Clifton, president of the National Automobile Chamber of Commerce, that 90 per cent of all passenger cars are used for business. He states further that "the average increase in business productivity due to motor cars was 56.7 per cent. Translated into working capacity, this means that 6,800,000 cars in daily use in America add every day the equivalent of an average over 3,800,000 workers to the nation's productive forces."

Little effort has been made to sell passenger miles or freight ton miles, the very basis upon which all other transportation is sold. Thus, when an alarming condition demanded drastic treatment, those in authority cut away the foundations of automotive credits without the slightest thought that they were in any sense crippling one of the great transportation systems of our country.

It was not long before the drastic result of this step made itself evident and a line of demarcation was laid down between passenger car and truck as a basis of credit, but the momentum of the first action was so great that its influence had to run its course and could be checked but feebly.

Mark you that the Federal Reserve Board recognized at that time that an industrial crisis was being reached in America because of insufficient transportation facilities, and yet in view of that knowledge by the Federal Reserve Board they restricted automotive credits. Why? Because they had not been brought to realize that the automotive industry was building units of transportation.

It is high time that the men of our industry realized that we individually have been building the units to make up a new system of modern transportation which daily moves millions of passengers millions of miles, and millions of tons of freight millions of miles.

You ask me to sell the automotive industry to America, and having brought to you a realization that we are building units of passenger and freight transportation, I lay upon the hearts of the men whose privilege and duty it is to write the sales messages of this industry a sense of responsibility for the enunciation of our individual campaigns so that they shall carry ideas of utility and essentiality.

Banish the Speed Vamps

We are engaged in the building of a virile, masculine industry. Our campaigns should be not effeminate. The real true blooded women of our land will be attracted to those cars which speak most of strength and sturdiness, of endurance and accomplishment, rather than to those whose appeals are directed to the frailties and weaknesses of vanity and pride. Thank God, the women of our land think more of strength and achievement than they do of "lounge lizards" and "speed vamps." We should emphasize passenger and truck performance in terms of passenger miles and freight ton miles so as to leave in the minds of the nation wholesome impression of performance and utility. To our printed word should be added similar propaganda by word of mouth carried by factory representatives and disseminate through dealer organizations.

This much we can do as individuals and a individual companies. This much we owe t the stability of our own organizations and th insurance of their permanency and success. Bo just so certain as we neglect this, we will suffe in time of adversity out of proportion to ou just deserts.

"What can we do as an industry to sell our selves to the country?" In other words, w want to have the automotive industry recog nized and honored as a worthy member of the association of industries on which is based the prosperity and progress of our nation.

An industry, in the same as an individual or a corporation, to be deemed worthy of prestige and good will, must perform worthy works commensurate with its ability and opportunity —work devoid of seifishness, of such intent and scope that out of it will come greater national prosperity, of which it will receive its proper, proportionate share.

Must Have Organization

Performance must be preceded by organization. The automotive industry is not fully organized. It has many excellent associations and organizations—but each formed and fashioned to meet some particular purpose. There is none created with the idea of performing a meritorious duty owed by the industry to the nation.

Let us scan our present organizations. We have the National Automobile Chamber of Commerce; the Motor and Accessory Manufacturers' Association; the Motor Truck Manufacturers' Association; the Motor Truck Sales Managers' Association; the National Automobile Dealers' Association; the Society of Automotive Engineers; the Automotive Equipment Association; the American Automobile Association; the Motor Truck Association of America and other organizations of similar character.

Each of these has been formed because of a realization of the necessity of an organization to care for the interests of certain groups within the industry. They function harmoniously but independently. The French, English, Belgian and American armies were marvels of individual efficiency and won numerous battles, but not until they had been united and co-ordinated under the Supreme Military Council did they begin to win campaigns.

The automotive industry needs a representative co-ordinate council to which shall be delegated certain work and duties. The voice of the automotive industry should become articulate when its rights are imperilled. Tax the industry justly. We are building passenger and freight transportation vehicles. If transportation is asked to supply a part of the national revenues let the tax fall on every new freight car and motor truck and in equitable proportion to its carrying capacity; let the tax fall on every locomotive, passenger coach, Pullman sleeper as well as passenger automobile—and in just proportion to its power or capacity.

Why tax a replacement part on car or truck and not tax a brake, spring or defective wheel on a locomotive or freight car? If we tax a gas tax steam—one is as important as the other.

We must have a body before we can have a

The Growing Tax Bill

ACCORDING to the Michigan State Tax Commission, taxpayers in this state paid $30,000,000 more into state, county and city treasuries in 1920 than in 1919. The average rate per $1,000 has increased from $24.60 to $26.40, while the assessed valuation has jumped from $4,503,980,981 for 1919 to $5,319,702,886. The total tax levy for 1919 was $110,776,106.19, while for 1920 it has been placed at $140,438,982.94. The largest increase was made in taxes for educational purposes, which were advanced from $29,753,423.09 in 1919 to $44,746,118.20 for 1920.

Digitized by Google

SAVE $2,000.00

You Don't Need a Broach to Make Hexagon or Square Holes!

DO IT THE "HEX" WAY



SQUARE DRILL

The latest advancement in machine shop practice is this simple but effective method for drilling angular holes. With "Hex" drills HEXAGON and SQUARE holes can be produced as easily as round ones are drilled.

They Save 78% of Labor Over Old Methods

They can be operated any place an ordinary drill can and with no more effort.



HEXAGON DRILL

—THE—

CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

voice. The supreme co-ordinate council of the automotive industry should have at its head a big man—broad-gauged, dynamic, dominant, paid an amount sufficient to command his fullest interest and commensurate with that paid to railroad life insurance or bank presidents—we need a big man for a big job.

This council should be composed of representatives from each of the dominant associations of the industry. It should have at its disposal ample resources: not less than $1,000,000 a year. How would you raise it? By a sales assessment or by a levy of 1 per cent on all advertising appropriations within the industry. By subscription if necessary.

This council should advertise. Through the Associated Advertising Agencies it should formulate and execute a comprehensive campaign that would multiply many fold the efficiency of every individual campaign in the industry. It would have at its disposal the best advertising brains of the land and should be able to dramatize on new lines "the spirit of transportation."

Through this supreme council the spirit of the industry should function for the good of our nation. Who shall say what volume of wealth the development of the government aided transcontinental railroads gave to America. Vast empires of the central Mississippi Valley, the West, Northwest, Southwest and Pacific were brought within reach of the markets of the nation and world by railroad construction and development. Yet I say to you that still vaster empires and sources of agricultural wealth lie tributary to these great steel arteries of travel waiting for the motor car and motor truck to open them to development.

The Farm Development Tour of 1919 showed the possibilities for work in this direction. The supreme council could organize not one but a dozen such tours and could establish with the co-operation of tractor manufacturers, builders of powered agricultural implements and country agents model farms in widely scattered, remote rural communities; model farms to which public school and agricultural college students and practical farmers could be brought for demonstration work and instruction.

Opportunity and ability to do a good work constitute duty. The allied automotive industry of America working under the direction of a generalissimo at the head of a supreme co-ordinate council has the opportunity and ability to more than double our agricultural resources by bringing our available areable land closer to centers of supplies and markets of distribution.

Let us add but a bushel of corn, wheat and oats to every acre of corn, wheat and oats and 10 pounds of cotton to every acre of cotton, and we will add $238,342,000 to the national wealth annually or enough to buy 238,000 additional cars at $1,000 each or 119,171 additional motor trucks at $2,000 each.

Let us start here and now an impetus that shall call into being this supreme co-ordinate council of the automotive industry. When the ship falls into the doldrums it is time to get out the oars or connect up the auxiliary motor. Not rest but work is what our industry most needs. Let's go forward!

How Motor Trucks Add To Value of Farm Lands

Motor trucks and highway development are the economic factors which are responsible for as much as 100 per cent annual increase in land value in various sections of the country, according to a report by the Firestone Ship by Truck Bureau, Akron.

Officials of one southern community—Hinds county, Mississippi—in campaigning for a $1,000,000 highway bond issue, claim that motor trucks, operating on good roads, have raised land values from $25 an acre five years ago to $100 and $125 an acre at present valuation. County supervisors, submitting the issue to a vote of the people, attribute their decision to ask for this sum "to the great agricultural, commercial and educational development of the country due to the use of the motor truck, tractors and passenger cars."

Investigation has developed, according to the Bureau report, that the farther away from town on improved roads that real estate lies, the greater the percentage of increase in value with the advent of good roads. Within five miles of an eastern city where recent improvements in highways were made, the appreciation in value within five years was only 68.3. But ten miles out the percentage of increase was 96.7 and twenty-five miles away the ratio of increase was 194.9. It is held that the motor truck is equally responsible with the highways for this improvement.

Farms contiguous to fairly good roads have been known to advance in value within two or three years after the construction of hard surface highways as much as 114 per cent, while the lowest increase reported was found to be 9.1 percentage.

"With these figures as a basis for estimation," says Ernest Farr, chief of the Bureau, "it does not require a stretch of the imagination to understand that the increase in land values is in direct ratio to two prime factors. There are a number of miles of improved highway built and the number of motor trucks added to those already carrying the burden of produce and merchandise from the farm to the city and the city to the farm."

TO BUY TRADE FINANCING STOCK

State Senator W. H. Chatfield, of Cincinnati, has prepared a bill to be introduced in the Ohio legislature to allow state banks to subscribe for stock in the Foreign Trade Financing Corporation. The bill will be modeled after the Edge act, which authorizes national banks to invest not to exceed 10 per cent of their capital and surplus in this $100,000,000 corporation.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

Collections of Every Kind and Size
TACTFUL
EFFECTIVE
PERSONAL COLLECTION SERVICE
for
Manufacturers and Dealers
Business and Professional Men
Write ——— For Interview ——— Phone
B. APPLEBY Dist. Mgr.
1019 Dime Bank Bldg. Detroit Main 3361
"Results or No Pay"

Signs of Industrial Revival

Several Automotive and Other Factories Throughout Michigan Are Taking On Men

FURTHER EVIDENCE that the automotive manufacturing situation in Michigan continues to improve is seen in plant reopenings during the last week or in announcements of definite dates on which operations will be resumed.

The C. R. Wilson Body Company, Detroit, took on about 200 men Monday. This force, it is hoped, will be increased within a short time. The company, which is making bodies for the Reo, Sheridan and Paige concerns, employed 2,500 men during peak production last year.

"Things are beginning to break," said C. Haines Wilson. "Old customers are coming in in increasing frequency and new customers are appearing."

Within the last 10 days the Ford Motor Company has added about 2,000 men at the Highland Park plant and 300 at the tractor factory at River Rouge. The normal number employed at the latter plant is between 5,000 and 6,000 men. Reports from Iron Mountain, where Henry Ford is building a mill, are that operations are being resumed after a slump of several weeks.

Announcement has been made by the Federal Motor Truck Company, Detroit, that it will resume operations on March 1 with a production schedule of 200 vehicles a month, as against a normal output of 450.

Harry M. Jewett, president of the Paige-Detroit Motor Car Company, predicted this week that the company would actually be behind orders before the end of the month.

"We have scheduled a production of 850 passenger cars for February," he said, "and we hope to meet that schedule, but even at that we will be lagging a little behind our orders."

The Liberty Motor Car Company, Detroit, reports that reports from its district supervisors from the Western as well as Eastern states indicate marked improvement in automobile sales conditions and an approach toward normalcy in some parts of the country. At the recent automobile show in Minneapolis, Minn., eleven cars were sold at retail by the local Liberty dealer, which is considered good business inasmuch as it was believed that probably no part of the country had felt more keenly the falling off of automobile sales than the Northwest states.

The company also reports an increase in the sales of enclosed cars and that this has led to the production of 52 per cent of Liberty closed cars out of the total output.

Announcement was made this week that the St. Johns plant of the Hayes Wheel Company would reopen on March 1 with a full force after having been idle since December. The factory makes motor truck wheels.

The Delta Chemical Company, Gladstone, which has been closed the last two months is expected to reopen with nearly a full force of 250 men March 1. About 40 men have been employed for some time in the repair shop and in getting the plant in condition for a resumption of operations.

The Akron factory of the International Harvester Company, where the International motor trucks are made, has increased its output to 150 vehicles a week. The company is working on an order for 500 trucks for shipment overseas.

The car loading department of the Furniture Manufacturers' Association of Grand Rapids in January shipped 90 cars. Goods rapidly are coming through the local factories now and shipments in February will show a large increase over the first month of the year. At the January sale, buyers were conservative with their orders, taking little more than what their immediate needs required. Almost invariably the instructions were for immediate shipment. The factories are getting the goods off as rapidly as possible.

Informal discussion of business prospects featured the quarterly meeting of the Kalamazoo Manufacturers' Association, held at the Chamber of Commerce, last week. While the expressions generally were conservative, they assumed a trend indicating improvement in the outlook. W. E. Kidder, of the Kalamazoo Sled Company, and Louis Rosenbaum, of the Kalamazoo Pant Company, tendered their resignations from the board of directors prior to the general meeting, and the board elected W. T. Clark, of the Fuller & Sons Manufacturing Company, and George Hopkins, of the Barley Motor Car Company, as their successors.

KALAMAZOO ENGINEERS ORGANIZE

The Kalamazoo Engineering Society, reorganized and affiliated with the American Association of Engineers, has elected these officers: L. J. Wykkel, president; Ernest Batterson, vice-president; D. E. Peet, secretary; L. A. Cobb, treasurer.

WEEK'S COAL PRODUCTION

Production of bituminous coal during the week ended February 5 totaled approximately 8,045,000 tons, which is 521,000 tons less than for the previous week and more than 1,160,000 tons below the output of the week of January 22. The output of anthracite during the same three weeks was respectively 1,985,000, 1,999,000 and 1,919,000 tons the first in February thus being about on a par with the last week of January and more than 250,000 tons ahead of the third week of that month.

REORGANIZING ACME CHAIR CO.

Business men of Reading have been called upon to help in the reorganization of the Acme Chair Company, whose plant and most of its personal property was destroyed by fire last December. The firm is an old-established one having been organized in 1872, and has always been one of the main industrial enterprises in the community. It is proposed to increase the capital stock from $125,000 to $250,000, by being common and the other half preferred stock, the latter to bear 7 per cent interest.

PLUMBERS CUT OWN WAGES

Jackson plumbers have voted to cut their wages 10 cents an hour, or from $1 to 90 cents, and propose to ask other building trades to follow suit. The action was voluntary.

BATTERY INTERESTS MERGED

The Excel Battery Company, Jackson, has taken over the interests of the Battery Service Company. The new company is composed of C. W. Cotton, president; Harold Cotton, vice-president, and George L. Cotton, secretary and treasurer. The latter formerly owned the Battery Service Company.

Digitized by Google

General Motors Profits In 1919 Total $48,252,000

During 1920 the General Motors Corporation's sales amounted to $565,000,000, an increase of $56,000,000 over 1919. The net profits were approximately $48,252,000. Total assets are $602,753,000, with real estate, plants and equipment at $248,000,000. Good will, patents, copyrights, etc., are listed as $22,724,000.

Total liabilities are $126,827,000 and total reserves $43,374,970. Total capital stock is $303,231,850 and surplus $127,531,180.

Pierre S. du Pont, president, in his report, says:

"The officers of the corporation have clearly in mind the importance of maintaining a strong cash position and of reducing the corporation's inventories and current indebtedness. During the year the corporation paid as federal income and excess profits taxes approximately $26,000,000. It also retired $12,000,000 of notes issued in connection with the purchase of the Fisher Body Corporation stock in 1919 and expended approximately $86,000,000 in extending and improving plants and facilities in line with the construction programs laid out in 1918 and succeeding years.

"While all known losses and appropriate write-down of inventories have been taken care of, nevertheless the board of directors, at its next meeting, will be requested to consider the advisability of appropriating some part, not exceeding $15,000,000, of the surplus account as a reserve for future contingencies.

MICHIGAN MOTOR GARMENT

The Michigan Motor Garment Company, Greenville, at its annual meeting elected the following officers: F. E. Ranney, president; George C. Bower, vice-president; R. M. Beardslee, secretary-treasurer and manager; O. W. Fowler, assistant secretary. The board of directors consists of the Messrs. Ranney, Beardslee, Bower, E. W. Ranney, J. H. Ditzeman, J. S. Hibson and E. A. Kemp. Three more branches will be opened.

TWO NEW ALMA PRODUCTS

The Alma Foundry & Manufacturing Company, Alma, has announced that it will manufacture the Little Giant Hay Presses, which formerly were made in Alma and later by a concern in St. Louis. The company is also getting ready to bring out a new furnace, to be known as the Alma. As announced in a previous issue, the concern, which is a new one, occupies the plant formerly the home of the X-Cel-All-Paint Company.

ANDRIX LOCK-NUT ELECTION

Stockholders of the Andrix Lock-Nut Company, Adrian, have elected the following officers and directors: H. Andrix, president; George D. Harris, Jr., vice-president; George D. Harris, Sr., secretary-treasurer. These officers and W. A. Lowe, C. W. Obee, Theodore Glazer and S. A. Foster make up the board of directors.

ADVANCE PUMP CO. DIRECTORS

The following directors have been elected by the Advance Pump & Compressor Company, Battle Creek: A. E. Blanck, L. B. Anderson, I. N. Moore, Eugene Stewart, P. D. Ferguson, C. A. Flinn and C. B. Halladay.

HODGES BUYS CHAIN RIGHTS

Announcement has been made by C. W. Hodges, Galesburg, Mich., that he has bought the rights, title and interest of Henry Lane in the Kalamazoo Chain Company, which gives him full ownership of all the real estate, patents and chain business located in Galesburg. The name of the concern will be changed to that of the Hodges Chain Company, and a complete line of tire chains and chains for other purposes will be brought out.

UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, WASHINGTON, D. C.

Offers For Sale by Sealed Bids Approximately 110,000 Tons of Surplus Ship Steel, Hog Island, Pa.

Sealed bids will be received in the office of the United States Shipping Board Emergency Fleet Corporation, 1319 F street N. W., Washington, D. C., on or before 11 A. M., March 2, 1921, at which time bids will be opened by the Chairman.

Bids must be submitted on this material f. o. b. cars, Hog Island, on proposal forms which will be furnished on request by the Emergency Fleet Corporation, Supply and Sales Division Offices, Sixth and B streets, Washington, D. C., 140 N. Broad street, Philadelphia, Pa., and 45 Broadway, New York City.

TERMS: Each bid must be accompanied by a certified check in the amount of 10% of the bid. At the time award is made an additional 10% certified check must be deposited to bring the initial amount up to 20% of the purchase price. All material as loaded and weighed must be paid for before release of cars, and the 20% initial payment will be retained to apply on final shipments as made.

No charge will be made for loading, switching or weighing. Movement of the material must be started not later than 30 days after the award of the contract, bidder to stipulate time in which all material purchased will be moved.

The Board reserves the right to reject any or all bids.

Sealed bids should be addressed to the Secretary of the United States Shipping Board, Washington, D. C., and indorsed, "SEALED BIDS FOR SURPLUS SHIP STEEL, HOG ISLAND, PA., and DO NOT OPEN."

Smith-Kinchman and Grylls

Architects and Engineers

"Incorporated 1903" Detroit, Mich.

Digitized by Google

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan **Main 4064**

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building
524 Griswold Street

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks
Investment Houses
Trade Associations

IRENE WILLIAMS
104 South Michigan Avenue
CHICAGO

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.
3 short blocks from Union Station
HOTEL BROWNING, GRAND RAPIDS, Mich.

FREE FACTORY SITES

At Harbor Springs, Michigan.

On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

Today's World Trade Problems

Theme of Eighth National Foreign Trade Convention, To Be Held in Cleveland, May 4, 5, 6 and 7, Announced

AMERICAN Foreign Trade and Its Present Problems" will be the theme of the Eighth National Foreign Trade Convention of the National Foreign Trade Council, to be held in Cleveland, May 4, 5, 6 and 7. The call for the convention, which has just been issued, says in part:

"The foreign trade of the United States, in common with domestic business, is suffering from contraction of credit, or credits, and other contributory causes. To study the causes of this check upon our international commercial activities; to analyze the conditions now confronting our overseas trade, and those it will have to meet in the future, and to endeavor to secure the thoughtful judgment of American business men upon the best methods of solving these problems of vital importance to all the American people," the convention has been called.

"In order that the convention may be equipped with the ability and the experience necessary to consider these problems, and that its judgment may have the value attaching to the well considered opinion of American business," the call continues, "Americans engaged in or desirous of entering foreign trade and connected with any factor of our international commerce, agricultural, commercial, industrial, financial or transportation; all chambers of commerce, boards of trade, national and state associations and other commercial and industrial organizations, as well as firms and individuals, are cordially invited to participate individually or by the appointment of delegates."

The call is signed by James A. Farrell, chairman, and O. K. Davis, secretary, of the National Foreign Trade Council.

The convention will open at 8 p. m., May 3, with a conference of trade advisers, this to be followed by a reception at 9 p. m., given by the members of the Council for foreign and convention delegates.

The first general session will be held at 10 a. m., the following day, the topics to be considered being "American Trade and Its Influence on Foreign Exchange" and "The Causes of Inflation and Its Effect on the Exchanges." At the second general session, at 2:30 p. m., the topics are: "Influence of American Investment Abroad," "The Settlement of Our Export Balance" and "Frozen Credits—What They Are and How to Thaw Them." Group sessions will be held at 8 p. m., the subject to be considered by Group 1 being, "Commercial Education for Foreign Trade;" by Group 2, "Foreign Credits" in co-operation with the National Association of Credit Men," and by Group 3, "Problems of the Export Manager" in co-operation with the Export Managers' Club.

The third general session, at 10 a. m., Thursday, May 5, will take up these topics: "The Effect of Double Taxation on Foreign Trade," "Foreign News and Foreign Trade," "Discrimination Against Foreign Trade," "A Reasonable American Policy for Foreign Loans" and "Adequate Foreign Service Essential to Our Foreign Trade." Group sessions will be held in the afternoon, Group 4 taking up special export problems of the manufacturer, in co-operation with the American Manufacturers' Export Association; Group 5, foreign trade advertising; Group 6, inter-American trade relations, and Group 7, the interest of agriculture in foreign trade, in co-operation with the American Farm Bureau Federation.

At the fourth general session, at 10 a. m. Friday, American maritime policy, marine insurance, inland transportation for foreign trade, and return cargoes will be considered. In the afternoon Groups 8, 9 and 10 will have their meetings, the first discussing banking service to foreign trade, in co-operation with the American Bankers' Association; the second, merchandising and forwarding, in co-operation with the American Exporters and Importers' Association, and the third, trade relations with the Far East.

The fifth and final general session will be held Saturday morning at 10. At this meeting the reports of the group sessions will be received and the final declaration of the convention formulated.

A registration fee of $10 is required from each delegate, and none but registered delegates will be permitted to participate in the convention. The proceeds of registration will be used to defray, in part, the expenses of the convention and to print the official proceedings, a bound volume of which will be sent to each delegate. Payment may be made at the time of personal registration at the Hollenden Hotel, or by check in advance to the National Foreign Trade Council, 1 Hanover Square, New York.

The annual banquet will be held the evening of Friday, May 5. Dress will be formal.

The names of the convention speakers have not been made public.

Copper Country Sees Situation Improving

The outlook in the Michigan copper district is beginning to brighten a little, according to reports from Houghton. Last week a shipment of 500,000 pounds was made to the Detroit Copper & Brass Rolling Mills and loading was started on a consignment of 560,000 pounds to Germany. This refers to activities at the Copper Range mines, Baltic, Champion and Trimountain. So far as is known, the Calumet & Hecla has not as yet received any new business from Germany. Some of the other mines in the district are practically idle.

The Copper Range, according to the Houghton Mining Gazette, is taking on men, especially at its Champion mine. Normally there are 1,200 men at the mine. Baltic and Trimountain now have from 40 to 50 per cent of their 1915-1916 force. Production at the three Champion shafts has been increased and is now 1,400 to 1,600 of selected rock, as compared with 1,000 two months ago. At the Baltic 16,000 tons of rock a month is now coming out, or 3,000 tons more than 60 or 90 days ago. The output at the Trimountain is 8,000 tons a month, also a substantial increase over two months ago.

MAYES BROS. TOOL ELECTION

At the annual meeting of the Mayes Brothers Tool Manufacturing Company, Port Austin, the following officers were elected: Frank Kinch, president; George S. Farrer, vice-president; H. S. Finan, secretary-treasurer. The directors are Lawrence Yaroch, Sr., S. J. Wallace, Frank Kinch and M. H. Mayes.

McLOUTH SHIPYARD BUSY

The McLouth shipyard, in Marine City, is reported to have a number of important jobs which are keeping the works busy and probably will keep it at capacity for some time to come. Most of the work is repairing and rebuilding of lake craft.

Digitized by Google

EDWIN DENBY

Something About the New Secretary of the Navy



EDWIN DENBY

Edwin Denby, who, it was reported early this week, had been selected by President-elect Harding to be Secretary of the Navy, is one of Detroit's most distinguished citizens—lawyer, manufacturer, banker, former congressman and a leader in civic affairs.

Born at Evansville, Ind., he went with his father and mother to China when a young man, the elder Denby having been appointed United States minister to that country. While in China Mr. Denby entered the employ of the Chinese Imperial Maritime Customs Service, where he remained seven years. He returned to Detroit in 1894 and matriculated at the University of Michigan, being graduated in 1896. Thereafter he went into the practice of law in the offices of Keena & Lightner, later participating in the organization of the firm of May, Denby & Webster. Afterward he headed the law firm of Denby, Kennedy & O'Brien. When the Spanish-American war broke out he, being a member of the Naval Reserves, was assigned to duty as a third-class gunner's mate on the gunboat Yosemite, and saw considerable fighting.

After the war he resumed the practice of law in Detroit and in 1902 was elected to the Legislature. In 1904 he was sent to Congress to represent the old First district, which at that time embraced most of Detroit. He was twice re-elected.

When he re-entered private life he resumed the practice of law and became interested as well in business and finance in Detroit. He became vice-president of the Denby Motor Truck Company, was one of the original stockholders of the Hupp Motor Car Corporation and was elected a director of the National Bank of Commerce. When the Bankers Trust Company was organized he was made a vice-president.

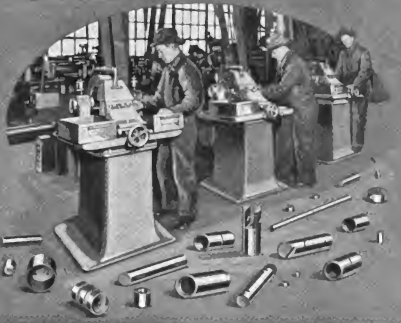
When America entered the World War Mr. Denby, to set an example for the young men, enlisted, after considerable difficulty because of his age, as a private in the Marine Corps, being advanced later first to corporal, then sergeant, then second and first lieutenant, captain and major. He saw service both at home and in France. Last year he was a candidate for Governor on the Republican ticket, but withdrew before the primaries. Lately he has been chief probation officer of the Municipal Courts.

CARBONIZING CYANIDING SMALL

HARDENING AND GRINDING

ANNEALING & TEMPERING STRAIGHT CYLINDRICAL





HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins
Valve Roller Pins
Roller Clutch Pins

Dowell Pins (Hardened Straight)
Oil Pump Plungers
Ball Bearing Ring Rolls (Straight)
Differential Cone Pins

Headless Shackle Bolts
Universal Joint Pins
Small Gear Shafts

Detroit Machine Tool Company

6945 St. Antoine St. Telephone Market 575

Digitized by Google

MORTON AUDIT COMPANY
1201 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS

INCOME TAX RETURNS
CORRECTLY MADE OUT
BY
CERTIFIED
PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:
Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.
Name .....
Business Address .....
Home Address .....
Date .....
THE WICKES BOILER CO.
SAGINAW, MICHIGAN

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602 680 Fort St., E. DETROIT

J. J. Stoddard PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

MOTOR CAR DEALERS ORGANIZING

Guy O. Simons, president of the Simons Sales Company, Willys-Overland distributors in Detroit, as regional director vice-president of the National Automobile Dealers' Association has been addressing meetings of dealers in Lansing, Jackson, Bay City, Saginaw and Flint preparatory to the organization of the Michigan Automobile Dealers' Association.

GMC CHANGES BUILDING NAME

What is now known as the Durant building, the office structure of the General Motors Corporation, Grand Boulevard, Detroit, hereafter will be officially known as the General Motors building and will be the general headquarters for the corporation. The Chevrolet building, 224 West Fifty-seventh street, New York, also has been changed to the General Motors building, New York branch.

FIRST ROLLS-ROYCES COMPLETED

The first of the American-made Rolls-Royce sixes have been completed at the plant of Rolls-Royce of America, Inc., in Springfield, Mass. It is said that the company has orders for at least 75 of its chassis at this time, or $862,000 of business. The chassis sells at $11,500, which is said to be the highest price in the American market. According to the Wall Street Journal, profit on each chassis, after charges, is around $2,000. It is expected that capacity production will be about one chassis a day, or 300 for the year. All bodies are custom built.

MULTOMETER CORP. REORGANIZED

The Multometer Corporation, Philadelphia, in which several Michigan men are interested financially, has been reorganized, with Arthur Brook, Jr., Philadelphia, as president; Robert W. Blair, of Blair & Rothfus, Detroit, vice-president; Thomas J. Buckley, Philadelphia, secretary-treasurer, and E. E. Carroll, assistant secretary and treasurer. The board of directors includes Frederick R. Johnson, secretary of the Packard Motor Car Company, Detroit. The corporation has a capital stock of $2,500,000 and makes a variety of accessories such as speedometers, multometers, lubrication indicators, tire valves, truck meters, clocks, etc. It is expected that the plant will be in full production by June.

NAPOLEON MOTORS ELECTION

Election of officers of the Napoleon Motors Company, Traverse City, resulted as follows: President, W. J. Chase, vice-president, Frank Trude; secretary-treasurer, W. G. Rath; general manager, C. D. Peet. Directors: the officers and E. G. Arntz, L. W. Smith and Frank Brooker. The company has declared a stock dividend of 8 per cent and an additional 2 per cent, payable in script redeemable in cash August 1, 1921.

U. S. CARS AT SCOTTISH SHOW

American automobiles, next to British-made cars, predominated at the annual Scottish automobile show, held in Glasgow. The following cars were shown: Hupmobile, Buick, Dort, Chalmers, Packard, Jordan, Milburn Electric, Chevrolet, Mitchell, Maxwell, Oakland, Overland, Oldsmobile, Paige, Dodge, Essex, Hudson and Cadillac.

REGISTRATION BOOKS READY

Books giving the motor vehicle registrations in Michigan have just been issued from the press, and will be sent by the state to each county clerk and chief of police in cities of more than 10,000 population. The book will be sold to residents of the state for $25 and to non-residents for $50. The cost of the publication is about $20,000, but the charges to private individuals are expected to help defray this expense. While the licenses this year were issued from 68 offices, the numbers are given in numerical order, and by the use of an index there will be little difficulty in finding any particular number, which was not true last year.

PAGE JOINS O'CONNELL TRUCK

Robert E. Page, formerly field agent of the Nelson Motor Truck Company, Saginaw, is now general sales manager of the O'Connell Motor Truck Company, Waukegan, Ill.

DURANT'S NEW SALES PLAN

When the new Durant car, to sell for less than $1,000, is ready for the market, it is said that Mr. Durant will seek representatives from among salesmen who have made records in other lines, but will not give an agency to any company or person who has sold cars of other makes. The first car is now nearing completion in a plant on Long Island and production will be started in August in a factory in Flint, according to report.

MORE PLANTS BACK AT WORK

Fisher Body Corporation plants on West End avenue, at Forest avenue east and Grandy avenue and at 722 Forest avenue east, Detroit, have resumed operations. The American Motor Body Company, formerly the Wadsworth Manufacturing Company, Detroit, has put between 500 and 600 men at work building sedan bodies for the Ford Motor Company. The Muskegon Motor Specialties Company, Muskegon, is running with one-third the regular force, six days a week.

ROWLEY WITH NASH MOTORS

W. O. Rowley, formerly sales manager with the Siegel-Zeckendorf Company, is now with the Detroit branch of Nash Motors.

PREDICTS 1921 TIRE DEMAND

The 1921 tire demand, according to John J. Watson, Jr., president of the Lee Tire & Rubber Company, New York, will approximate 30,000,000. He bases this estimate on a probable car production of 1,000,000 and a scrapping of from 500,000 to 750,000 old cars.

ELECTRIC AUTO-LITE ADDS WORKERS

A gradual increase in business has prompted the Electric Auto-Lite Corporation, Toledo, subsidiary of the Willys Corporation, to call back to work 200 employes, making the force at work now 350, as compared with a normal payroll of 3,000.

BOLLSTROM MOTORS CHANGE

The Bollstrom Motors, Inc., St. Louis, Mich., has withdrawn its connection with the Bollstrom Engineering Company and henceforth will be a separate company. F. C. Ohland, secretary and treasurer, has resigned.

BUICK'S JANUARY SALES

It is reported from the plant offices of the Buick Motor Company, Flint, that the company sold 1,700 cars in January.

HYATT INCREASES FORCE

The Hyatt Roller Bearing Company plant at Paterson, N. J., is gradually increasing its working force as orders for product are received.

Digitized by Google

FLINT'S 1921 SHOW MARCH 2-5

The Flint Automobile Dealers' Association announces that the annual Flint motor show will be held in the Buick building, March 2 to 5. The association, which includes most all of the local automobile distributors and dealers, is making efforts to have the biggest and best display of cars ever shown in the city. While the decorative effect of the show room will be most attractive, the endeavor will be directed toward making the visitor more interested in the automobiles than in the decorations. It is a well-known fact that in connection with many shows held in recent years throughout the country, a large percentage of the visitors came more especially to look at the decorations than at the cars.

OAKLAND SALES HEADS CONFER

Headquarters and field sales executives of the Oakland Motor Car Company held a three-day conference at the factory in Pontiac this week.

WILLS SHIPPING CARS

C. H. Wills & Company, Marysville automobile manufacturers, have begun making shipments of their cars, the Wills-Ste. Claire. The first consignment, which left the factory Saturday, February 19, went to New York and Chicago, and the second consignment to Philadelphia and Boston. Robert S. Potter, vice-president of the National Shawmut Bank, Boston, was the first purchaser. The first car was completed February 12. Mr. Wills drove it 65 miles an hour on a final test run.

BENTON HARBOR CASTINGS CO.

The annual meeting of the Benton Harbor Castings Company, Benton Harbor, resulted in the election of F. L. Bradford as president, E. C. Bowlby, vice-president; H. S. Gray, secretary, and J. B. Kovar, treasurer. The directors include the officers and W. F. Benning, S. W. Trick, W. S. Robinson, L. N. Allen and H. A. Furber. It is announced that James A. Wolf has purchased a substantial amount of stock in the company and has become superintendent.

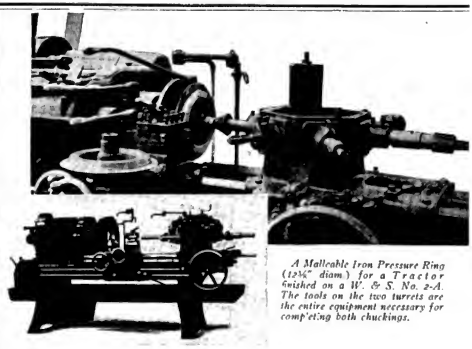
PARIS TRAVEL BUREAU OPENED

The Equitable Trust Company, New York, has opened a travel service bureau in Paris, France, under the direction of an expert. Travelers from the United States will be enabled to obtain suggestions as to the most desirable hotels, rates and accommodations and purchase of railway and steamship tickets, besides foreign trade information, market news status of commodity markets and any other information necessary to the American business man or traveler abroad.

STATE BANK AT WEST BRANCH

The Ogemaw County Bank, West Branch, a private institution since 1899, has incorporated as a state bank and plans to open as a state institution about April 15. J. McNay Ealy will be president and R. C. McKay, cashier. Directors, in addition to these officers, will be Peter Pardee, of Reese; John McKay and W. T. Yeo, West Branch.

At the annual meeting of the Truscon Steel Company, held in Detroit, Monday, February 21, it was voted to increase the capital of the company $2,000,000. The probabilities are that the increase will be effected by the means of a stock dividend, although such action was left to the board of determination. While the annual statement is not yet for distribution, the surplus is estimated to be about $3,000,000, which would seem to presage the stock dividend as a probable outcome. Capital-bones as per the last statement at hand were $2,500,000 7 per cent preferred and $2,000,000 common. The secretary's report speaks of very profitable business during the first 10 months of 1920 with very good prospects when conditions become normal.



A Malleable Iron Pressure Ring (12¾" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x 44"—21" Swing to ⅝"x 4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office—Ford Building
Chicago Office—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6:30 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

MAIN 1491
SPRUNK
ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Washington—Violations of rulings made by the Interstate Commerce Commission relative to the shipment of coal into Detroit, which are costing Michigan manufacturers $1,120,000 a year, are charged in a bill of complaint against 63 railroads filed by the Michigan Manufacturers' Association with the I. C. C. It is alleged that roads bringing coal from the Hocking Valley, Inner Crescent and Outer Crescent districts are obtaining 16 cents more a ton on shipments than allowed by the Commission and that the basic shipping point has been moved to West Virginia, even for coal coming from Ohio. A few years ago the Commission established a 40-cent differential between Ohio and Eastern coal shipments, but when the 40 per cent increase in rates became effective the base for coal moving north into Detroit was changed to West Virginia, it is charged.

Saginaw—J. H. Shenck has informed the Board of Commerce that a new freight line will be established between the city, Detroit, Bay City and Harbor Beach.

Detroit—State Highway Commissioner Frank F. Rogers has made plans for a paved highway across Michigan, from Detroit to Benton Harbor, as part of a 300-mile stretch to Chicago. Work is to be started this spring on a 25-mile gap between Detroit and Jackson. Asphalt and concrete surfacing will be used. The road will be built with federal aid and will cost about $20,000 a mile.

Grand Rapids—The Pennsylvania Railroad Company's Michigan division, which reduced its working force in the maintenance of equipment department in January, resumed this work in this division Monday. The notice states that 80 per cent of the men will be re-employed.

Washington—As a result of an agreement between state officials of Michigan and Wisconsin, reached at a conference in this city, Michigan's protest against an increase in intrastate passenger rates to 3.6 cents a mile, in conformity with interstate rates, will be included with that of Wisconsin, which is being heard by the United States Supreme Court. Nineteen other states also have joined with Wisconsin, so that the decision of the court will decide the issue in all of these states. The Michigan case is still before the United States District Court, Detroit.

Detroit—Representative business men of Flint have called on President Frank H. Alfred, of the Pere Marquette, to request that a branch line be laid in Flint to serve the Dort plant and also the new Durant plant. Mr. Alfred replied that the construction of such a line would be impossible at this time, as the Government had not adjusted the company's claim for several millions of dollars rental for the use of the lines. Mr. Alfred did agree to present the matter to the board of directors.

Toledo—The lake steamer Denmark has been towed to the docks of the B. & O. Railroad and is expected to be loaded soon, thus being the first lake boat being made ready for opening navigation on the Great Lakes. Reports from marine men say that the movement on the upper lakes may be started much earlier this year as the ice on Lake Superior is already disappearing.

INJUSTICE TO WALCOTT LATHE CO.

In connection with an article, "The Lathe Family," in the February 19 issue of the Michigan Manufacturer & Financial Record, seven illustrations were used, four of them appearing on Page 9. One of the four illustrations should have been designated as a Walcott lathe in use in the plant of the Detroit Gear & Machine Company, but by accident the name of the lathe was omitted, while all the other machines illustrated were properly identified. Realizing that this inadvertence, although unintentional, was an injustice to the Walcott company, the paper takes this means of rectifying it.

NORTHRUP LOCK ABOUT READY

The Northrup Lock Company, Brighton, is expected to start operations within the next sixty days. This is a new concern which will manufactcnre other articles of hardware besides the lock. The company plans to sell $50,000 of its stock in Brighton. According to reports, $22,000 of stock was disposed of recently within 24 hours.

CHAIR WORKS EXPANDING

The plant of the Oak Chair Works, Williamston, is being enlarged. The company specializes in designing rockers and dining chairs.

TARIFF ON SALT ASKED

The Mulkey Salt Company, of Detroit, has asked Michigan congressmen to use their influence to obtain a duty of $7.50 a ton on foreign salt. In explaining its suggestion, the company refers to German competition and states that American firms cannot compete with the German salt makers for the following reasons: Wages paid in Germany are lower than in the United States; extremely low ocean freight rates on salt, which in some cases actually do not exist because the salt is taken on for ballast purposes; increase of freight rates in this country to 111 per cent in three years, and the low value of the mark in foreign exchange. The freight rates and packing alone of domestic salt to be delivered to New York are said to be more than the price quoted for the German salt at eastern seaports.

WATERVLIET PAPER ELECTION

The following officers and directors were elected at the annual meeting of the Watervliet Paper Company, Watervliet: William M. Loveland, president; Charles B. Hays, vice-president; August B. Scheid, treasurer; F. D. Gilchrist, Director, the officers and J. B. Balch, W. M. Baldwin, R. A. Le Roy, Fred Scheid, John A. Pyle and Harrison Geer.

RETAIL HARDWARE ASSN. ELECTS

The convention of the Michigan Retail Hardware Association, held a few days ago in Grand Rapids, resulted in the election of the following officers: Norman D. Fopp, Saginaw, president; Charles A. Sturmer, Port Huron, vice-president; Arthur J. Scott, Marine City, secretary, and William Moore, Detroit, treasurer. The executive committee is composed of J. H. Lee, Muskegon; A. J. Rankin, Shelby; L. J. Cortenhof, Grand Rapids; Scott Kendrick, Ortonville; George W. McCabe, Petoskey, and George L. Gripton, Britton.

BUSINESS REPORTS OPTIMISTIC

A review issued this week by the Chamber of Commerce of the United States says that reports received from practically every section of the United States agree that the worst of the business depression has been passed and that from now on a steady, if slow, improvement is to be expected. "The most convincing evidence that we are on the high road to recovery is found in the report from every section of the country of steadily growing sentiment that 'business will be better in the spring,'" the review says.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

Digitized by Google

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—The week ended February 19 gave evidence of improvement in building activities. The report of the city building department shows that 284 permits were taken out, or 76 more than during the preceding week. The outlay represented was $694,990, as compared with $467,050, an increase of nearly $230,000. However, when compared with the corresponding week in 1920, the record is not so impressive, inasmuch as the cost for buildings a year ago for the same week was $3,062,000.

The list of contracts awarded during the two weeks ended February 17 does not show many important industrial projects, according to the lists furnished by the Builders and Traders' Exchange. Among the jobs awarded by contractors were the following: A steel sizing plant and boiler house for the Semet-Solvay Company; a two-story dormitory for the Wayne County poor commission; a high school building; a garage for G. J. Buckley, at Grand River near Kirby avenue. Sub-contracts were let as follows: Granite and re-enforced steel for the 18-story Julius Stroh building; roofing, sheet metal, painting and glazing for an office and store building, and a motor bus comfort station to be erected by the city at East Grand Boulevard and Jefferson avenue. It was also announced that W. S. Holmes, Lansing, let the contract for a brick and steel school building to be located in Monroe to Gratton Bros., Lansing, on a bid of $115,550. There were eleven other bidders. Among projects announced from the offices of architects as awarded was a five-story concrete warehouse.

As for projects in the hands of architects, the list shows a decided increase over the previous two or three weeks. The list includes the following: A 6-store and 6-flat building; a 5-store and 5-flat building, brick and steel construction; a brick veneer flat building; a 6-store and 6-flat steel and stone trim building, with 10 garages in connection, and a two-story residence and four-car garage. A variety of other construction includes a three-story brick and stone sales and service station; a two-story brick engine house; a 4-room brick grade school building; a brick and steel reinforced concrete lodge building and a three-story brick constructed sales building at Flint. There are also a brick reinforced garage and service station; remodeling of the five-story and basement warehouse for the Whitaker Paper Company; a four-story store, University of Detroit unit; a two-story and basement brick and stone school, to be erected in Grosse Pointe, and a two-story and basement 8-room school building.

Lansing—S. S. Riley, president of the Central Michigan Fanciers' Association, and others are backing the proposition to utilize the old bricks torn out of the East Michigan avenue pavement for the construction of a municipal show room and auditorium for automobile and machinery shows, trade and stock exhibitions.

Grand Rapids—The week ended February 11 was a decidedly better one than the previous two. The number of permits taken out was 23, or five more than during the preceding week. The cost involved was $66,025, as compared with $10,425. The two largest items were for a cement foundation for a church, to cost $13,000, and a residence, to cost $14,000.

Lansing—The Ideal Power Company, Lansing, is increasing its operations, and will be obliged to enlarge its facilities. The company is now employing about 175 men and turning out 40 complete mowers daily. The old plant of the Lansing Body Company, purchased some time ago, will be improved and additions built. The body company is liquidating its stock and will probably be out of business by May 1.

Detroit—Plans are being drawn for a new school of Commerce and Finance building for the University of Detroit, the building to be four stories high, 55x200 feet and to cost $200,000. It is to be completed by October.

Kalamazoo—During the week ended February 12 six permits were taken out, involving an expenditure of $8,930. During a corresponding week in 1920 two permits, representing $5,200, were issued.

Grand Rapids — The Owen-Ames-Kimball Company has been awarded the contract to build the coal pulverizing plant of the Grand Rapids Malleable Iron Works, to cost about $35,000. J. Herman & Son have been given the contract for foundations for the new plant of the Noon Lake Ice Company, to be constructed at Summer and Bowery streets, and which will cost between $80,000 and $100,000.

Detroit—Daniel B. Luten, Indianapolis engineer, has submitted a plan for the Belle Isle bridge to the common council, which provides for a reinforced steel and concrete span to cost $2,400,000 or $2,200,000, according to the type of approach desired for the Island end. This estimate is nearly $2,000,000 lower than any of the bids submitted by engineers who have figured on the work. As the matter stands now the voters must agree to an increase of about $2,000,000 before the bridge can be built according to present plans. Mr. Luten asks 10 per cent of the cost estimate as his fee. Following the announcement of Mr. Luten's suggestion, the Detroit Engineering Society sent a communication to the common council urging that no bridge plans be made or accepted unless approved by prominent engineers and suggesting that a board of five engineers be appointed to examine all plans. The society asks the council not to accept plans for a cheap bridge.

Jackson—The S. S. Kresge Company has taken in over the building to remodel the lower floor of the Carter building at a cost of $25,000 preparatory to opening a new store to be known as the 25 cents to $1 store.

Detroit—With the total during 1920 industrial building reached a valuation of $12,000,000, the total value of all building during the year approximating $20,000,000, according to figures made public this week by the Department of Building.

Lansing—A. T. Vandervoort, retail and wholesale hardware dealer, has begun the construction of another warehouse on property leased from the New York Central Railroad. This is the third warehouse Mr. Vandervoort has built on the tract.

Detroit—The Associated Building Trades Employers' Association of Michigan has passed resolutions recommending a 20 per cent reduction in wages of building trades employes throughout the state.

Washington—Retail lumber dealers, before the ways and means committee of the House, declared that a tariff on lumber would increase the lumber bill of the American people about $80,000,000 annually and greatly reduce all kinds of building, for which reasons the retail lumber trade was opposed to any tariff.

Detroit—When the action of the American House Wrecking Company against Henry Ford and Edsel Ford and the Ford Motor Company to recover damages for loss of contract to wreck the River Rouge naval training station was brought before Judge Ormond F. Hunt in circuit court last week, Judge Hunt dismissed the suit on the ground that it had been brought into the wrong court. It should have been, he said, a replevin action. The plaintiff claimed to have lost $60,000 as a result of losing the contract, and that the Fords were to blame by reason of delays in the progress of the work caused by them.

Jackson—Three permits were taken out in the city during the week ended February 5. The outlay represented was $6,050.

HOLLAND CASHIER CELEBRATES

Henry Luidens, cashier of the First State Bank, Holland, celebrated the thirtieth anniversary of his connection with the institution, February 22.



Mono Rail and Electric Hoist Systems

Installed by "Northern" Engineers will yield wonderful savings in many factories.

We would like to tell you more about

NORTHERN HOISTS

labor saving products if you are interested. Are you? Ask us--

NORTHERN CRANES — NORTHERN HOISTS

Northern Engineering Works

DETROIT, MICH.

Digitized by Google

Supreme Court Decision On Assets Sales Tax Pends

On December 16, 1920, there was decided before the district court of the United States for the District of Connecticut the case of Frederick F. Brewster vs. James J. Walsh, collector of internal revenue for the district of Connecticut. The point at question concerned income derived through an increase in value of capital assets when realized by sale, or other disposal, by one not a trader therein.

The decision was against the collector, it being held that income derived from sale of capital assets was not taxable income. An immediate appeal was made to a higher court.

This case is now well known in industrial, legal and accounting circles. However, a question has arisen from the practical application of this decision in its relation to 1920 returns.

Can the case be considered as authority for not reporting income realized from the sale of capital assets?

There can be no doubt of the fact that until a higher court reverses the opinion of the district court of Connecticut the case will stand as the law of the land. Whether the U. S. Supreme Court will agree with the lower court is, of course, not known. The case is pending. However, it seems to be the opinion among many accountants, attorneys and executives of high rank that the district court will not be supported in its opinion by the higher court. If this is true, individuals, corporations and industries at large relying upon this decision to save them from reporting heretofore taxable income earned during the year 1920 will be obliged to file amended returns covering the profit in question.

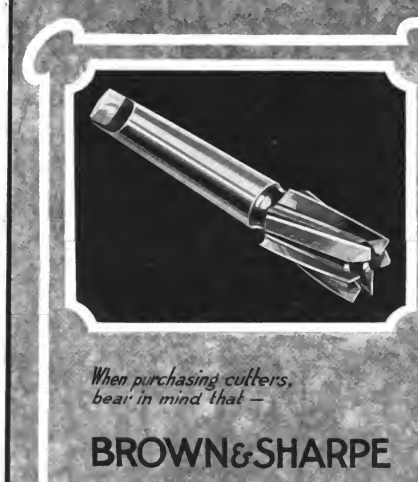
For this reason it would seem advisable at the present time to hold up all returns where a question is involved regarding taxable profit on the sale of capital assets until a later date, says Wesley W. Richards, manager of Jonathan B. Cook & Company, public accountants, Muskegon. It is, of course, not necessary to file returns before March 15, and it is not improbable that a decision of the higher court will be handed down prior to that date, or that one of the smaller cases pending in other courts throughout the country will be decided before that time.

The fact that a taxpayer does not claim a deduction from profits does not, of course, stop him from filing an amended return at a later date should the case carry through the supreme court.

GROUP SEVEN BANKERS MEET AT FLINT

About 175 bank officers and directors of Group Seven of the Michigan Bankers Association met at Flint Tuesday of this week for the annual spring meeting. The delegates assembled at the new Durant Hotel at noon and at 1:30 all sat down to luncheon as guests of the Flint banks. After the luncheon the ladies departed to attend a function of their own and left the male contingent to go into the program, the principal numbers of which were a talk by R. B. Locke, manager of the Detroit Federal Reserve Bank, on general business conditions, and a paper by R. M. McConnell, vice-president of the National Bank of Commerce, Detroit, on the subject of "Financing the Automobile Dealer." The substance of Mr. McConnell's remarks was that the dealer was making a mistake by discounting his paper with the various finance companies which operate throughout the state, for the reason that the paper eventually is shouldered by the banks and therefore it should come to them in the first place.

The question box, which is an important feature of the Group Seven meetings, was in charge of Horace Potter of the Citizens Commercial and Savings Bank, Flint, and the usual keen interest was shown in this department. C. S. Mott, president of the Industrial Savings Bank, Flint, gave the address of welcome



When purchasing cutters, bear in mind that —

BROWN&SHARPE

Carbon & High Speed Steel

CUTTERS

Give highest returns per dollar invested.

B&S cutters are the result of fifty years' experience in the manufacture and use of milling cutters. The shops around you will insist that B&S cutters give longest service and reach the maximum of Cutter Economy. They know from experience.

BROWN & SHARPE MFG. CO.
Providence, R. I.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, FEBRUARY 26, 1921

Things May Look Up Now

THE GREATEST single consumer of manufactured products in the United States is the railroad system. That industry came out of the war in bad physical condition, as was natural because it had gone into the war in poor condition, had been subjected to immense strain during the war and had little improvement made upon it while it was subject to the war-time strain. When rehabilitation was apparent on the return of the railroad properties to the control of their private owners, the funds were not available. The government owed the railroads more than $600,000,000, which was not repaid. Increases in passenger and freight rates were authorized, but the sum of these seems to have been taken up by the increased labor costs which were authorized during the governmental regime. It seemed reasonable, therefore, that the debts which were due by the Government should be settled as soon as possible, to make the resources of the companies available for betterments. However reasonable this may have seemed, the state of the law was interpreted by the Government's officials to be that until an exact settlement of each account could be arrived at, no partial payment on such accounts could be made. A marked example near at home was that of a sum owed by the Government to the Grand Trunk Railroad. The bulk of this account was undisputed and payment of the whole sum hung on settlement of some few minor items. So the railway company had to bring some form of suit against the Government to bring about a settlement. The same situation seems to apply to every railroad account with the government.

The history of Government accounting and settlement of war-incurred obligations indicates that they are almost interminable, so that the situation which existed in regard to the payment of the Government's obligations was very far from promising. The House bill, in Congress, providing for partial settlements in the way of payment for undisputed items in the Government's guaranty of return for the use of the property of the railroads was intended to cure the situation, and did. That it has now passed the Senate and gone onto the President for his approval is an indication that the railroads may now undertake rehabilitation as soon as they come into possession of what is due them. That Senator LaFollette, of Wisconsin, tried to prevent the passage of the bill in the Senate simply indicates what a cheap old skate Senator LaFollette is, in that his anti-corporation virus poisoned his system against a proceeding manifestly just and gave him a new opportunity to appeal to base sentiments.

With the railroad payments in the way of being made, there is promise of better things in the way of supplying railroad materials. There is a bad condition of existing tracks and bridges affecting a large percentage of the railway mileage of the country. There is a bad condition of motive power affecting all but the very great systems. The car shortage for normal business is quite as pronounced as it was in times of normal demand, despite the fact that the abnormal conditions have released 300,000 cars and upwards from the demands of the service. The reopening of business will mighty soon catch up with this temporary oversupply and bring about a shortage again. The railroad managements are thoroughly informed about these conditions and the availability of money to provide for betterments can have no other effect than to bring about orders which will revivify steel mills, put foundries and machine shops into work and make a demand for timber. The promise of speedy settlement of the railroad claims against the Government means a very large drop in the bucket of improvement for general business conditions.

The Hardest Blow at the Private Banks

PERHAPS the strongest blow that has been struck against the continuance of private banks in Michigan is that which comes out of the death of "Deacon" George Ellis, of Grand Rapids, and the condition in which his death seems to leave the depositors in his private bank. George Ellis was an honest and a forceful man, despite the fact that he was unconventional and a bit contentious. A student for the ministry, a homesteader in the West, a baseball manager, a professional pool seller and gambler, a public official with a keen sense of duty who always kept his feet on the ground, a controversialist with the order of things that are, George Ellis had seen a good deal of a good many sides of life. Among them was banking, and he decided to have a fling at that. He paid a higher rate of interest than his state-organized competitors, and attracted depositors. He kept his banks open from an early hour in the morning to a late one at night. He invested his depositors' money very largely in municipal bonds, which were very safe and fairly liquid. He got his share of the bumps, no doubt, but he played his banker game along lines which tended to minimize his share. He kept a safe reserve in cash. He was a man in middle life, pretty healthy, and with no pressing notice that he was near the jumping-off place and should make provision for the segregation of his banking assets and liabilities from those which were purely personal. He was accounted a rich man in his own right. He gathered in nearly four and a half millions of deposits, and his private bank was the biggest one in Michigan, although it was far from being the greatest in the United States, as some of the perfervid writers about it now declare.

But George Ellis had not counted on death and succession in his banking business. A bank must have continuity. It cannot close up shop on one day with the status of a bank, and fail to open up on the morrow because its owner has died during the night and his death put deposits and resources into

Digitized by Google

the status of claims against his estate and assets thereof, respectively. His checking accounts cannot be subject to withdrawal at will one day, and the next be in the status of claims to go before the commissioners on claims appointed by the probate court. There seems to be even no probate law to expedite the settlements, so that the death of Mr. Ellis, equally as the death of any other private banker, leaves a condition of moratorium, so far as the depositors are concerned, that must extend through the six months required by commissioners to consider and report on claims. In other words, the private banker's credits to his depositor customers have become simply valid claims against his estate, to be distributed in the orderly way provided by law for the distribution of the estates of deceased persons.

There is no doubt that George Ellis' depositors will eventually be paid in full. But that was not their implied contract when they deposited their money. The time that they were to be paid was not eventually, but now, if they chose to call for their assets. There are 15,000 of them, it is said. So that the emergency of death in a business which could have gone on in beautiful shape during life has interfered with the business plans and relations of 15,000 people, if not to embarrass them, at least to cause them annoyance and fears lest their funds be not again available for use.

George Ellis' private bank was easily the best example of the system that Michigan has ever had, and it has turned out not to be death-proof, which, after all, a bank should be if it is to serve its purposes. The great success of Ellis' venture has simply exaggerated the danger which grows out of lack of continuity. There is no cure for such a situation by requiring private bankers to segregate these trust accounts from their general property holdings; because such segregation would bring another element of weakness, namely, the establishment of a relation of trusteeship which might be construed as not making available, in a pinch, the private resources of the banker.

If George Ellis had lived, he might have found a way to correct this weakness, because he was a very resourceful and scrupulously honest man. But he who counts on death waiting on his plans counts on that which he may not control.

The Harmfulness of Exaggeration

EVERYBODY is pleased at every item of improvement in industrial conditions in Michigan and elsewhere, and everybody is taking account of such items as they are announced. Such items are being daily made public, but nothing is to be gained—indeed very much harm is done—by exaggerating the statements of improvement. This harm comes out of the fact that every interest involved is on the qui vive to be accurately informed concerning the improvement of business conditions. These interests include labor, as represented by the men who are out of employment; banking, as represented by those who will have to provide the banking facilities required by active industry; transportation, as represented by those who will have to provide the facilities for rolling raw materials in and fabricated products out, and a host of lesser but proportionately important interests. A series of statements of fact of improvement in conditions will bring these interests into harmony with the situations as they accrue and find them quite ready for the return of normal activities. A series of false alarms can only be harmful in leading labor to be over-expectant and banking and transportation to be under-prepared.

Short Measure Stuff

SINCE THE BOYS FEEL THAT WAY, OF CORSET STAYS OFF

IT IS SAID that Grand Rapids girls check their corsets the same as they do their coats, hats and rubbers when they go to public dances there and the girl that does not either go without her corset or check it is not asked many times during the evening to dance.—From the Coral (Mich.) News.

* * *

IF THE SUPPER IS THAT GOOD, THEY OUGHT TO BE

When you come to the chop suey supper at the town hall Friday evening, you will think you have dropped into a city Chinese cafe. Be sure to come and get a good supper and the decorations will be worth the price. Price 35 cents.—From the Danville column of the Ingham County News, Mason, Mich.

* * *

DID ANYBODY EVER SEE THE WIFE OF AN OLD GRAY MARE?

Members of the Old Gray Mare club, together with their wives and guests to the number of 50, held their annual banquet at Hotel Belding, Tuesday night.—From the Belding correspondent of the Ionia Sentinel-Standard.

* * *

WE'LL BET A COOKIE YE ED DOESN'T CARE FOR THIS PROPOSITION

An effort to build a road from the Gulf of Mexico to some place on Lake Huron as a monument to P. T. Colgrove is on foot and a lot of hot air was spilled on the project at Stanton last Monday.—From the Coral (Mich.) News.

* * *

ENTER THE FIRST ROBIN SWEEPSTAKES

Entries for the First Robin Sweepstakes are still being received. Yesterday we worked in our own garden, spreading breakfast food for the early birdies. Afterward we took a post of vantage and waited for the robins to appear. There were sparrows of all kinds, pacifists, militants, gluttons, some who merely came to scratch, but no reds. We were reluctantly called from the scene of action by the head of the house, who insisted that there was work to be done. Of course, we wouldn't have claimed the prizes had we won, but we might have tried to capture said robin and asked where his cousins and nephews were headed for, in the interest of other entrants. Watch for him.

* * *

The son whose father once personally conducted him to the woodshed for disciplinary purposes now gets even by taking the old man to father and son banquets and making him listen to the after-dinner speeches.

* * *

She doesn't scold
'Bout anything;
I bet she wants
Some togs for spring.

* * *

With Charles Evans Hughes secretary of state, there won't be quite so many scraps on paper. —A. F.

These false alarms have been repeated in Detroit and Michigan during the past few weeks, and are wholly the result of inaccurate reporting by the daily press or of an actual desire to misrepresent conditions for the purpose of selling papers. For instance, a Detroit paper announced the other day that the C. R. Wilson Body Company, of Detroit, would immediately put on 600 men. The actual number was one-third of 600. The American Motor Body Company was announced as starting last Monday with a force of 2,000 men. A body of 600 was nearer the fact. The Ford Motor Company was announced as adding 4,000 men to its force. The fact, as far as can be found out, was that 2,000 men were asked to go back to work. Similar statements about the Continental Motors Corporation and about various plants up-state have turned out to be exaggerations.

Prosperity is not built on lies, even upon daily newspaper lies. The facts about bettering conditions are all welcome to all the people. Neither lies nor liars have a place in the re-establishment of public or industrial confidence.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

WITH the idea of getting on the outside and looking in, so far as Detroit is concerned, the writer interviewed several upstate business men and bankers the early part of the week. Their expressions of opinion may throw some light on the situation as they see it.

Arthur G. Bishop, president of the Genesee County Savings Bank and the First National Bank, Flint, asserted that while Flint had been hit a man's size blow by the depression, the savings deposits of his banks were beginning to show a come-back that was encouraging. Unemployment has been greatly diminished by the return of many single men to their homes in surrounding towns and cities. Cashier Grant Brown, of the Industrial Savings Bank, expressed the opinion that the last three months had seen a steady and continued improvement in the business of the city, as evidenced by the merchants' reports of sales. There seemed to be a few vacant stores in Flint, but vacant houses were not plentiful. It appears as if the relief due to the moving away of unemployed had simply given the families heretofore jammed up tight, two or three to a house, a chance to spread out and get their breath and stretch their legs. Optimism seems to be bred into the Flinters, and he who tries to put a wet blanket on the contagious optimism in the vehicle city will get a cold reception.

Over in Saginaw a like sentiment was expressed, although the Saginaw people never reached the same heights of enthusiasm and imagination as has always obtained in Flint. Yet in Saginaw they are going along cheerfully and the ages of accumulated wealth in the city are being added to daily. Cashier Julius Hollandmoritz, of the Bank of Saginaw, said that savings deposits were going up right along. They hesitated a little during December but did not slide back and since Christmas have increased steadily, the total now in his bank being more than $12,000,000, a high record. Mr. Hollandmoritz observed that at Christmas there were many gifts of gold coins and bills and right after Christmas many of the same tokens came right back into the hand. A few large depositors made withdrawals to snap up choice bargains around the first of January but the number of new accounts being opened is a new high record and where savings depositors formerly earned $10 a day and deposited $1 in their accounts, the same persons are now depositing a much greater proportion of their earnings in spite of the earnings being much smaller.

There is a snug little city over in Tuscola county named Caro that also atomizes cheerfulness. The business of the city is almost exclusively supplying the farmers, and notwithstanding the misfortunes of the latter during the last season, the banks of Caro report an almost normal level of deposits and a particularly gratifying growth in savings business.

The city is admiringly showing off the new $100,000 bank building of the State Savings Bank, and judging from the number of farmers met along the road between Saginaw and Caro who were driving new coupes, limousines and sedans, the latter are still a long way from bankruptcy.

There is going to be a little fuss over the sugar situation. It was stated that the companies' offer of $6 a ton for sugar beets, with a sliding scale of advance in case market price increased, was not meeting a pleasant welcome among the beet growers. Some of the wiseacres, however, have it figured out that sugar will be much higher by the time the seed goes in, and in that event it is expected that the farmers will be lined up without difficulty.

On the whole, the general sentiment as regards the immediate future is greatly improved at the present time, and conversation with some fifteen or twenty bankers from Gratiot, Ingham and surrounding counties, who were in attendance at the bankers' group meeting at Flint on Tuesday, bear out the statement.

Current Investment Offerings

BOLGER, MOSSER & WILLAMAN, DETROIT

	Rate	Maturity	Price Yield
Everett, Wash., water...	5½	7-1-23	.... 6.00
Harrison Co., Tex., roads	5	6-10-24	.... 6.15
Greenville Co., Va., road	5	42 op.'19	.... 6.00
Morrison Hotel of Chicago, Ill., first and refunding mortgage	6	1922-30	.... 7.00
Wisconsin Chair Co. secured gold notes....	7	1922-24	.... 8.00
Mid-Co. Petroleum Co. first mortgage	8	1922-27	.... 8.75

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6	1924-30	7.00
Remb-Robinson Co.	6	1926-27	8.00
Alphonso A. Hovey	6	1921	6.00
Dennis Kirby	6	1921	6.00

HALSEY-STUART & CO., CHICAGO

Republic of Chile	8	1941	99.00 8.10
State of Minnesota Soldiers' Bonus Fund ..	5	1925-26	.... 5.55 to 5.65
State of Washington ...	5½	1941	102.70 5.15
Deere & Co. notes.....	7½	1931	99.00 7.65
Kansas City Pr. & Lt. Co. 1st and ref.....	8	1940	100.00 8.00
Northwestern Bell Tel. 1st Mige. Bonds ..	7	1941	96.50 7.33

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative sales is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Columbia Nat. Fire	25	27
Detroit Mortgage, com.	2¾	4¼
Detroit Mortgage, pfd.	5¾	6½
Detroit Copper & Brass....	15	25
Detroit National Fire	25	26
Detroit Life	55	65
Federal Bakeries Co.	27	30
Federal Discount Co.	7¼	7¾
Fisher Body	81	83
Great Lakes Engineering, new.....	11	14
*Great Lakes Engineering, o'd.....	55	65
Hayes Steel Ball	11	15
Hayes Wheel Co.	16	18
Interstate Fire	16	18
Jewett, Bigelow & Brooks.....	10	11
Kelly Wonder Stove	2	3
Monroe Binder Board	39	45
McCord Manufacturing, com.....	7	7¾
McCord Manufacturing, pfd.....	48	60
Michigan Copper & Brass....	15	17
Noble Oil, com.	65	67
Petoskey Portland Cement	10	12
Peninsular Fire Ins.	20	30
River Raisin Paper	12	15
Trippensee Mfg. Co.	7½	8½
Union Mtge. 100% com.....	9	11
Union Mtge. 90% com.....	8¾	..

Range During 1920, Approximate		
Hoover Steel Ball	21¾	18
Columbia Motors	11	4
Noble Oil, com.	1.30	.58
Mich. Copper & Brass....	26	19½
Detroit Mtge., pfd.	6¾	5½

Motor Stocks	Bid	Asked
Briscoe Motors	17	19
Columbia Motors	4¾	5
Chalmers	1	3
Chevrolet	175	200
Cole	210	270
Crow-Elkhart	55	60
Cleveland	41	45
Curtiss Aeroplane	3	6
Denby Truck	1½	2
Elgin Motors	5½	6¼
Fisk	14	14½
Harroun	..	1¼
Haynes	150	175
Hupp	13½	14
Jordan, com.	..	1¼
Jackson, pfd.	..	2½
Keystone Motors	15¾	16½
Lafayette Motors	30	60
Liberty Motors	6½	7½
Liberty Motors, pfd.	50	70
Lee Tire	21	21½
Locomobile	2	3
Mercer	4½	5½
Nash	175	200
Pierce-Arrow Truck	26	28½
Republic Truck	21½	22
Saxon Motors	5½	6¾
Scripps Booth	25	40
Stevens Duryea units	95	105
Stromberg Carburetor	36½	37
Wilson Truck	5½	6

Cleveland Stock Exchange

Reported by Otis & Co.
Wednesday, Feb. 23, 1921.

	Bid	Asked
American Multigraph	18⅜	..
Dow Chemical	..	200
Firestone T. & R.	74	76
Do., 1st pfd.	81	..
Fisher Ohio Body	18	19
Do., pfd.	65	67
Goodyear T. & R.	12	13
Do., pfd.	27	27½
Grant Motor	3	3½
Grasselli Chemical	..	135
Interlake Steamship	..	210
Jordan Motor	..	25
Miller Rubber	83	85
National Acme	21	24
Peerless	23	24½
Portage Rubber	19	20
Do., pfd.	..	80
Prod. & Rfg. Corp.	4⅜	5
Do., pfd.	7	8
Standard Paris	1¼	1½
Do., pfd.	7	9
Stearns Motor	22½	23
Victor Rubber	15	28
White Motor	38	40
Youngstown Sheet & Tube.....	70	71½
Do., pfd.	101½	..

NEW INVESTMENT FIRM

John H. Buxton, Jr., formerly a mining engineer of Northern Canada and latterly for two years with the Charles R. Murphy Company, Detroit, stock underwriter, and Roy E. Foley, also with the Murphy company the last five years, have formed the investment banking firm of Buxton, Foley & Company, with offices in 420 Free Press building, Detroit. Mr. Foley is a native of Watertown, N. Y., and has been in Detroit 12 years. The firm will engage in handling the bonds of the Wayne County Bond & Mortgage Company and the bonds of the North American Bond & Mortgage Company, and will also specialize in the stock of the North American Bond & Mortgage Company, in addition to dealing in municipal and railroad bonds.

Digitized by Google

MICHIGAN STATE TELEPHONE

The annual report of the Michigan State Telephone Company for the year ended December 31, 1920, has been sent out to stockholders. Below is given a comparison of the income statements for the year just ended and for the previous fiscal year ended December 31, 1919. In comparing figures, account must be taken of the fact that the figures for the year 1919 do not include the revenues accrued to the federal government and the expenses borne by the same during the period of government control, from January 1, 1919, to July 31, 1919. The net returns, however, exhibit a splendid improvement, which should be gratifying to stockholders, and as well to the public who are telephone users, for a public utility company that does not make a fair return on its investment cannot give good service. (A comparative balance sheet will be published next week.)

Comparative Income Statement

	(Cents omitted)	
Operating revenues	$14,344,100	$4,337,373
Operating expenses	13,276,079	4,619,289
Net operating revenues	$ 1,068,026	$ 318,084
Deductions—		
Uncollectible revenue	48,223	27,772
Taxes assignable to operations	632,491	126,456
Operating income	387,311	163,855
Add—		
Non-operating revenue	147,164	111,102
Compensation as per Government contract		962,478
Gross income	534,476	1,237,436
Deduct—		
Rent and miscellaneous	119,375	49,976
Interest	1,645,586	1,462,356
Dividend appropriation		180,000
Amount carried to surplus	1,230,485	*454,892

*Deficit charged to surplus.

President Kuhn's message to the stockholders in connection with the report will be summarized next week.

MAYNARD TO GRAND RAPIDS

Beginning April 1, A. J. Maynard, vice-president of the Traverse City State Bank, Traverse City, will become a resident of Grand Rapids and begin his activities as a director and vice-president of the Grand Rapids National City and City Trust and Savings Banks. Mr. Maynard is well known as one of the leading bankers of northern Michigan, having been connected with the Traverse City institution for 19 years. He is also president of the Peoples State Bank, Boyne City, vice-president of the Kalkaska State Savings Bank, Kalkaska, and interested in various other enterprises. Maynard is a Detroiter by birth and still considered one of the younger bankers in the state.

GREENE GOES TO FEDERAL RESERVE

Bruce F. Greene, Jackson, who has been with the State Banking Department off and on for some four years, resigned his position as state bank examiner February 7 to accept a similar position in Chicago with the examination department of the Federal Reserve Bank of Chicago. Greene will be remembered by the Michigan bankers as a young man of something over 200 pounds avoirdupois and he made an enviable record in his work. He was for about a year a captain in the army.

OWOSSO SAVINGS BANK CHANGES

A. D. Whipple, heretofore cashier of the Owosso Savings Bank, and W. S. Cooper, who has been assistant cashier, were elected respectively vice-president and cashier, February 15, both well merited promotions, Mr. Whipple having been with the bank 30 years and Mr. Cooper 16 years. Deposits are reported as $2,253,095.

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK
WOOLWORTH BUILDING, NEW YORK

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. K. Dunham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

For
MICHIGAN INVESTORS
Complete Service in
All forms of Investment

Specialists in Ohio
Rubbers, Motors and Steels

Government, Municipal
and Corporation Bonds

Listed and Unlisted Securities

Corporation Financing

Members All Principal Exchanges
Full Private Wire Connections

OTIS & COMPANY
200 Majestic Building
DETROIT
Cleveland, New York, Cincinnati, Boston, Columbus, Toledo, Denver, Youngstown, Akron, Colorado Springs

The
Public Accounting Department
of
THE MICHIGAN TRUST COMPANY

PREPARES Income and Excess Profits Tax and other Federal Tax Returns;

INSTALLS General and Cost Accounting Systems;

MAKES Audits and investigations for any purpose desired.

Pearl St. and Ottawa Ave., Grand Rapids, Michigan

MATTHEW FINN
High Grade Municipal
and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Feb. 18, 1921	Feb. 11, 1921	Feb. 20, 1920
Total reserves	$2,352,980,000	$2,342,198,000	$2,035,440,000
Bills discounted—Sec'd by Gov't war obligations.	990,162,000	1,011,877,000	1,525,203,000
All other	1,374,278,000	1,388,539,000	883,321,000
Bills bought in open market	166,874,000	178,873,000	531,703,000
Total bills on hand	2,531,282,000	2,581,289,000	2,890,227,000
U. S. Government bonds	25,849,000	25,849,000	28,775,000
U. S. Victory notes	15,000	15,000	63,000
U. S. Certificates of indebtedness	261,759,000	263,574,000	268,810,000
Total earning assets	2,818,908,000	2,870,831,000	3,188,875,000
Bank premises	19,303,000	18,977,000	11,344,000
Uncollected items, other deductions gr. deposits.	641,661,000	667,478,000	1,029,653,000
5% Redemption fund against F. R. Bank notes.	13,114,000	13,807,000	12,724,000
Gold shroud in custody or in transit	8,000,000	8,000,000	.....
All other resources	7,788,000	7,500,000	8,881,000
Total resources	5,858,031,000	5,886,491,000	6,378,487,000
LIABILITIES			
Capital paid in	100,740,000	100,557,000	90,531,000
Surplus	202,686,000	202,036,000	120,120,000
Government deposits	61,516,000	48,487,000	11,544,000
Due to members—Reserve account	1,720,855,000	1,749,289,000	1,828,891,000
Deferred availability items	475,799,000	428,619,000	815,606,000
Other deposits, including foreign gov't credits	24,092,000	25,802,000	90,360,000
Total gross deposits	2,366,772,000	2,355,131,000	2,815,450,000
F. R. notes in actual circulation	3,087,444,000	3,050,416,000	2,977,124,000
F. R. Bank notes in circulation—net liability	194,481,000	193,173,000	240,858,000
All other liabilities	32,891,000	33,173,000	84,404,000
Total liabilities	5,858,031,000	5,822,491,000	6,378,487,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	50.8%	48.6%	42.7%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	58.8%	57.6%	47.4%

CONSUMERS POWER COMPARATIVE STATEMENT

The following comparative earnings statement of the Consumers Power Company, including the operation of the Michigan Light Company, for the months of December, 1920, 1919, 1918 and 1917, and for the 12 months ended December 31 of these respective years, has been issued by Hodenpyl, Hardy & Company, Inc., 14 Wall street, New York, operators of the properties, under date of January 26, 1921:

Month of December	1920	1919	1918	1917
Gross earnings	$ 1,301,316.64	$ 1,155,920.32	$ 924,458.12	$ 842,186.24
Operating expenses	744,877.09	625,446.01	524,836.98	455,942.68
Gross income	556,426.55	530,363.31	429,621.15	387,092.61
Fixed charges	240,262.06	205,808.65	197,911.67	210,590.23
Net income available for dividends, replacements and depreciation	316,176.49	324,560.66	131,709.48	146,502.38
Dividend preferred stock	67,363.60	64,370.98	63,973.00	81,515.00
Balance	$ 248,812.89	$ 260,289.68	$ 67,738.48	$ 84,987.38
For 12 Months Ended December 31	**1920**	**1919**	**1918**	**1917**
Gross earnings	$14,157,455.85	$11,429,094.15	$9,420,695.26	$8,168,781.21
Operating expenses	9,048,843.78	6,377,395.81	5,459,047.26	4,672,613.04
Gross income	5,115,589.62	5,061,698.84	3,931,647.85	3,496,168.17
Fixed charges	2,806,352.13	2,538,461.23	2,304,768.11	1,641,117.56
Net income available for dividends, replacements and depreciation	2,296,857.46	2,588,217.51	1,626,859.84	1,855,050.59
Dividend preferred stock	781,699.53	770,565.22	766,562.00	780,778.00
Balance	$ 1,427,286.96	$ 1,762,632.29	$ 860,697.84	$1,124,277.59

Furniture Makers Ask Payne Rates on Veneers

Z. Clark Thwing, Grand Rapids, president of the Veneer Manufacturers Association, appeared before the ways and means committee of the national House of Representatives, last week, and asked that a tariff of 35 per cent ad valorem be placed on veneers coming into this country. This is the rate which prevailed under the Payne-Aldrich bill, but under the Underwood bill passed eight years ago veneers come in duty free.

Thwing declared foreign veneers were making serious inroads on the American industry. Competition comes from Great Britain, Germany, Finland and Japan. Under the Payne-Aldrich bill there was practically no competition. Thwing said he had been in the furniture business 32 years and knew conditions at home and abroad. He said low wages paid abroad enabled the foreigner to undersell the American market, the rate of exchange also operating in favor of the foreigner.

Asked whether the veneer manufacturers had been forced to cut wages, Thwing said they had made a cut of 10 per cent and would be compelled to make another 10 per cent cut if competition was allowed to continue.

While Chairman J. W. Fordney was not inclined to say in advance what the committee would do, it is known he favors giving to the furniture industry all the protection it wants.

DRUGCRAFT CO. NAMES OFFICERS

The Drugcraft Company, Ann Arbor, has elected the following officers: J. Harry McCormick, president and general manager; E. B. Manwaring, vice-president; H. M. Cole, treasurer; R. O. Taylor, secretary. These officers and S. G. Kress, J. A. Wilcox, Frank J. Davidson, all of Ann Arbor, and W. G. Van Natter and Clifton B. Hitt, Detroit, make up the board of directors.

Digitized by Google

Dividends Payable

Company	Rate	Payable	Stock of Record
American Tel. & Tel.	$2.00 Q	April 15	March 18
Atlantic Refining, com.	$5.00 Q	March 15	Feb. 21
American Sugar Re-fining, com.	1¾% Q	April 2	March 1
American Sugar Re-fining, pfd.	1¾% Q	April 2	March 1
*American Bosch Magneto	$1.25 Q	April 1	March 15
Crucible Steel, pfd.	1¾% Q	March 31	March 15
Cerro de Pasco Copper	50 cents Q	March 1	Feb. 17
Detroit United Ry.	2% Q	March 1	Feb. 12
Fairbanks, Morse, pfd.	1½% Q	March 1	Feb. 18
Federal Mining & Smelting, pfd.	1% Q	March 15	.....
General Electric	$2.00 Q	April 15	March 9
General Cigar, pfd.	1.75 Q	March 1	Feb. 21
S. S. Kresge, pfd.	1¾% Q	April 1	March 15
Loose-Wiles Biscuit, 1st pfd.	1¾% Q	April 1	March 19
**Michigan Sugar	1% Q	March 1	Feb. 15
Napoleon Motors	8% stock	.....	.....
†Napoleon Motors	2% script	.....	.....
National Sugar Ref'g	1¾% Q	April 2	March 12
National Lead, com.	1¾% Q	March 31	March 11
***Peerless Truck & Motor, com.	50 cents Q	March 31	March 1
Peerless Truck & Motor, com.	50 cents Q	June 30	June 1
Peerless Truck & Motor, com.	50 cents Q	Sept. 30	Sept. 1
Peerless Truck & Motor, com.	50 cents Q	Dec. 31	Dec. 1
Packard Motor Car, pfd.	1¾% Q	March 15	Feb. 28
Rubay Body, pfd.	1¾% Q	April 1	March 19
Republic Iron & Steel, com.	1¾% Q	May 3	April 22
Republic Iron & Steel, pfd.	1¾% Q	April 1	March 18
****Standard Oil, Indiana	$1.00 Q	March 15	Feb. 15
Scoville Mfg.	$5.00 cash	April 1	March 24
‡Scoville Mfg.	4½% Lib. Bonds		
Union Carbide & Carbon	$1.50 Q	April 1	March 5

*The previous quarterly of the American Bosch was $2.50.

**The previous quarterly of Michigan Sugar was 2½ per cent, with an extra dividend of ½ per cent.

†The extra dividend of Napoleon Motors is payable in script redeemable August 1, 1921.

***The previous quarterly dividend of the Peerless Truck & Motor was 75 cents, paid in January, and compared with $1.25 paid for the previous quarter.

****This is the first dividend declared by Standard Oil of Indiana on its new $25 par value stock. Previous dividends of company were on basis of $1 quarterly, with $5 extra, or at the rate of $25 a year.

‡In addition to a cash dividend of 5 per cent, the directors of the Scoville Manufacturing Company voted to distribute 4½ per cent in Fourth Liberty Bonds with April 15 and subsequent coupons attached. Each stockholder of record February 14 is entitled to receive these bonds to an amount equal, at face value, to $50 for every five shares of stock standing in his name.

Lord Bond Tax Measure Passed by the House

The House at Lansing this week passed unanimously the bill of Rep. George Lord, Detroit, to place on the tax rolls the bonds of all municipalities and states, other than Michigan. This class of securities up to this time has been required to pay a specific tax of one-half of one per cent, in lieu of all other taxes. The tax is required to be paid only once. The Lord measure continues the specific tax on Michigan state and municipal bonds of this class, but exempts them from the annual levy.

A bill sponsored by Rep. E. B. Ramsey would permit cities of 50,000 to 100,000 population to extend the present limit of 10 per cent of assessed valuation of bonded indebtedness for public improvements in any proportion they might choose. Other bills provide for a reduction in the monthly rate on delinquent taxes as a penalty from one to one-half per cent; permission to cities to condemn more property than needed for public improvements; increase in fees for notary public from $1 to $5; permission for any school district upon majority vote to bond itself to 15 per cent of its assessed valuation; danger signals on all switches on the main line of every railroad, and permission for Grand Rapids to increase the school tax from six to nine mills.

Delay in the passage of an appropriation bill to complete the state office building has been caused by Sen. James Henry, Battle Creek, who has asked the state auditors to furnish the Senate with a full account of the money thus far spent. When the building was authorized four years ago, $800,000 was appropriated. This was expected to be sufficient. Increased costs intervened and the 1919 legislature appropriated an additional $975,000. Now $1,140,000 more is wanted to finish the work, making the total nearly $2,000,000.

A concurrent resolution introduced by Rep. Arlie L. Hopkins, Manistee county, expressed opposition to a tariff on Canadian lumber, and is directed to Michigan congressmen. It declares there is a housing shortage and such a tariff would work a hardship on home-builders and farmers.

TO DOUBLE FURNACE OUTPUT

The Marshall Furnace Company, Marshall, at its annual meeting elected the following officers: President, F. K. Berry; vice-president, C. H. Billings; second vice-president, D. M. Jobbins; secretary, W. Mackie; treasurer, M. F. Jacques. A dividend of 10 per cent was declared and the announcement made that unless something unforseen occurred the company would make 8,000 furnaces this year, which would be twice the 1920 output.

THE OLDEST HOUSE IN MICHIGAN

FOREIGN GOVERNMENT SECURITIES

Foreign Government Bonds are looked upon with a degree of uncertainty by many investors. This is a misconception due to lack of investigation. We are recommending for purchase certain issues of countries not involved in the recent war, which were sold abroad prior to 1914 and which may now be bought at such a discount that the purchase can obtain a high yield on a bond which has every element of safety. Due to the fact that a number of these issues are payable in Foreign Exchange, the purchaser also has the opportunity to profit by the rise in exchange.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

Better Business

The anticipated improvement in business is already evident in many industries. More settled values and more dependable earnings are being established.

Write for Letter F-8, which describes bonds and notes that still yield large returns and are obligations of corporations benefiting by the trend towards normal price levels of commodities and service.

Bonbright & Company
UNION TRUST BUILDING, DETROIT
Telephone Cherry 4320
New York Philadelphia Boston Chicago

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE FEBRUARY 2192

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100			6%		Quarterly	Jan. 3, 1921	1½		1½%		$3,000,000
Am. Ls & Trac. Co., com.	100	110	100	111 - 09	204 - 55	4%	4%	Quarterly	Feb. 1, 1921	½	1½%	½		$28,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½		1½		$14,226,200
Auto Body Co.	5½	5¾	10	5¾ - 4½	12½ - 5½				Jan. 20, 1917		25%			$1,274,000
Do., pfd.	7	7½	10		10½ - 10½	6%		Semi-Ann	Feb. 1, 1921	3%		3%		$527,000
Bower Roller Bearing Co.	15	19	10	19 - 15	25 - 15	Varies		As Dec'd	July 1, 1920	10%				$800,000
Charcoal Iron Co. of America, com.	2½	2¾	10	2¾ - 2	5¾ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd.	3¾	3¾	10	3¾ - 3¾	6¼ - 3¾				July 1, 1919	3				$2,217,250
Cities Service Co., com.	248	253	100		355 - 250½	*8%		Monthly	Feb. 1, 1921	1%	1¾%	1%	2½%	$45,088,245
Do., pfd.	69½	70	100		79 - 65	6%		Monthly	Feb. 1, 1921	1%		1%		$75,465,984
Coshuta Lead & Zinc Co.		14	1	16 - 16	23 - 6	Varies		As Ded'd	Nov. 15, 1917	20%				$400,000
Columbia Sugar	12¾	14½	100	14½ - 10¼	20½ - 11¾	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co.			10	7¾ - 7½	18½ - 6¾	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pw. Ry. & Light Co., com.	13	14	100	14 - 12	20 - 12	4%		Quarterly	Nov. 1, 1920	1%				$18,985,900
Do., pfd.	34	36	100	35 - 34	23 - 23	16%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,985,000
Continental Motor Co.	6¼	6¾	10	7¾ - 5¾	14¾ - 6¾	4%		Quarterly	Dec. 20, 1920	1%				$9,447,099
Do., pfd., XD	..	91¾	100		100¾ - 93	7%		Quarterly	Jan. 15, 1921	1¾		1¾%		$2,151,700
Detroit & Cleveland Navigation Co.	76	78¾	50	75¾ - 71	114 - 67	5%		Quarterly	Feb. 1, 1921	2½		2½%		$6,000,000
Detroit Creamery Co.	21¾	22½	10	25¾ - 22¾	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2				$1,800,000
Detroit Edison Co., XD	96	96¾	100	98 - 96¾	114 - 92½	8%		Quarterly	Jan. 15, 1921	2		2%		$27,855,200
Detroit Brass & Malleable Works	93	97	100	98 - 96	98 - 93	6%		Monthly	Feb. 1, 1921	½		1%		
Detroit United		90	100			6%		Quarterly	Dec. 1, 1920	2				$15,000,000
Edmunds & Jones, com.	13½	15	None	14½ - 13½	34 - 8½	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,000 shs
Do., pfd.	75	85	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾		1¾		$800,400
General Motors	13	13¼	10	16 - 14	42 - 12¾	20c		Quarterly	Feb. 1, 1921	20c		20c		30,950,358 shs
Federal Truck	22	23	10	22½ - 18¾	82 - 16½	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	251	255	100	257 - 230	460 - 210	Varies		As Ded'd	July 15, 1920	10%				$7,000,000
General Alum & Br Mfg. Co., com.	13	14½	10		11¾ - 11	Varies		As Ded'd	Oct. 1, 1920		6%			$1,952,750
Gladys-Belle, com., XD	52	83	1.00	73 - 57	2 - 57	5%		Quarterly	Jan. 15, 1921	4%		4%		$6,000,000
Do., pfd.	60	67	1.00	80 - 63	1.48 - 61	16%		Quarterly	Jan. 15, 1921	4%		4%		$2,000,000
Godchaux Sugar, com.	20	23	None		69½ - 30½									$ 70,000 shs
Do., pfd.	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$3,500,000
Hanna Furnace, com.	27	32	10	30 - 30										$1,800,000
Do., pfd.	96	99	100											$750,000
Hall Lamp Co.	12½	14	10	15 - 14	22½ - 16	Varies		As Ded'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	3½	4½	10	3½ - 2¾	8½ - 2½	Varies		As Ded'd	Feb. 1, 1920	1½%				$1,500,000
Holland-St. Louis Sugar Co.	8	10	10	7 - 7	19¾ - 7¾	12%		Quarterly	Oct. 15, 1920	3%				$2,000,000
Iron Silver Mining Co.	29		25		90 - 67	8%		Semi-Ann	July, 1920	8%				$2,500,000
S. S. Kresge, com.	136	140	100	96¾ - 90¾	161 - 100	6%		Semi-Ann	Jan. 2, 1921	3%				$30,000,000
Do., pfd.	101	103	100			6%		Semi-Ann	Jan. 2, 1921	1½		1½		$2,000,000
Lindeman Steel, com.	12	15	10		24½ - 13½	6%		Quarterly	Jan. 2, 1921	1½		1½		$1,068,000
Lincoln Motors Class A com.	19¾	20	20	21½ - 17¾	50¾ - 13½	$2.00		Quarterly	July 20, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co.	6		10	6¼ - 6¼	12¾ - 9½				Dec. 1, 1914	25c				$750,000
Michigan Drop Forging Co.		40	None		50 - 50	$3.00		Monthly	Feb. 1, 1921	25c		50c		$ 12,500 shs
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$250,000
Michigan Stamping Co., com.	15	18½	10	17¾ - 17¾	30 - 15	8%		Quarterly	Jan. 1, 1921	2%		1½%		$1,300,000
Michigan Sugar Co., com.	8½	8¾	10	9 - 6¾	13¾ - 7½	4%		Quarterly	Dec. 1, 1920	3%				$7,471,100
Do., pfd.	8		10	9 - 8	13¾ - 8	6%		Quarterly	Dec. 15, 1920	1½%				$3,500,000
Miles-Detroit Theater Co.	16¾		10		21 - 15¾	*16%		Quarterly	Jan. 10, 1921	4%		4%		$350,000
Motor Products	42	44	None	43 - 42	104½ - 35				Feb. 2, 1921	$1.25		$1.25		$ 100,000 shs
Motor Wheel, com.	10¾	11½	10	11¾ - 8½	13¾ - 8½	*8%		Quarterly	Nov. 20, 1920	2%				$4,500,840
Murray Mfg.		13½	10		33 - 13	*18%		Monthly	Feb. 15, 1921	1½				$743,450
National Grocer Co.	8¾	9	100	9½ - 8¾	156 - 156	12%		Quarterly	Jan. 1, 1921	2%		2%		$2,000,000
Do., pfd.	88	92	100		157 - 90	8%		Semi-Ann	Jan. 2, 1921	4%		4%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.		112	100	1.20-1.10	2.00-1.05	*18%		Quarterly	Jan. 1, 1921	4½%		4½%		$4,000,000
Packard Motor Co., com.	11	13¼	10	11¾ - 9¾	28¾ - 9¾			Quarterly	Oct. 31, 1920	2½				$11,888,100
Do., pfd.	74		100	72 - 69	95¾ - 67	7%		Quarterly	Jan. 15, 1921	1¾				$15,250,500
Paige-Detroit Motor Car Co.	19¾	19¾	10	19¾ - 13¾	45 - 12			Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.	90	94	25	97 - 89	117 - 89	*16%		Quarterly	Jan. 1, 1921	8%		8%		$11,838,850
Penberthy Injector, pfd.	99	100½	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$500,000
Reo Motor Co., com.	22½	24¾	10	23½ - 17¾	29¾ - 16¾	10%		Quarterly	Jan. 1, 1921	2½		2½%		$9,937,250
Scotten-Dillon Co.	18¾	19	10		35 - 29	8%		Quarterly	Jan. 3, 1921	2%	50%	2%	50%	$1,500,000
Timken Axle Co., com., XD	32	35	10	34½ - 26¼	54½ - 29	8%		Bi-Month	Jan. 15, 1921	2%				$10,000,000
Do., pfd.	89	93	100		93¾ - 84	7%		Quarterly	Dec. 1, 1920	1¾		2%		$5,000,000
True-Con. Steel Co., com., XD	25	30½	10	28½ - 27¾	29 - 18	8%		Quarterly	Jan. 1, 1921	2%		2%		$1,450,200
Do., pfd.	9¾		10		9¾ - 9¾	7%		Quarterly	Dec. 1, 1920	1¾				$1,432,200
U. S. Radiator, com.	13	17½	100		21 - 13									$4,000,000
Do., pfd.	75	83	100		85 - 80	7%			Jan. 25, 1921	1¾		7%		$2,800,000
Waring Hat Co., com.		25	None											
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$140,000 shs
Western Knitting Mills	10		None	11 - 8½	30½ - 8½	$2.00		Quarterly	Nov. 25, 1920	50c				$750,000
White Star Line			50		50½ - 50½	7%		Ann. & Nov.	Aug. 23, 1920	3½				$1,000,000
Wolverine Portland Cement Co	2½	4	10	2½ - 2	5½ - 2½				Dec. 15, 1917	1%				$1,000,000

*Old $60,570; new 6¾-27 3/8% in 1911, 7% in 1920, only dividends since organized. †Extra dividend ‡Partly. § Book value $859,469, Ed. & J. ¶ Book value, $3,219,327. Godchaux Book value, $2,622,745.00. Western Knitting Mills. ‡ Book value $5,004,190. Motor Products. ‡Old ‡Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Feb. 23 1921
Canada	1.0000	.85	.8500	.8650
London	4.8665	3.6275	3.8500	3.8850
Switzerland	.1930	.1529	.1602	.1656
Paris	.1930	.0699	.0706	.0725
Belgium	.1930	.0626	.0743	.0762
Holland	.4019	.3162	.3175	.3420
Italy	.1930	.02465	.0266	.0266
Greece	.1930	.0762	.0735	.0840
Spain	.1930	.1328	.1292	.1396
Vienna	.2634	.0023	.0028	.0022
Berlin	.23821	.01345	.0158	.1655
Denmark	.2679	.1595	.1948	.1825
Norway	.2682	.1595	.1866	.1730
Sweden	.2680	.2045	.2190	.2240

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Feb. 21, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	91.12	93.80	90.00	91.06	99.30	99.76	99.56	99.62
U. S. Liberty 1st 4s	87.30	85.50	85.32	85.80	99.00	94.90	92.00	94.12
U. S. Liberty 2nd 4s	86.60	86.30	84.10	85.00	99.50	92.84	93.04	94.10
U. S. Liberty 1st 4¼s	87.20	86.35	85.50	85.18	99.46	95.14	96.50	....
U. S. Liberty 2nd 4¼s	86.74	86.30	84.34	85.00	99.20	94.00	95.70	....
U. S. Liberty 3rd 4¼s	90.60	90.04	87.20	88.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	86.98	86.46	84.36	85.86	99.75	100.10	....	....
Victory Bonds, 4¾	97.40	96.48	94.90	95.50	94.00	95.00	95.90	96.22

Digitized by Google

Michigan Bank Stocks

Name	Last Published Statement			Dividends		Detroit Stock Exchange					
	Book Val.	Capital	Deposits	Annual Rate	How Paid	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Last Sale	Feb. 21, 1921 Bid	Feb. 21, 1921 Ask
American State	150	$1,000,000	$15,999,348	10%	J-A-J-O 1st	221	215	226	200	221	...	221
Detroit Savings	257	1,500,000	23,962,300	12%	3 Jan-Jul 1st 3 Fe Jan	260	258	280	250	260	258	...
Dime Savings	263	1,500,000	32,676,658	14%	1 Monthly 1 Jan-Jul	...	...	280	258	258	260	...
First and Old Detroit National	194	5,000,000	69,589,082	†12%	J-A-J-O 1st	271	271	275	268	271	270	...
Central Savings Bank	142	1,000,000	17,615,136									
First State	160	1,000,000	12,789,601	10%	J-A-J-O 1st	...	...	...	...	...	185	...
Highland Park State	108	1,000,000	14,287,348	20%	J-A-J-O 1st	...	...	266	265	265	...	275
Merchants National	167	2,000,000	9,739,967	8%	J-A-J-O 1st	140	140	163	142	140	143	...
National Bank of Commerce	231	1,500,000	22,274,437	10%	J-A-J-O 1st	...	...	210	190	210	...	...
Peninsular State	156	2,500,000	31,623,787	12%	J-A-J-O 1st	...	...	220	215	215	...	...
Peoples State	282	5,000,000	100,783,895	12%	J-A-J-O 1st	360	355	385	306	355	355	...
United Savings	157	500,000	6,832,934	12%	Monthly	308	308	315	309	308	300	...
Wayne County Home	259	4,000,000	74,072,277	16%	Monthly	...	...	347	306	347	348	...
American Loan and Trust	134	300,000	x5,765,959	6%	J-A-J-O 1st	...	...	165	165	156	...	127
Bankers Trust	117	500,000	x2,302,594	8%	J-A-J-O 1st	...	...	...	...	...	...	...
Guaranty Trust	174	300,000	x3,412,198	8%	J-A-J-O 1st	...	...	148	...	...	...	180
Detroit Trust	417	1,000,000	x11,298,331	14%	J-A-J-O 1st	...	...	...	...	...	275	300
Security Trust	338	500,000	x4,143,177	12%	J-A-J-O 1st	...	...	...	...	...	290	...
Union Trust	190	1,000,000	x8,282,568	6%	J-A-J-O 1st	180	180	197	195	195	175	190
Commonwealth-Federal	124	750,000	10,328,127			...	...	130	...	...	105	112
Bank of Detroit	160	1,000,000	18,469,135	10%	J-A-J-A 1st	...	...	...	...	...	192	200
Continental Bank	120	750,000	1,150,000			...	...	...	...	...	...	...
Michigan State	110	250,000	2,190,838	6%		...	...	...	...	...	130	135
American State, Dearborn	125	100,000	321,163	6%	Jan-Jul	...	...	...	...	...	...	...
American State, Highland Park	132	200,000	2,088,453	15%	J-A-J-O 1st	...	...	122	122	122	118	122
Peninsular State, Highland Park	120	100,000	1,264,556	12%	J-A-J-O 1st	...	...	...	...	...	...	...
Rouge State Bank	118	50,000	352,845			...	...	...	...	...	...	...
Industrial Morris Plan	119	500,000	†806,789	6%	J-A-J-O 1st	...	...	...	...	...	...	...
Hamtramck State	433	25,000	2,634,208			...	...	...	...	...	...	...
River Rouge Savings	256	50,000	1,210,414			...	...	...	...	...	...	...
City National Bank, Battle Creek	131	250,000	3,798,766			...	...	...	...	...	...	...
First National, Bay City	295	200,000	3,821,762	10%	J-A-J-O 1st	...	...	...	...	...	...	...
Bay County Savings	282	100,000	4,625,743	10%	J-A-J-O 1st	...	...	...	...	...	...	...
Genesee County Savings, Flint	200	500,000	6,993,155	10%		...	...	...	...	300	...	...
First National, Flint	232	300,000	5,417,770			...	...	...	...	...	...	...
Grand Rapids Savings, Grand Rapids	204	400,000	10,325,117	12%	J-A-J-O 1st	...	...	...	...	250	...	...
Fourth National, Grand Rapids	197	300,000	4,349,967	12%	J-A-J-O 1st	...	...	...	...	220	...	...
Commercial Savings, Grand Rapids	134	200,000	3,257,945	8%	J-A-J-O 1st	...	...	...	...	195	...	...
City Trust and Savings, Grand Rapids	138	200,000	2,566,059			...	...	...	...	...	...	...
Peoples Savings Bank, Grand Rapids	165	200,000	2,992,849			...	...	...	...	...	...	...
Kent State, Grand Rapids	266	500,000	11,562,817			...	...	...	...	...	...	...
Grand Rapids National City, Grand Rapids	139	1,000,000	7,960,353	8%	Semi-Ann.	...	...	...	...	170	...	...
Grand Rapids Trust Co, Grand Rapids	185	300,000	x988,328			...	...	...	...	...	...	...
Michigan Trust Co., Grand Rapids	139	1,000,000	x3,581,078			...	...	...	...	...	...	...
Morris Plan Industrial, Grand Rapids	156	50,000	† 427,900			...	...	...	...	...	...	...
Peoples National, Jackson	196	150,000	1,826,967	17%	J-A-J-O 1st	...	...	...	...	...	...	...
Jackson City Bank, Jackson	200	200,000	2,341,775	16%	J-A-J-O 1st	...	...	...	...	110	...	...
National Union, Jackson	183	400,000	4,324,819	12½	J-A-J-O 1st	...	...	...	...	...	...	...
Kalamazoo National, Kalamazoo	143	500,000	5,008,168			...	...	...	...	...	...	...
Capital National, Lansing	199	300,000	4,113,430	12%	J-A-J-O 1st	300	300	300	300	300	...	...
City National, Lansing	245	250,000	5,001,413	15%	Jan-Jul. 1st	...	...	...	...	335	350	360
American State Savings, Lansing	182	500,000	7,500,000	10%		...	...	...	...	190	...	...
Pontiac Commercial and Savings, Pontiac	140	750,000	9,407,930	12%	J-A-J-O 1st	...	...	...	...	...	...	...
Oakland County Savings, Pontiac	...	250,000	3,124,638			...	...	...	...	...	...	...
American Savings Bank, Pontiac	...	400,000	4,731,256			...	...	...	...	...	...	...
National Bank, Pontiac	...	200,000	789,291			...	...	...	...	...	...	...
U. S. Savings, Port Huron	161	100,000	1,889,175	8%		...	...	...	...	...	...	...

*Under one ownership—stock combined.
‖Nominal quotations.
†Investment Certificates
xTotal Assets

Lansing Stocks

Closing quotations on the Lansing Stock Exchange, Monday, February 21, are reported by G. N. Murchey & Company, as follows:

	Bid	Asked
Auto Body Co	4¾	5¼
Auto Body, pfd	6½	7½
Bros Motor Car Co	22½	27½
Duplex Truck Co	6¾	8¾
Bates & Edmonds Motor Co	8	10
Motor Wheel Corp	10⅞	11¼
First Bond & Mortgage Co	28	33
Michigan Mortgage Co	8½	9½
Michigan Screw Co. (ex. stock div.)	18	28
Lansing Co	25	45
Atlas Drop Forge Co	24	28
Federal Forge Co	8	10
Novo Engine	22	27

Interested in: Petoskey Portland Cement, Peninsular Portland Cement, Federal Dismantling, Jumbia Motor, Union Mortgage, Grange Life Assurance Co.

Detroit Bank Clearings

Week of Feb. 23, 1921	$ 87,731,631.88
Week of Feb. 16, 1921	70,021,937.28
Week of Feb. 9, 1921	$ 76,606,462.25
Week of Jan. 26, 1921	$ 79,015,667.01
Week of Jan. 19, 1921	$101,886,332.70
Week of Jan. 12, 1921	90,172,447.74
Week of Jan. 5, 1921	$107,863,394.28
Week of Feb. 23, 1920	$ 93,528,757.86
Week of Feb. 16, 1920	101,293,770.93
Week of Feb. 9, 1920	$101,049,306.36
Week of Feb. 2, 1921	$ 87,995,325.10

Detroit Listed Bonds

Name	Feb. 21, 1921 Bid	Ask	Last Sale
Cons. Pow Co.—5s, 1934	80½	81½	81
Detroit & Flint—5s, 1921	...	...	98
Det., Ft. W. & B. Ry.—5s, 1927	85½	86	78
D., M. & T. Short Line—5s, 1933	30	31	...
Detroit Northw'n—4½s, 1933	37½	39	33
Detroit & Pontiac—5s, 1931	35	36	35
Detroit & Pontiac—4½s, 1926	..	54	...
Det. & Ft. Huron—5s, 1950	..	..	...
Detroit Railway—5s, 1934	..	86	...
Det. Ry. Tpnl. & Term.—5s, 1924	..	100	...
D., Y. & A. A. Jackson—5s, 1936	..	86½	...
Det. United Ry.—4½s, 1932	..	..	...
Detroit Edison Co.—5s, 1952	..	85	...
D. Ed. Co.—1st & ref. 5s, 1940	81¾	83	80
East Mich. Light—5s, 1921	77	..	...
Detroit Edison Deb. 7s, 1925	96	98	...
Detroit Edison deb. 7s, 1925	95½	96½	93½
Detroit Edison deb. 7s, 1920	...	93½	94¼
Detroit Edison deb. 5s, 1951	100½	101⅝	100⅝
D. C. Gas Co., G. M.—5s, 1913-23	..	94	...
D. C. Gas Co., P. L.—5s, 1923	92	94½	94½
Detroit & Sub. Gas Co.—5s, 1924	..	80	...
Mich. State Tel. Co.—5s, 1924	88	90	...
Tol., Fremt'r & Norw'k—5s, 1930	..	..	...
Wyan. & Del. River—5s, 1918	..	..	...
Ry.-Prod. Coke Corp.—6s, 1936	..	..	...
Detroit Rock Salt 6s, 1933	..	..	...

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

Digitized by Google

FLOWER RECEIVERSHIP CHANGE

On February 15 the Union Trust Company, Detroit, filed its resignation as receiver of the Flower Valve Manufacturing Company in the Wayne circuit court and the Security Trust Company was appointed to fill the vacancy. The Union Trust Company is trustee under a mortgage securing an issue of first mortgage bonds, and because of conflicting interests found it difficult to act as receiver under the circumstances.

The receiver was first appointed under a bill of complaint filed by a stockholder and a creditor on May 13, 1920. Since that date the receiver has been operating the valve plant and through its operations has been able to liquidate a portion of the bonded indebtedness which fell due within the period of the receivership.

The plant is located at Parkinson street and M. C. R. R., in the western part of the city. It consists of more than six acres of land with large buildings especially constructed for the business, and the foundry and machine equipment is of the most improved type. The production is principally large valves and fittings for water and sewer work, and is largely sold to municipalities and corporations requiring the conveyance of liquids in large quantities. As of December 31, 1920, the assets of the company are listed at $1,410,162.37 and the liabilities at $881,891.85. The plant has a number of large orders on hand and in negotiation, and the Security Trust Company is continuing the operation.

EDISON REPORT FOR JANUARY

The Detroit Edison Company reports net profits of $317,613.09, after charges and interest, for the month of January. This is an increase of 4.4 per cent over the same month of last year. The gross revenue was $2,135,951.10, an increase of 15.01 per cent, and the operating and non-operating expense $1,561,951, an increase of 13 per cent, leaving net income of $573,999.78, an increase of 21 per cent. Deduction for interest leaves the net of $317,613.09.

GOODLY DIVIDENDS PAID

The American State Savings Bank, a consolidation of the American Savings and Lansing Savings Bank, opened for business last week with assets of $5,000,000, capitalization of $500,000 and reserve of $250,000.

In the equalization process resultant of this consolidation, the Lansing State Savings Bank paid its first stock dividend in the history of its 29 years of business. The dividend amounted to 100 per cent and was in addition to a 90 per cent cash dividend, also the result of the equalization. The bank has always paid a conservative semi-annual cash dividend, and any profits in excess have been allowed to accumulate.

The officers and directors of the combined bank are: J. Edward Roe, president; W. K. Prudden, S. H. Carpenter, M. R. Carrier, C. E. Bement, D. E. Bates, Charles E. Toms, L. C. Abbott, vice-presidents; Chas E. Toms, cashier; C. A. Schray, assistant cashier; E. D. Gibbs, assistant cashier; J. C. Phalen, auditor; L. L. Sattler, manager North Lansing branch; B. L. Berry, manager industrial branch.

Directors: L. C. Abbott, H. J. Baker, D. E. Bates, C. E. Bement, W. Brogan, S. H. Carpenter, M. R. Carrier, J. P. Edmonds, W. S. Foster, C. F. Hammond, H. F. Harper, H. A. Haze, Jacob Himmelberger, J. P. Hopkins, H. B. Lundberg, W. K. Prudden, J. G. Rentter, J. Edward Roe, R. C. Rueschaw, L. L. Sattler, E. C. Shields, H. C. Teel, C. E. Toms and Otto Ziegler.

FRANK H. HUBER PROMOTED

Frank H. Huber, assistant secretary of the Mishawaka Trust & Savings Bank, Mishawaka, Ind., has been promoted to be secretary-treasurer of the organization. Mr. Huber is a former "farmer boy" from Charlotte, Mich., who later studied at a business college in Ypsilanti and started in his banking career with the Union Banking Company, of St. Joseph.

M. C. EARNS $4,668,280

For 1920 the operating income of the Michigan Central Railroad was $4,668,280, as compared with $16,934,172 in 1919. Gross income totaled $87,555,206, or $10,000,000 less than the year before.

GENERAL CIGAR PROFITS

The net available for dividend distribution on the common stock of the General Cigar Company was $15.12 a share at the end of 1920, as compared with $12.64 in 1919. Total profits after deduction of federal taxes and charges were $3,400,019.

AMERICAN CHICLE STATEMENT

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Cash on hand and in bank	$35,427.40	$ 276,968.00
U. S. Liberty bonds at market	85,071.75	100,548.33
Notes and accounts receivable	2,032,626.30	2,399,373.41
Accrued interest	4,057.07	4,644.75
Inventories; materials and supplies goods in process, finished stock, etc., at cost, market, the lower..	4,939,331.35	4,333,236.63
Advances for purchase of material;	594,345.49	993,434.44
Contingent insurance fund	31,372.55	32,551.36
Sinking fund	134.32	77.35
Deferred charges	704,431.54	511,233.29
Stocks and bonds and treasury stock	2,107,002.00	1,320,774.13
Land, buildings, machinery, equip., less reserve	4,373,430.33	3,700,932.19
Patents, trade marks, good will, etc.	2,159,432.36	2,165,392.35
	$23,493,833.13	$20,323,385.93

LIABILITIES

Notes, accounts and interest payable	$ 3,334,332.04	$ 1,774,433.19
Reserves for taxes, bad debts, etc.	53,034.13	547,006.90
Funded debt—		
Bonds	2,047,500.00	2,102,500.00
Serial notes	2,380,000.00	2,500,000.00
Capital stock, pfd.	2,000,000.00	2,000,000.00
Capital stock, com.	10,352,844.99	8,000,000.00
Surplus	2,000,371.41	2,895,743.74
	$23,493,843.16	$20,823,685.33

PROFIT AND LOSS ACCOUNT

Gross profit from sales after deducting cost of material, labor and manufacturing expenses	$ 4,394,171.45	
Plus other income	230,117.33	
Less selling, advertising, administration, taxes, etc., including $141,740 depreciation on plant	$ 3,787,329.19	
Interest charges	424,365.69	
Dividends paid	331,173.00	
Balance carried to surplus	160,918.50	
Plus surplus at beginning of period	2,895,743.74	
	$ 3,056,662.24	
Less adjustments and loss on inventories as of December 31, 1920	1,056,291.23	
Balance December 31, 1920	$ 2,000,371.41	

A noteworthy change in the company is the substitution of 151,408 shares of common stock of no par value for 80,000 shares of common of $100 par. In the balance sheet of December 31, 1919, common stock was credited as $800,000 and surplus was $2,895,743.74, or a total of $3,695,743.74. In the December 31, 1920, statement the equity applying to the 151,408 shares of no par common stock is credited as $10,352,-944.59 and surplus is $2,000,371.41, or a total of $12,353,315.80. The difference between these totals is $1,457,572.06 and neither the profit and loss account nor the surplus account changes appear to show where the gain in common stock equity arose. The 80,000 shares of common of $100 par a year ago had a book value of $136, whereas the 151,408 shares of no par value are covered by an equity of $12,353,315, and the book value is about $81.

KANAWHA & MICHIGAN

The net operating income after taxes of the Kanawha & Michigan Railroad for the year 1920 was $676,140, as compared with $166,843 in 1919

SAXON'S REPORT

The balance sheet of the Saxon Motor Car Corporation, Detroit, for the year ended December 31, 1920, shows total assets of $7,321,092, as compared with $6,936,417 for April 1, 1920. Inventories were $1,779,038, as against $747,495 for April. Surplus was $4,286,700, a decrease of $116,116 from the April total.

INSURANCE MEN MEET MARCH 1

Under the auspices of the Detroit Life Insurance Underwriters' Association, 1,000 insurance salesmen will meet in Hotel Statler, Detroit, March 1. Orville Thorp, president, and Charles W. Scovell, past president of the national association, will be the speakers.

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Trombley
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Collection Service

Our collection service is broadly efficient because our facilities for handling collection items have not merely *grown* in the course of time. They have always been definitely planned and perfected with a view to satisfying specifically the requirements encountered in the great territory in which we operate.

Capital and Surplus $3,750,000

Digitized by Google

PARKER RUST PROOF

There is presented herewith a resume of the annual report of the Parker Rust Proof Company to its stockholders as of December 31, 1920, together with a comparison with the balance sheet for March, 1920 (exact date not given). A comparison of surplus account at the end of 1920 with the amount of surplus at the end of 1919 shows that the same was changed from a deficit of $229,545 on December 31, 1919, to a positive surplus of $69,622 on December 31, 1920. Rate of net earnings against capital outstanding as of December 31, 1920, was 2.69 per cent on the whole capital, notwithstanding the practical cessation of business in the last four months of the year.

ASSETS	Dec. 31, 1920	March, 1919
Cash	$ 18,117.32	
Notes receivable	7,343.75	
Accounts receivable	18,802.14	
Merchandise receivable	72,085.45	
	$ 111,350.66	$ 142,070.81
Real estate, buildings and equipment	175,911.69	180,842.62
Patents	850,000.00	850,000.00
Miscellaneous accounts	20,036.74	5,411.69
	$1,157,898.49	$1,178,023.92
LIABILITIES		
Notes and accounts payable	$ 43,132.98	$ 46,591.20
Reserves	24,151.01	110,988.45
Preferred stock outstanding	400,000.00	400,000.00
Common stock	620,171.67	570,180.00
Surplus	69,622.83	50,263.27
	$1,157,898.49	$1,178,023.92

Income and Expense for 1920

Net sales	$325,148.46	
Cost	222,845.54	
Manufacturing profit	$102,302.92	
License revenue	44,412.66	$146,715.58
Expenses and		
General administrative	$ 35,282.22	
Shipping	8,172.97	
Selling	42,133.86	
Advertising	15,566.06	
Service	9,135.48	110,291.69
Operating profit		$ 36,123.89
Less		
Interest on borrowed money	$ 1,750.70	
Depreciation	7,874.71	
Bad debts	2,164.69	
Miscellaneous	20.25	11,350.35
		$ 24,773.54
Plus other income		2,706.19
Net profit for 1920		$ 27,479.73

Changes in Surplus Account

Balance of surplus at beginning of period	*$229,545.18
Miscellaneous gains and losses applicable to year 1919 resulting in net gain of	5,074.20
Balance of deficit after adjustment, Dec. 31, 1919	*$224,470.98
Gained through readjustment of capital after paying premium and expense, etc.	$280,176.63
Discount on preferred stock retired	2,427.50
Net profit for 1920	27,479.73 $310,083.86
Amount of surplus before dividends	$ 85,622.88
Less 4 per cent dividend on preferred stock	16,000.00
Balance of surplus at end of period, Dec. 31, 1920	$ 69,622.88

*Deficit.

Note 1—Accumulated unpaid preferred dividends are $79,666.67.

Note 2—No uncompleted purchase contracts Dec. 31, 1920.

Note 3—No contingent liabilities except one of $22,268.54, representing a judgment which is being appealed and for which surety company has given a bond of $60,000, holding $100,000 par value of bonds covering the plant and a certificate of deposit for $10,816, as security.

COMMERCIAL SECRETARIES ELECT

In convention in Port Huron last week the Michigan Commercial Secretaries' Association elected the following officers: Roy Brundage, Kalamazoo, president; C. W. Haensel, Port Huron, vice-president; C. W. Otto, Pontiac, secretary and treasurer.

World Wide System of Banking Service

In addition to technical phases of foreign banking, the National Bank of Commerce in New York offers a broad service to those engaged in foreign trade.

From its own files this bank is prepared to furnish reliable information concerning the character and credit standing of large commercial houses of the world. Through association with the leading banks of other countries we can obtain special reports covering subjects important to the safe and orderly conduct of international business.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits
Over Fifty-five Million Dollars

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,
President Ford Sales Co., Flint.

GRANT J. BROWN, Treas.,
Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Troy Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

Borrower vs. Banker

(Continued from Page 6)

deposits went off $11,000,000, while loans jumped up $35,000,000. And about April 15 total loans exceeded the loanable portion of deposits, with the result that on May 1 total loans reached $413,000,000, while loanable funds were but $388,000,000. Consequently the banks had to borrow on that date the difference of $25,000,000 to replenish their reserves; or if you look at it the other way around, they borrowed the amount in order to lend it to their customers.

The growing tightness of money during May, June, July and August of last year is well remembered no doubt, and particularly so by the defendants, for during this period, while deposits grew only $2,000,000 and loans decreased but $8,000,000, it was necessary for the banks to increase their borrowings $17,000,000 to a total of $68,000,000 on September 1. And to make our clients' jobs more unpleasant, loans went up $4,000,000 during September, while deposits went down $20,000,000, so that our much maligned banker friends found themselves borrowing $34,000,000 on October 1, to take care of their customers, instead of $25,000,000 that they were borrowing on May 1 for the same purpose. Up to the end of 1920 the ratio remained about the same; and while we are on this subject it seems timely to refer to another feature of this reloaning process, namely the supposed profit in the operation.

There was a time, during the first five months of 1920, when a bank could rediscount your paper at 6 per cent and collect 7 per cent, but as the rate schedule, which is interlined at the bottom of the sketch, shows, at the time this was possible, the banks were carrying large amounts of Certificates of Indebtedness which, as explained in the foregoing, were then commonly hypothecated with the Reserve Bank to provide funds for purchasing same, with the result that the borrowed money inhibit thereby created was so large that further borrowing with the object of reloaning at a higher rate would have subjected the banks to penalties. The gentlemen of the jury, is substantially the fact as regards this allegation, although our clients in fairness will not deny that possibly one or two of their number may have taken occasional advantage of the rate differential early in the year when reserves were ample and demand strong. However, the percentage of total loans thus handled was exceedingly negligible, because as soon as the Government began to take up its enormous bulk of floating paper, up went the discount rates, and not only was incentive removed but the well known deflation process set in shortly thereafter, and the banks found themselves forced to rediscount paper at 7 per cent upon which they collected 7 per cent. The exhibits prove this contention. From the middle of April it was necessary to borrow to take care of the necessities of customers and it was on June 1 that the reserve bank rate went to 7 per cent for eligible paper.

We submit, on behalf of our clients, that the business interests of Detroit are deeply indebted to the Detroit banks for carrying this extra loan load of from $25,000,000 to $34,000,000 during the last eight months of 1920 without profit or compensation, and it is furthermore submitted that, so long as this extra load continues, equilibrium is not accomplished, and until the people by their savings have built up deposits or the borrowers have reduced their loans and a condition of normal balance restored, further undeserved and misleading criticism against the Detroit banks be omitted.

Public Utilities

Detroit—Large users of steam power furnished by the Detroit Edison Company will save from $15,000 to $20,000 a month as a result of a further 5 per cent discount on bills announced by the company, the discount to be effective from December 15, 1920. The company has allowed a 5 per cent discount, but when power users asked for lower rates because of the present business situation, the company responded with an additional 5 per cent.

Saginaw—John Leidlein, Saginaw, has been elected president of the Valley Home Telephone Company, succeeding Martin L. Debats, Bay City, who was killed recently by robbers.

Grand Rapids—The city commission and the Grand Rapids Railway Company have decided upon a replacement valuation of the city lines of $10,578,241, without allowance for depreciation. This valuation was worked out preparatory to considering a service-at-cost-plan when the company's franchise expires in April. The company has been allowed a 7 cent fare and in January earned profits of $179.53, the first in three years. The deficit is $270,000.

Williamston—The report is current in Williamston that the Detroit Edison Company will purchase the local power and light plant. Negotiations are said to be in progress. It is reported that if the deal is consummated the plant here will be discontinued and local users connected up with a power line from Fowlerville.

Detroit—The Detroit United Railway has given its permission for the crossing of its tracks by the lines of the municipal railways, provided the plans and specifications for the crossings are submitted for approval by the company's engineers.

Saginaw—Directors of the Valley Home Telephone Company have been re-elected. They are Otto Born, Dr. R. W. Brown, W. A. Collins and A. H. McMillan, Bay City; Charles Woolhan, Birch Run; James Gibbs, Ithaca; Henry R. Martini, Sebewaing, and W. F. Hemmeter, John Leidlein C. W. Liken and Clyde O. Trask, Saginaw.

Detroit—Judge Arthur C. Denison, Cincinnati, sitting for Judge Arthur J. Tuttle in federal court, has decided that the city cannot tear up the Harper avenue tracks of the Detroit United Railway, as such action would be a violation of the day-to-day agreement.

Public Utility Bonds

Yielding 7.40% to 8.00%

We offer well secured bonds of established public utility corporations serving large cities.

Special offerings will be made to investors upon request for List D-96

Merrill, Lynch & Co.

Members New York Stock Exchange

1056 Penobscot Bldg., Detroit

Chicago, New York, Milwaukee, Denver, Los Angeles

MUTUAL HOME & SAVINGS

For 1920 the Mutual Home & Savings Association, Grand Rapids, reported receipts totaling $2,360,723; earnings divided, $168,673. Cash on hand December 31, $22,061. Loans totaling $114,800 were made for the building of 42 homes; $125,300 was lent to pay mortgages on 49 homes; $155,175 was lent to pay contracts on 70 homes; $719,575 to buy 268 homes; $20,500 for improvements on 12 homes and $20,000 for miscellaneous expenditures on 14 homes. The stockholders elected as directors for three years Clarence E. Peck, William C. Sheppard and Harry E. Hosken.

PORT HURON FETES WILLS

The Chamber of Commerce of Port Huron gave a dinner this week in honor of C. Harold Wills, president of C. H. Wills & Company, Marysville. The dinner was in reality the closing event of "a perfect day" not only for Port Huron and Marysville but for the whole St. Clair river district, for it was on Thursday, the day of the dinner, that the Wills automobile plant, completed, was thrown open to public inspection. Prominent men of the district and several from Detroit gathered around the tables at the Harrington Hotel to do honor to Wills and his associates. The speakers said that the people of the district were coming to realize only now the real meaning of the coming of the Wills-Lee industries, which in the course of only two years have transformed an immense site which was practically bare land, into a center of industrial activity. Reference to Henry Ford was made and some of the speakers predicted that in time the name of Harold Wills would be as widely known as that of the Detroit motor magnate.

MICHIGAN PAPER CO. ELECTION

At the annual meeting of the Michigan Paper Company, Kalamazoo, the following officers were elected; President, J. D. Wagner; vice-president, E. A. Stowe; secretary-treasurer and manager, G. W. Gilkey; assistant secretary, C. Wagner; sales manager, T. D. Earl. The board of directors consists of George A. Ames, G. W. Gilkey, H. W. Jackson, R. D. Keppel, H. J. Mesick, H. Peigrin, E. A. Stowe, William Thomsen and J. D. Wagner. It was announced that the capital stock of the company will be increased from $1,000,000 to $2,000,000, in the shape of a stock dividend.

CITIES SERVICE BANKERS SHARES

Cities Service Company's distribution on its bankers shares, payable March 1 to holders of record February 15, will be 26.78 cents a share. The distribution, February 1, was made to 18,642 shareholders, an increase of 1,728 from January 1.

ST. CLAIR C. OF C.

Organization of the new St. Clair Chamber of Commerce has been completed. J. J. Gannon is president; Franklin Moore, first vice-president; John Schlinkert, second vice-president; R. S. Jenks, treasurer, and Charles Crissey, secretary.

Digitized by Google

Banks and Bankers

H. H. LARNED RETIRES

H. H. Larned, for 27 years a stockholder and director in the Lansing State Savings Bank, has resigned from the directorate. This practically means his retirement from business activity in Lansing. Previous to the consolidation with the American Savings Bank, Mr. Larned was chairman of the board of directors of the Lansing bank. For 10 years he was president of the bank, being succeeded by J. Edward Roe.

UNION SAVINGS & LOAN

Officers elected by the Union Savings & Loan Association, Lansing, last week are as follows: President, Christian Herrmann; vice-president, Frank B. McKibbin; secretary-treasurer, H. T. Donaldson; attorneys, C. F. and E. T. Hammond. Harold Andrews, Detroit, has been employed as assistant to the secretary and treasurer.

STANDARD SANITARY MFG.

The balance sheet of the Standard Sanitary Manufacturing Company for 1920 shows the net after taking care of preferred stock dividends and depreciation to be $2,728,890. This was equal to $22.74 a share on the common stock, as compared with $27.31 in 1919.

NEW CADILLAC BANK OPENS

The American State Bank opened for business in Cadillac, February 19. There are four departments: commercial, savings, bond and safety deposit. Peter Torbeson is president; C. J. Helm, vice-president, and Frank Coffey, cashier. The board of directors consists of E. W. Benjamin, Emil Brehm, Henry Curtis, J. C. Ford, C. J. Helm, Charles Nordell, E. F. Sawyer, M. E. Thomas, Peter Torbeson, John Willman and W. S. Williams.

INCREASE OF CAPITAL

Stockholders of the First National Bank, Manistique, have voted to increase the capital stock from $65,000 to $75,000 and the surplus from $15,000 to $25,000. Present resources of the bank are close to $800,000. The bank building will be remodeled some time this year.

GIBSON MANAGES TITLE CO.

Claire Gibson has assumed the management of the Title Bond & Mortgage Company, Kalamazoo. He has been for ten years with the Kalamazoo National bank, from which he retires as assistant cashier. The Title company announces that it has taken over the Taylor Title Company.

MICHIGAN COPPER & BRASS STATEMENT

(Cents omitted)
Dec. 31, 1920

ASSETS	
Cash on hand and in banks	$ 6,586
Accounts receivable	503,446
Notes receivable	10,062
Inventories	950,132
Investments	14,400
	$1,554,627
Real estate and buildings	$ 579,658
Plant accounts, machinery, equip, etc.	1,089,890
Deferred charges	27,719
	$3,364,896

LIABILITIES	
Current	None
Reserves—	
Law contingency	$ 100,000
Income and profits taxes	65,538
Bad debts	29,447
Depreciation	238,890
	$ 433,876
Capital stock issued, par $10	$ 991,250
Surplus at beginning	$1,733,551
Profits for 1920	206,918
	1,940,470
	$3,364,896

Did you get your copy of our new booklet—

"Why Corporations Appoint
Security Trust Company
Register and Transfer Agent
For Their Stock"

We will gladly deliver you a copy, in person, or upon mail or phone request.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Our own faith in our First Mortgage Bonds is absolute. We are sold on our own proposition. And to prove our confidence in it we guarantee the payment of both Principal and Interest.

Resources of over $7,000,000 back up our guaranty.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

TRADING DEPARTMENT

Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.

JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation; 70 Years of Service.
THE DETROIT SAVINGS BANK
OLDEST BANK IN MICHIGAN
41-47 Fort St., West. Pennsylvania Building. 14 Branches

Digitized by Google

Write for Your Copy of

INVENTORY VALUATION

For Federal Taxation and Banking Purposes

Free on Request

FEDERAL Income Taxes are now engaging general interest. It was not strange, therefore, that when we published an authoritative discussion of Inventory Valuation in a recent issue, that there should have been a demand for copies which exhausted the supply and required us to prepare reprints.

The article was an extract from an address made by William M. Lybrand, President, National Association of Cost Accountants, before the January meeting of the Detroit Chapter of that Association.

The opinion and judgments of a specialist and unprejudiced observer on this important topic is presented. We want every banker, manufacturer, accountant, attorney and merchant to have a copy, which is why it was reprinted in booklet form for general distribution.

Inventory Valuation will prove helpful to those who seek or give credit, plan for the future or are concerned with the preparation of Federal Tax returns.

It summarizes principles of valuation that have stood the tests of time and that are governing in the present conditions.

Copies will be mailed free on application to

MICHIGAN MANUFACTURER
AND
FINANCIAL RECORD

611 Free Press Building Detroit, Michigan

C. C. COAL COKE REX.

1303-4 MAJESTIC BLDG. DETROIT, MICH.

OFFICE APPLIANCE MEN MEET

Members of the Office Appliance Managers' Association of Detroit, attending a conference at the Detroit Board of Commerce, last week, heard the following speakers: C. K. Woodbridge, New York, sales manager, Dictaphone Company, and president, National Association of Office Appliance Managers; R. K. Russell, Chicago, general sales manager, Ditto Sales Company, and H. E. Ingram, Tonawanda, N. Y., general sales manager, Rand Company, Inc.

NEW KIRKGASSER PERSONNEL

An advertising agency was established in Chicago by George J. Kirkgasser the latter part of last year, and is now handling work for the Cutler-Hammer Manufacturing Company, Pawling & Harnischfeger Company, Wetmore Reamer Company and Frank D. Chase, Inc., industrial engineers. Mr. Kirkgasser was assistant advertising manager for the Cutler-Hammer Company from 1910 to 1914, after which he assumed the duties of advertising manager for that company. His new office is located in the First National Bank building, Chicago, and he is specializing in work for industrial concerns, although not limiting this entirely to technical fields. F. C. Smith, previously connected with the McGraw-Hill Publishing Company, has joined the new agency, and Miss A. A. Buchholtz, formerly office manager of the advertising department of the Cutler-Hammer Manufacturing Co., has assumed like duties with this agency.

"POWEROX" INTRODUCED

The Barrett-Cravens Company, Chicago, has brought out a new type of motor vehicle for industrial plants and yards under the trade name of "Powerox." It is a carrier-tractor with a chassis suitable for box, stake, platform or hopper bodies with a capacity of 3,000 pounds, and a tractor pulling power of 20 tons on trailers. It is only 4x8 feet in size and has a four-cylinder, four-cycle motor capable of a speed of from one to 10 miles an hour, but can be adjusted to higher speeds. The motor develops 25 horse-power and is water-cooled. The specifications of the vehicle are similar to those of the best trucks.

UTRECHT'S WORLD FAIR SEPT. 6-16

American manufacturers and traders are invited to send their representatives to the First International Industrial Fair which will be held in Utrecht, Holland, September 6 to 16.

Since 1917 national fairs have been held in Utrecht, the geographical center of the Netherlands, with increasing success each year. In 1919 the number of exhibitors was little below 1,300, including all branches of Dutch industry. The importance of these events soon spread beyond the Dutch frontiers. In 1919 no less than 1,124 applications were received from abroad for entrance tickets, the greater part from Germany and Belgium. So great was the interest that the governments of Belgium, Brazil, Denmark, Germany, France, Japan, Norway, Ukraine, Portugal, Roumania, Sweden, Switzerland and China sent special commercial representatives to Utrecht. Under these circumstances the directors of fairs felt encouraged to plan an international event for 1921. Judging from experiences and from recent reports coming to hand from several foreign countries, the enterprise promises to be very successful.

OFFICE MANAGERS CONFER

The office managers of the several district offices of the Cutler-Hammer Manufacturing Company were in attendance at a general sales meeting held in Milwaukee last week under the direction of W. C. Stevens, sales manager of the firm.

MELVIN SIGN CO. REORGANIZED

The Melvin Sign & Advertising Company, known to Detroiters since 1894, has been reorganized. The new officers are: President, John W. Forest; vice-president, Malcolm R. McCallum, and secretary-treasurer, C. B. Shields. Mr. Forest, who for several years was sales manager for the late A. L. Melvin, has expanded the organization so that it has seven departments, as follows: Poster, painted signs, commercial signs, electric signs, de luxe bulletin boards, distributing and gold lettering. The Melvin Sign and Advertising Company is Michigan representative for the Hi-Glo Company, Wheeling, W. Va., which manufactures electric signs. The company intends to open branches in a number of cities throughout Michigan.

Digitized by Google



Home Office Building, Temple Ave., Facing Cass Park.

Standard Accident Insurance Co.

OF DETROIT

Thirty-Seventh Annual Statement December 31st, 1920

ASSETS		LIABILITIES	
Bonds, Market Value	$ 9,425,847.30	Reserve for Unearned Premiums	$ 3,785,323.56
Loans on Real Estate Mortgages	523,613.50	Special Reserve as Required by Law	5,940,948.37
Collateral Loans	233,736.80	Reserve for Commissions, Cancellations, Taxes, etc.	888,310.92
Cash in Banks and Office	549,412.78	Surplus to Policy Holders—	
Real Estate, Home Office	878,028.63	Capital $1,500,000.00	
Interest on Bonds and Mortgages, due and accrued	177,551.21	Surplus 1,345,075.01	2,845,075.01
Premiums in Course of Collection	1,671,467.64		
	$13,459,657.86		$13,459,657.86

BOARD OF DIRECTORS

LEM W. BOWEN, President	Detroit	-	President and Gen'l Mgr. D. M. Ferry & Co.
D. M. FERRY, JR., Vice-President	Detroit	-	Vice-President D. M. Ferry & Co.
DWIGHT CUTLER, Vice-President	Detroit	-	Manufacturer
J. S. HEATON, Vice-Pres. & Treas.	Detroit	-	Standard Accident Insurance Company
J. H. THOM, Vice-President	Detroit	-	Standard Accident Insurance Company
CHARLES C. BOWEN, Secretary	Detroit	-	Standard Accident Insurance Company
J. T. KEENA, Director	Detroit	-	Chairman of the Board, Peoples State Bank
EMORY W. CLARK, Director	Detroit	-	Pres. First and Old Detroit National Bank
CHAS. C. JENKS, Director	Detroit	-	President Security Trust Company
KIRBY B. WHITE, Director	Detroit	-	Vice-President D. M. Ferry & Co.
GEO. H. RUSSELL, Director	Milwaukee, Wis.	-	Insurance

Claims Paid Since Organization, $34,442,526.09

Standard Accident Insurance Company Writes Personal, Accident and Sickness Insurance of all kinds, Automobile Liability, Property Damage and Collision, Workmen's Compensation, Elevator Insurance and Inspection, Team Owners' Liability and all forms of General and Public Liability Insurance for Employers, Merchants, Manufacturers and Property Owners.

MICHIGAN BRANCH OFFICE

E. H. RHINES, State Agent, 123 Fort St., West, Detroit

Digitized by Google

The Legislature and the Trucks

(Continued from Page 7)

and the cartage business will continue to increase its contribution toward government, state and municipal support and road building, and be willing to do it.

Speaking of the controversial attitude of the passenger car elect toward the motor truck division of the constantly moving public, the story is told of a group of state legislators out riding, whether for business or pleasure is not stated. Their car arrived at the rear of a large motor truck, when an amount of honking seemed to disturb. The road was none too wide and the heavily laden truck held the center of the stage, so to speak. Either the driver did not hear the honking behind him, or he was one of those perverse individuals who believe that both time and tide can be made to wait on man—if he drives a truck.

Shortly after this episode there appeared in the House a bill providing a penalty for neglect on the part of a truck driver to turn aside to let a passenger car pass. It may seem to many truck drivers that to have to take to the ditch to make room for a passenger car will be a hardship.

The measure just referred to does not work any financial hardship, but House Bill No. 57, introduced by Rep. DeWitt would, if made a law, drag some more of the truckmen's hard earned revenue away from him. This measure provides that every truck of more than a ton capacity shall carry a rear view mirror. This bill is, whether or not intended as such, a relative of the previously mentioned "road hog" bill, and, like it, discriminates against the truck for the very reason that where both could be attended to or become undesirable traffic conditions, the passenger car can be and often is as much of a malefactor as the truck.

The mirror bill requires trucks to have attached to them a mirror or reflector by which the driver will be enabled to see the road behind him. Such an attachment, it is assumed, would permit him to see cars approaching in the rear so that he could get out of the way, and also prevent the possibility of his backing down upon a car in the rear. Discharging him the mirror the driver might ditch his car or run down another vehicle or a person in front of his car, but of course that is up to the driver.

Mirrors of the kind used for this purpose can be purchased for as little as $1.50. There are about 47,000 commercial vehicles in use in the state, which are not all more than of one-ton capacity, but the majority of them are said to be. If only half of the trucks are more than one-ton capacity, the number of mirrors required would cost truckmen about $35,000, which would make such a law really worth while to somebody. The truck is a rough working machine. It carries heavy loads and has to take an immense amount of abuse. An attachment like a mirror, which must be set far enough out from the truck body to command a view of the road in the rear, would not last long on the average truck. Like gasoline and oil, the mirror expense should be classified under permanent maintenance costs.

Under power the truck jiggles when on the best of roads. On poor roads it either wallows or "undulates." The driver gazing into his shimmying mirror could not be held responsible for all he might see reflected from the road behind him. If by chance his efforts to concentrate upon the wiggly mirror to be sure the car behind him was not dancing the fox trot should result in his running some per son or car down in front, should he be held entirely responsible, or is this just a foolish question?

This One They Like

It is with considerable satisfaction that the trucking business dwells upon one measure introduced which does not seek to choke it and which is House Bill No. 25, fathered by Rep. McDonald. This measure provides that the license fee on automotive equipment shall be reduced 25 per cent for all residents north of the counties of Mason, Lake, Osceola, Clare, Gladwin and Arenac.

The contention is that owners of automotive equipment in the regions specified get only about half a year's use of their cars because of the condition of the roads, and that taxes are assumed to be charges against actual value received. Monroe county residents, especially those who are gunning for the trucking business, should be taken on a junket into the northern county to see the roads. They might not be so hard on the industry for one thing, and more thoughtful on road building for another.

The motor truck industry and the cartage business are not fighting this taxation because they object to all taxes and are determined to have the rights of the road entirely free of charge. The Detroit Transportation Association, representing 500 or more owners and users, is opposed to all the bills so far introduced, with the exception of Mr. McDonald's. F. L. Henk, executive secretary of this Association, and also of the National Team and Motor Truck Owners' Association, treats the proposed legislation in this light:

"We do not expect that the truck will entirely escape criticism, nor legislative restriction. Some restrictive laws are necessary and will be welcomed, but we do feel that most of the bills submitted to date in the Michigan legislature have the appearance of attempts to legislate the commercial vehicle off the roads. We favor legislation that will protect the highways and make them safer for the public. We expect to pay our share of the cost of building and maintaining good roads just as we are doing it now. What we do ask is—why aim at this business as an exclusive target for what might be recognized as unjust, discriminatory and destructive legislation when once the trucking industry and the cartage business is closely and fairly studied? So far as we know no legislation has been directed at farmers' wagons, tractors and agricultural equipment which use the roads constantly and do their share of damage to surfaces and bridges the same as traffic.

"It is generally recognized that motor truck transportation has come to stay; that it is necessary to the advancement of industry and commerce; that it has in the past saved communities from suffering and industrial reverses when other mediums of transportation were not effective, and was one of the great contributors to victory in the War. The industry that produces commercial vehicles and the business that uses them as its service equipment should be encouraged and protected, not heckled or crippled.

A Skin Game That's Legitimate

(Continued from Page 10)

then they are passed to the slitting machines, where the ends are thinned out, after which they go to the "feathering" machines, where a feather edge is put on the thin ends so that when the sections are glued together the joints will be smooth.

The glue is now put on to these thin ends and the sections are joined together, end to end, and pressed together in a hydraulic press under a pressure of 2,400 pounds. Sections which are to be used in the making of double and triple-ply belts are covered with glue the whole length and then allowed to set, this process being repeated several times before being pressed together. The material and workmanship is then inspected and then the belt is run through a machine which trims the edges and stamps the number of feet contained, this number appearing every four feet. The belt is wound on this machine, also. The next and last operation is that of polishing the edges.

The Detroit Oak Belting Company employs approximately ninety people when running under normal conditions, and turns out about 600,000 pounds of belting a year, all of which serves to advertise Michigan and the quality of its products to all parts of the world. This company sends a large part of its product to Cuba, where it is used in the sugar mills, and quantities are used in the southern part of the United States in the sugar and lumber mills. The Detroit Oak Belting Company has a representative in England, another on the Continent, and it recently has sent a man to the Far East for the purpose of placing Detroit Oak Belting there.

Among the other more prominent manufacturers of leather belting are the Charles S. Schieren Company, whose Michigan offices are at 515 Shelby street, Detroit; the Graton & Knight Manufacturing Company, offices at 462 Jefferson avenue, Detroit, and the Edwin R. Ladew Company, whose Michigan representative is the Charles A. Strellinger Company, Detroit.

BERKEY & GAY ELECTION

The last year has been a good one for the Berkey & Gay Furniture Company, Grand Rapids, which at its recent annual meeting declared a dividend of 8 per cent on the common stock. Officers were elected as follows: President, George G. Whitworth; vice-president and general manager, E. A. Wallace; vice-president and director, Lachlan MacLachlan; treasurer, W. J. Wallace; secretary, B. B. Warren. Directors: the officers and Mrs. William H. Gay and Jay C. Freeman, the latter being elected to represent the Berkey estate. Mrs. J. C. Rickenbaugh having resigned.

BATTLE CREEK INDUSTRIAL REVIVAL

The Nichols & Shepard Threshing Company, American Steam Pump Company and Duplex Printing Press Company, Battle Creek, are again keeping their regular forces at work, while the Duplex company has increased the number of employes. The A. H. Stove Company has reopened its foundry, and the Kellogg Toasted Corn Flakes and Postum Cereal companies are operating with reduced forces.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

L-XX
HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse
1437-1459 Franklin Street
Detroit, Mich.

GOOD

Planing can only be accomplished in GOOD time by using GOOD Planers of GOOD design and GOOD workmanship, such as the CINCINNATI.

Rapid Power Traverse
Forced Lubrication
Herringbone Gears
Box Table
Box Arch

Have You CINCINNATIS?
If Not, Ask Us About Them

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING - DETROIT
CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

Investing in Prosperity

(*Continued from Page 8*)

merce. In this emergency we need to remind ourselves that 17 per cent of our total production is devoted to foreign business, that one-fifth of our agricultural and industrial population depends for livelihood on international commerce, that the remotest parts of the country are affected by our foreign trade, and that this is pre-eminently the time for freshened interest and activity in everything that pertains to foreign commerce. Now is the time, not later, when our competitors have regained control of world markets, routes of trade and the means of international communication, for American business to insist upon the return of our merchant marine to private ownership and operation; to insist that the foreign service of the Government be strengthened and made more efficient; that adequate cable and wireless facilities be established under American control, and that American enterprise shall enjoy the protection of its government wherever it goes on legitimate business.

Above all, America must be thoroughly impressed with its new responsibilities and opportunities as the foremost creditor nation. Fundamentally this involves recognition of the fact that if we are to continue profitable trade with the rest of the world, heavily indebted to us as it is, we must give them time to work out their debt—in short, we must give them credit in such amounts and for such periods as will enable them to rehabilitate their war-shattered industrial organism.

The Edge Act, passed as an amendment to the Federal Reserve Act, December 24, 1919, was designed to provide the machinery of relief. This law provides for the organization of corporations with minimum capital of $2,000,000, operating under the control of the Federal Reserve Board, to finance foreign trade. It makes it possible for foreign concerns to purchase American goods on credit running for as long as five years, without tying up the capital of the American exporter. These long-time credits will be based upon security offered by the foreign buyer, which in turn will serve as the basis for the issue by these Edge corporations of debentures to be sold to American investors. The amount of such debentures which a corporation may issue is limited to ten times its capital and surplus. Prior to the passage of the Edge bill, legislation was enacted permitting national banks to invest up to 5 per cent of their capital and surplus in corporations engaged in international financial operations, and in many states the law now permits state banks to invest in the stock of these corporations.

Despite the increasing gravity of the foreign credit and international exchange situation and of the slowing-up of trade everywhere with falling prices and creeping paralysis of business at home, the facilities of the Edge Act were not availed of in any large way until the close of the year, when the $100,000,000 Foreign Trade Financing Corporation, fathered by the American Bankers' Association, was launched at the Chicago conference in December. This corporation, which it is hoped to have in operation early in 1921, will have authority to make loans abroad and issue debentures to the amount of $1,000,000,000. By virtue of its large resources it will challenge attention and command respect and confidence both at home and abroad.

A survey of the world's business and credit situation makes it plain that there is urgent need for this type of financing corporations and that its resources will be fully utilized in making advances on longer time credit than is customary through the familiar sixty or ninety-day trade bill upon adequate and properly-protected security in foreign countries. As a whole people we loaned our Allies nearly $10,000,000,000 on faith without the pledge of any specific security; as individuals and business groups we must, even upon the selfish basis of self-protection, lend our credit to them as individuals and business groups in order that they may work out post-war rehabilitation and so be able to liquidate their indebtedness to us.

All these nations, some rapidly, others more slowly, are working to that end. Even for the countries of Central Europe new hope appears. The Council of the League at Geneva has projected a scheme to mobilize the national resources of these countries behind the manufacturer and merchant. Conditional upon their abandoning internal quarrels and taking steps to help themselves, private credit will be guaranteed by gold bonds based upon national assets. This elaborate scheme involves in a measure indirect nationalization of industry and trade, but these countries have become accustomed to government regulation, and the choice seems to be between some such system and utter ruin.

The measure of success of the foreign trade financing organization depends of course upon the willingness of the American investor to absorb the debentures put out by the corporation. American investors underwrote the nation's war obligations aggregating $25,000,000,000 within the space of about two years. Though the flaming zeal of patriotism which made that achievement memorable has passed, there is every reason to believe that the habits of thrift, economy and hard work learned in that great venture can be invoked in this new enterprise to help save the commercial world from demoralization. To sell hundreds of millions of dollars worth of debentures based upon foreign security will require the most deliberate planning, most astute organization and most masterly salesmanship. That it can be done and will be done we have no doubt. Its successful achievement will pioneer the way to other foreign investment activities, will hasten the rehabilitation of a war-torn world, will redound to our own prosperity, and will justify our boast—"America, the Creditor Nation."

FEDERAL STAMPING, HOLLAND

The Federal Stamping Company, Holland, has just held its annual meeting, at which a proposal to increase the capital stock from $25,000 to $35,000 and declare a cash dividend of 7 per cent was ratified. The officers elected are the following: President and general manager, Thomas Olinger; vice-president and attorney, Thomas N. Robinson; secretary and general superintendent, John R. Spencer; treasurer, Henry Winter. The new board of directors is made up of these men and A. H., C. H. and E. C. Landwber.

EMPLOYES VOTE ON WAGE CUT

Before putting into effect a 15 per cent wage cut, the Kalamazoo Vegetable Parchment Company, Kalamazoo, asked the union and non-union employes to vote on the proposition. The present wage agreement runs until May 1, but the company desires to make the cut by March 1.

THREE MORE PLANTS RESUME

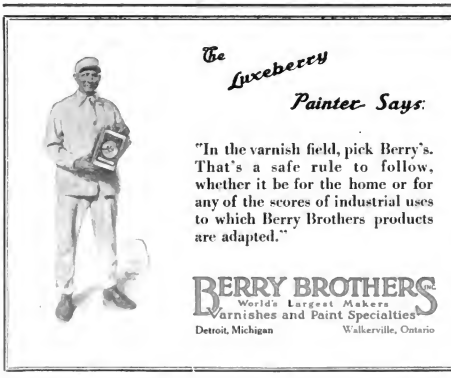
The Melling Forge Company, Lansing, has reopened its plant under a reduced production schedule. Factories of the Ypsilanti Reed Furniture Company at Ionia and Lyons have resumed operations.

LUMBERING IN KALKASKA

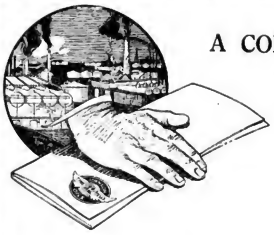
Owing to the exceptionally favorable weather, lumbering operations in Kalkaska county are said to be in better shape than ever. From the Wells & Avery camp, eight miles from Kalkaska, some record loads have been drawn. Some of these have been of between 4,000 and 5,000 feet.

DETROIT VENEER & PANEL

Stockholders of the Detroit Veneer & Panel Company, Cadillac, were told at the annual meeting that notwithstanding the business depression the latter part of the year, the company ended 1920 with a loss of only a few hundred dollars. The outlook for this year is beginning to brighten. The stockholders voted to sell the remaining $7,500 of unsold capital stock out of a total capital of $100,000.



Digitized by Google



Caustic Soda, Soda Ash and Linseed Oil for immediate shipment from Chicago stock.

If you do not now receive our monthly market letter, write us at once. It is worth your while.

A CONTRACT IS A CONTRACT

THE ability to deliver fuel oil as specified is one thing. The willingness to live up to an agreement is another one entirely.

We pride ourselves upon our integrity. Our customers like to do business with us because there is never a quibble about a contract, and they have found that we will move Heaven and Earth to take care of them.

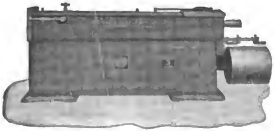
We enjoy doing business on that basis.

JOHNSON OIL REFINING CO.

DETROIT Dime Bank Bldg. CHICAGO 208 S. La Salle St. Union Arcade Bldg. PITTSBURGH TULSA, OKLA., Daniel Bldg.

JOHNSON OILS

American Broaching Machines & Tools



MADE IN TWO TYPES, EITHER OPERATED BY SCREW OR RACK

American Broach & Machine Co.

F. J. LAPOINTE, Pres.

Ann Arbor, Michigan

DETROIT, OFFICE:

305 Scherer Bldg. Phone Cadillac 5381

Why Take a Risk on Forgings?

When at no greater expense you can secure your requirements and eliminate all forging responsibility by having them made

"The Champion Way"

FORGINGS THAT PASS OUR INSPECTION ARE CERTAIN TO MEET WITH YOUR APPROVAL

Try Us

The Champion Machine & Forging Co.

CLEVELAND, OHIO

Detroit Office:
H. B. KENDAL CO. REAL ESTATE EXCHANGE BLDG.

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 5163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

ESTABLISHED 1906

Bookkeeping
Appraisals
and
Cost Systems

Audits

Income
Tax
Reports

THE
WALTER S. GURD CO.
Public Accountants
708-9 Hammond Bldg. Detroit, Mich.
Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F. C. A.

GRATON & KNIGHT
Standardized Series
LEATHER BELTING
Tanned by us for belting use
The Correct Belt for Every Drive.

Leather Belting for power transmission, Lace Leathers, Leather Packings, Gaskets, Washers, etc. Automotive Leathers—Straps, Clutch Leathers, Fan Belts, Boots, Leather Links, Liners, Coupling Discs, Washers, Crank Holders, Robe Straps.

THE GRATON & KNIGHT MFG. CO., Worcester, Mass.

Oak Leather Tanners, Makers of Belts and Other Leather Products.

Distributors and Branches in All Principal Cities.

New Corporations

FOR WEEK ENDED FEB. 19, 1921

Arteraft Engraving Co., Kalamazoo; designing, illustrating, commercial photography, etc.; Fred J. Exner, Mae P. Exner, LeRoy Combs, Kalamazoo. 12,000

Financial Investment Co., Grand Rapids; to buy and sell all classes of approved securities, in addition to real estate bonds and mortgages; F. A. Stowall, C. U. Clark, C. E. Converse, Grand Rapids 25,000

Sisburg Coal Co., Bay City; retail coal and other fuel and mason supplies; James F., Helen H. Hennessey, M. McKay, Bay City 20,000

Potter & Johnson Agency Co., Detroit; to deal in machinery, tools and appliances of all kinds; William L. Gleason, William L. McKay and William J. McKee, 535 Bates St., Detroit 10,000

Owosso Food Products Co. (F.), Minneapolis, Minn.; Gilbert L. Taylor, Owosso, Michigan agent 175,00

Ojibiway Steel City Land Co., Ltd. (F.), Windsor, Ont.; Henry C. Hummel, secretary-treasurer, 1326 Dime Bank Bldg., Detroit 40,000

Detroit Sheridan Co., Detroit; wholesale and retail dealer in automobile parts and supplies, repairs and garage; Charles L. and M. H. Bussey, 4208 Woodward Ave.; J. M. Eddy, Detroit 75,000

Union Building Co., Detroit; to erect, build, purchase and sell real estate and buildings and operate same; Abraham and David Cooper, 285 Hendrie Ave.; Claude Burns, Detroit 40,000

The Taylor Rubber Co., Detroit; manufacturing and mercantile business; Hugh Thorburn, 810 Newport Ave., Detroit; Parker G. Ballou, Hartford, Ont. 1,000,000

Hugh Preston Art Service, Inc., Detroit; commercial art; Hugh A. Preston, 944 Collingwood Ave.; Clyde W. Carter, John A. McLeod, Detroit 15,000

Monarch Construction Co., Kalamazoo; contracting and construction in all branches; Arthur P. Shields, Archie W. Ruff, William Tucker, Kalamazoo 100,000

Door Control Co., Detroit; manufacture, sale and distribution of door checks or door controls for general use, etc.; Louis Huard, 3255 Whitney Ave.; Thomas P. Schuch, Alois Kuka, Detroit 10,000

Michigan Aero Service Corp., Lansing; to maintain and operate for pleasure and commercial purposes, aerodromes, airplanes, etc.; Harold E. Jones, 414 South Pine St.; Glen Walter Price, Glen Bixby, Lansing 10,000

Rowena Junk Co., Detroit; to buy, sell and deal in rags, paper, books, magazines, rubber, iron, steel and other metals; F. Gellman, 1262 Euclid E.; Sam Stovack, Detroit 1,000

Paper House of Michigan, Detroit; to manufacture, buy, sell and deal in all kinds of paper and other items of merchandise; L. E. Perine, 1626 Chicago Blvd.; K. B. White and F. P. Todd, Detroit 60,000

Viking Motors Co., Detroit; to manufacture aircraft motors and airplanes and accessories, buy and sell automobiles, etc.; John W. Swartz, 2704 W. Grand B'v'd.; Robert L. Bailey, Fred H. Aldrich, Detroit 100,000

S. J. Hoexter, Inc., Detroit; to manufacture, sell and deal in machines, tools, automobiles and truck accessories; William A. Evans, 62 Adams Ave.; Herman H. Hoexter, S. R. Glogower, Detroit 10,000

Benton Harbor Picture Frame & Novelty Mfg. Co., Benton Harbor; manufacture of picture frames, mirrors, novelties and other articles of like and similar character; Frank Hart, Charles Berger, Morris Reiter, Benton Harbor 10,000

Krieg Auto Co., Olivet; buying, selling and exchanging of automobiles and tractors, farm implements, etc.; Duray F. Munger, Vine B. Peters, Milton J. Krieg, Charlotte 15,000

W. J. Grant Co., Ltd., Jackson, dealing in real and personal property and to act as agent for insurance and bonding companies; William J. Grant, Clarence E. Meyfarth, Lena R. Grant, Jackson 4,000

Aero Cushion Tire Agency for St. Clair County, Port Huron; to buy, sell and deal in aero cushion inner tires and other products; Alex Michailoff, Mark Redjenoff, Eugene Rollinson, 1206 E. Grand Blvd., Detroit 5,000

Shield-o' Cushion Co., Inc., Detroit; to manufacture, buy and sell tools, dies

Digitized by Google

and machine shop business; Frank E. Shaller, 6128 Trumbull Ave.; James L. Conlon, John H. Thomas, Detroit 25,000

Lansing Union Truck Sales Co.; to deal in motor acrs, trucks, motorcycles, etc.; Harry Herndon, W. W. Thorbarn, L. L. Thorburn, Lansing 25,000

Lansing Waste Paper Co., Lansing; to deal in paper stock and waste material; Jacob H. and Lillian Shapiro, Lansing; George Peisasky, Kalamazoo 10,000

Foster-Fowler Co., Lansing, general insurance agency business; Thos. G. Foster, Seymour K. Fowler, Roy L. Goodel, Lansing 5,000

Star Coal Co., Detroit; to deal in coal, coke, wood, etc.; William B. Alcorn, 4211 Taylor Ave.; Clifford S. Taylor, William J. Gray, Jr. 10,000

R. & A. Lumber Yards, Alpena; to manufacture and deal generally in lumber and all other products, Evan F. and R. A. Allison, Harriston, Ala.; Ralph Gilchrist, Alpena 250,000

Coldwater Construction Co., Coldwater; construction of roads, bridges, culverts; contracting generally for all kinds of earth and cement construction; Charles A. Pollock, Harrison L. Milnes, William H. Milnes, Coldwater

Birss Automobile Co., Saginaw; to engage in sale of automobiles and conduct garage for storage of same; Charles S. and Ann L. Birss, Edward and Grace Boergert, Saginaw 15,000

Haselschwerdt Motor Sales Co., Grass Lake, Jackson county; conduct general garage, buy and sell automobiles and accessories; Henry, Walter D. and Cecil H. Hasselschwerdt, Grass Lake 20,000

Huron Oil Co., Bad Axe; to buy, sell and deal in automobiles, accessories and all equipment necessary in operating gasoline station; Irene A. Binder, John C. Neeb, Henry Binder, Bad Axe 20,000

Owosso Real Estate & Improvement Co., Owosso; real estate; William J. Blood, H. R. Sturtevant, Leigh H. Blood, Owosso 41,000

C. W. Whiston Co., Detroit; general manufacturing and mercantile business; Clarence W. Whiston, 2921 Woodward, Detroit; Burt W. Hathaway, Chicago; R. E. Fitzgerald, Wilmette, Ill. 30,000

CHANGES OF OFFICE

Charles W. Kaider, Inc., office moved from Grand Rapids to Detroit 2

Borden Co. (F.), Jersey City, N. J., Michigan office moved from Lansing to Mt. Pleasant 30,000,000

CHANGES OF NAME

Shiawassee & Genesee Co-operative Ass'n (name changed to Lennon Shipping Association), Lennon 5,000

Loan & Deposit Bank (name changed to Loan & Detroit State Bank of Grand Ledge, Mich.), Grand Ledge.. 50,000

H. M. & M Co. (name changed to Hanson & Michelson Lumber Co.), Grayling 650,000

Wirthlif Insurance Agency (name changed Wirthlif Agency Co.), Port Huron 1,000

M. V. Brown & Sons Co. (name changed to Commercial Engraving Co.), Detroit 20,000

Crossman Stamping Co. (name changed to Peerless Stamping Corporation), Ypsilanti 10,000

Townline Creamery Co. (name changed to The Town Line Cheese Co.), Kawkawlin 5,000

Bentley & Miller (name changed to Bentley-Miller-Theisen Co.), Detroit 10,000

Best Store Co. (name changed to Best Store & Stamping Co.), Detroit 200,000

Family Department Store (name changed to Polonia Department Store), Detroit 150,000

Mutual Automobile Association (name changed to Michigan Automobile Association of Grand Rapids), Grand Rapids 1,000

INCREASES

Multi Products Co., Detroit, from $50,000 to 250,000

Standard Oil Co. Whitings, Ind., Detroit, from $30,000,000 to 100,000,000

Michigan Paper Co. of Baldwell, Manistee, from $1,000,000 to 3,000,000

Co-operative Ice Co., Grand Rapids, from $500,000 to 700,000

Detroit Hoist and Machine Co., Detroit, from $60,000 to 150,000

Kalamazoo Paving Co., Kalamazoo, from $10,000 to 60,000

Mueller Metals Co., Port Huron, from $2,000,000 to 3,000,000

Ferndale Land & Title Co., Detroit, from $2,000 to 20,000

McCray Refrigerator Co. (F.), Detroit, Kindallville, Ind., from $50,000 to.. 1,000,000

Pontiac Mortgage Investment Co., Pontiac, from $1,000,000 to 1,500,000

Get a C-H Lifting Magnet For your Portable Crane

The C-H Lifting Magnet has become one of the necessary attachments of the portable excavator-crane along with the grab buckets, chain slings, and digging buckets;—iron or steel structural material, pig iron, bars, scrap—may be handled quickly and at low cost.

The full advantage of these portable machines are possible when a Cutler-Hammer Magnet is a part of the equipment because of the high capacity compared to weight.

Publication 855 on magnets will be sent on request.

THE CUTLER-HAMMER MFG. CO.
Magnet and Clutch Dept

Detroit, New York, Chicago
Pittsburgh, Boston, Cleveland,
Cincinnati, St. Louis, Denver, Salt Lake City, Birmingham, San Francisco,
Los Angeles, Seattle
Northern Electric Co., Ltd., Montreal, Canada

Works: Milwaukee
New York and Bedford Eng. land.



C-H LIFTING MAGNETS

SEND US YOUR ORDERS

for gray iron castings, finished or in the rough. Motor blocks our specialty. We are equipped to give you prompt delivery. Address:

Boyne City Chamber of Commerce
BOYNE CITY, MICHIGAN

W. J. PEOPLES & CO.

Stocks -:- Bonds
Foreign Exchange

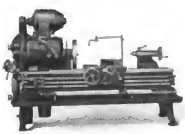
First Floor Penobscot Bldg. Phone Cherry 8640

We solicit your inquiries

Digitized by Google



We Positively Carry the Largest Stock in Michigan



We Purchase Your Entire Plant Let Us Quote You

Machinery and Power Equipment

Our Aim is to Render Service

Complete Exuipment

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Repair Shops, Heat Treating Plants, Wood - working Plants, Iron and Metal Foundries.

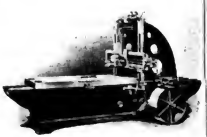
Riverside Machinery Depot

251 ST. AUBIN AVE.

Phone Edgewood 1581-82-83-84



Phone Us When in the Market for Equipment and our Representative will be glad to call



SOLVAY COKE

Best for Your Needs: the Name Guarantees the Highest Quality

SEMET-SOLVAY CO.
DETROIT, MICH.



ELECTROTYPES ARE THE WORKING PLATES

The trolley repairman, despite difficulties, keeps the electric current flowing steadily and the lines of transportation open. Good Electrotypes—performing efficiently under all printing conditions—keep production flowing smoothly and open the way to more profitable results for the advertiser.

Michigan Electrotype & Stereotype Co.
Fort Street at Second Main 1972

MICHIGAN

ELECTROTYPES STEREOTYPES

DETROIT

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Fifteen Cents a Copy

Five Dollars a Year

Public Service Operations at Cost

Sticking to the Facts

Screws and Screw Machines

Germany's Growing World Trade

Give the Stockholders a Chance

[Editorial]

DETROIT, SATURDAY, MARCH 5, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 10*

This 5 Room Colonial Bungalow with Garage Complete → $894

Bungalow has Living Room, Dining Alcove, 2 Bed Rooms, Bath, Kitchen. Bungalow or Garage can be purchased Separately



Send for the ALADDIN Catalog Today

Price of above includes all material for completing both buildings—one hundred other California bungalows, Colonial Bungalows, Cottages, Two story Homes, and latest information on building conditions.

YOU are sure to find an Aladdin home to suit your tastes and pocketbook for the variety ranges from a few hundred dollars to homes costing fifteen thousand dollars completed. They are built of the very highest quality lumber to be had and designed and constructed according to the very highest architectural standards. They are not "portable," "sectional" nor "fabricated." They are real homes constructed exactly as any well-built home in your neighborhood. The Aladdin catalog gives all these details.

Present Aladdin Prices

are based on the below-cost figures. Rather than lose more money the great timber and lumber producers have already *closed down*. Common sense points to immediate action for the prospective home builder. Aladdin cannot continue very long to accept orders at present prices. *It's your opportunity.*

Read the experience of Mr. Gustave Anderson, of Lemont, Illinois, who recently wrote: "I am just finishing my new Aladdin Readi-cut Home. I have erected it on spare time only—some of my friends helping part of the time. We are very pleased with it and think more of it that I was able to build my own home, not being a carpenter myself. I found the blueprints very simple and did not have any trouble to speak of to find the place for the different pieces, and I was also very careful to follow the directions for piling the lumber, which was a great help. I found that material exceptionally good, and every piece went exactly where it was intended to go, and fit perfectly when put in place. The finishing lumber was particularly fine. I figure I have my home now at about half of what it would otherwise cost me, and I will heartily recommend Aladdin system of readi-cut homes to anyone desiring to build an exceptionally attractive home at a very low figure."

We have thousands of letters from satisfied owners of Aladdin Readi-cut Homes who have had the same experience as Mr. Anderson. No matter where you live there is an Aladdin Readi-cut owner near you to whom we will gladly refer.

Alladin System

Saves Labor. All the materials are cut to fit in the Aladdin Mills ready to be nailed in place on the job. This saves about 1/3 of the carpenter's wages.

Saves Lumber. The Aladdin system of standardized cutting to fit of materials saves 18% waste of lumber. This means **18% saving on the cost of the lumber.**

Saves Time. You purchase all the materials from one source and they are all on the job ready for you when you want them. Your home is not delayed for weeks and months before completion.

Send for Catalog 100 Attractive Home Plans

Send to Offices Nearest You

National Homebuilding Service.

Aladdin Homes are manufactured and shipped direct from the Aladdin Company's own mills in North Carolina, Mississippi, Michigan and Oregon. Wherever you live, Aladdin Homes come to you in a straight line from the nearest timber region.

Aladdin's National Homebuilding Service means shorter routes, quicker delivery and lower freight rates for builders in every part of the United States. Three days to a week are saved in shipments reaching destination.

Price Includes All Materials

The Aladdin Book of Homes has a message for you. Amongst its pages, profusely illustrated in colors, leading home designs are represented.

Aladdin homes are cut to fit as follows:

Lumber, millwork, flooring outside and inside finish, doors, windows, shingles, lath and plaster, hardware, locks, nails, paint, varnishes. The material is shipped to you in a sealed boxcar, complete. The book, "Aladdin Homes" gives complete information on the Aladdin guarantee which assures you of highest quality of material. Ask for book No. 2079.

Other Aladdin Homes

The Aladdin Company

Enclosed find stamps for the book "Aladdin Homes," No. 2079

Name.....

Street.....

City.....

State.....

The Aladdin Co., Bay City, Michigan

Branches: **Wilmington, North Carolina** Hattiesburg, Mississippi **Portland, Oregon** Toronto, Ontario, Canada

1920 High Price...$6403 Present Price...$4767

1920 High Price...$3033 Present Price...$1858

1920 High Price...$4620 Present Price...$2960

1920 High Price...$4452 Present Price...$2883

1920 High Price...$4179 Present Price...$2626











Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Public Service Operations at Cost

A Review of the Conditions Under Which the Utilities Must Operate

IT MAY SEEM STRANGE to some engineers at first thought that it is within an engineer's province to have a hand with lawyers, municipal executives and utility management in framing the agreements, contracts, ordinances or franchises necessary to continued satisfactory operation of a public utility. But it should not appear remarkable if you admit that an engineer's work is something more than merely applied science, applied mathematics and certain accompanying uses of a drawing pencil.

An engineer's participation in business affairs like franchise-making is one more evidence of his ever extending sphere, of his widening influence and new responsibilities. There are daily realized more and more business negotiations where it is of particular advantage to have the proposed arrangements made with the aid of a man whose profession continually deals with the inexorable laws of cause and effect both in the inanimate world and in human relations; a profession which deals first hand with the service to be secured from materials, machines and labor; one which continuously has to count the cost of building and operating industrial works and living facilities, and daily weigh the factors that promote financial success or invite failure.

It would be preposterous to infer that the engineer alone possesses all the knowledge and skill essential to perfecting all sorts of business contracts. The business or municipal executive can see, best of any of us, no doubt, certain desirable aims and practical ways to these ends, like adjusting utility rates more or less automatically to varying costs of service; like insuring a definite interest return to investors and finding what is adequate under changing conditions; or like making it impossible to sidetrack developments obviously required in the general public good.

But we do find that the business executive more and more realizes that he is safer if he relies on the engineer to make sure that no natural laws are broken, that no impossible tasks are set, that what is cited as cost includes all elements of true cost and excludes all fictitious things paraded as costs, that there is no mathematical juggling by which property is confiscated or unfair increments pyramided, that projected improvements will yield the promised results and not be expensive will-o'-wisps. The most successful business executive realizes that he can and should rely on the engineer in wider and wider fields for such service, as much as he relies on the lawyer to insure that the existing laws and ordinances affecting his business are compiled with, that his plans may not later be nullified by illegality, that clauses are not present in his contract which at some future time may change the whole intent and performance, or that the equities are always preserved between all parties.

By HARRY BARKER

Harry Barker, the author of this article, is an American engineer of distinction, associated with George W. Fuller, of New York City. He has been engaged for some time in appraisal and other work as the engineering counsel of the city of Grand Rapids, in the problems growing out of the fixing of adequate and just fares for the street railway system of that city. In view of the presentation of a "Service-at-Cost" proposal in Detroit affecting the street railway system, his views, being those of an engineer engaged on the municipal side of this question, are highly interesting.—The Editor.

In opening the discussion of such a business topic as "service-at-cost franchises," these few general remarks have seemed warranted as one statement of the platform of a growing group of engineers regarding their stand in relation to private and public business affairs.

The Place of "Service-at-Cost" Plans in Utility Regulation

The idea of keeping rates for public utility service close to cost is not new, though it has aroused more discussion in the last three or four years than before. The idea is as old as our present scheme of public regulation by commission. What is now talked of so much as the "service-at-cost" plan differs from the older regulation in two ways.

First, the rates and service are more automatically adjusted to costs as the latter shift from time to time. Secondly, a larger element of "home-rule" is injected into the regulation.

Under the older state regulation, to which we have become accustomed, if the utility company felt that costs were rising so as to warrant higher rates, it applied for an increase; and generally the move was contested by the customers. There was irritation and diminished confidence on both sides; unproductive expense and long delays were apt to ensue. These "service-at-cost" plans, now advocated, set up such municipal and company machinery as will, in competent hands, make prescribed changes in rates up or down according as certain agreed conditions appear and cost factors fluctuate up or down. This machinery and the duties laid on its directing officers are the substance of the "service-at-cost" franchises.

To get a correct perspective of the "cost-of-service" idea it is of some help to step inside a moment and view it from the angle of franchises in general and good franchises in particular.

The prime object of franchises for municipal utilities may be very generally summed up as the definite record of certain desirable ends which it is agreed to secure. Further than that, a franchise may lay down the ways in which the desired ends are to be attained.

In the first place, the object of the franchise is to insure good service for those desiring to use the particular facility, whether it be street railway, electric light power, gas supply, water supply or telephone communication, and where the community does not desire to undertake these services as a municipal enterprise.

What many regard as the next important object is to insure adequate extensions of the utility facilities and such improvements from time to time in the plant and property as may be judged essential to service which would be considered good, measured by standards prevailing from time to time.

From the public point of view the next important object of a franchise is to insure that the service is furnished at rates which in themselves are not greater than the service intrinsically is worth to the customer, are as low as the utility can afford to give and still stay in business, and do not unfairly discriminate between customers.

The next important object of the franchise is one which directly affects the persons who have invested their capital in the property and business of a public utility. Possibly sometimes the patrons of the utility temporarily forget that this also affects them, though indirectly. This is to reduce to a minimum the risk of losing the principal of funds which different people have invested in the plant and business of the public utility. The public is interested in this object, for it is common experience that if the risk of losing the principal is great, the investor will not put new money into the enterprise unless he gets a high rate of interest to compensate for the risk, and this of course is bound to be reflected eventually in higher cost or poorer service to the consumer. There is a related object of a franchise which affects the investor first and the customer almost as much, although in a different way. That is, the franchise should help the business insure a fair return on capital, and by fair return is here meant one which compensates for the use of the money and the special hazards of the business, if there are any, but one which also limits the return to such use and risk.

At this point the aims of the older types of franchises have commonly stopped. It is now seen that it is highly desirable if it is possible to work into the franchise some definite inducements for continuously improving the service, extending the facilities and introducing economies of operation whose final result is a lower cost of service to the customers.

These few fundamental points have been stated without regard to the nature of the utility. They should apply to all with equal

Digitized by Google

force, although the difficulty of drawing up a franchise successfully to embody all of these desirable objects may prove to be a much more difficult problem in the case of some utilities than in others. It would seem, off-hand, that the more localized and simple the service and the fewer the classes of patrons, the easier it would be to arrive at a franchise which satisfies all the fundamental requirements to the highest degree. When inter-city relations arise or the classes of customers increase and there are a variety of services rendered, necessarily complications arise, with troublesome details. It would seem as if a street railway franchise affords the best opportunities for working out a desirable plan and that a far reaching and complex service like telephone communication might become difficult.

Whether or not a "service-at-cost" franchise is a good franchise depends upon how carefully it has been worked out to fit the local conditions. It wholly depends completely upon how it satisfies the tests of any good franchise under local conditions. Its value depends upon how well the makers provided for its enforcement—for the regulation of the utility in conformity therewith.

The "service-at-cost" plan is not some wonderful ready-made automatic device which can be installed in the municipality and then left to itself to cause the utility company to meet every demand on it for service at nominal charges to the public.

But it is possible with the development of a "service-at-cost" plan, within a franchise or any operating contract, to promote good service, to induce extensions and improvements, to keep rates and charges most nearly reasonable at all times, to minimize the risk to the investor, to insure some approach to a fair return to the investor in lean years as well as in prosperity, and to offer rewards for producing better service and lower rates—all in a way and to a degree that no ordinary franchise can do.

The introduction of the complete "service-at-cost" plan into franchise making in many cases can be the key to the whole satisfactory solution of a difficult problem—whether the service is good or only fair, whether the facilities are ample or only meager, whether or not fares are sometimes extortionate and sometimes confiscatory, whether the risks of the business are severe or only ordinary, whether or not the return to the investor can oscillate up or down or be fairly stable, whether there is or is not an incentive to continuous progress and economy.

There are certain features of franchises which have become familiar through their general necessity of a framework but which do not distinguish the better from the poorer. For instance, authority and consent necessarily are granted to occupy the streets, to build, maintain and operate works and do business otherwise in devious ways. Commonly, certain express limitations and reservations to the authority and consents are introduced. The right of the community to purchase the works and business under generally specified terms is common, as is also the right of a community to name the purchases. The community sometimes lays down general rules and requirements fixing the service itself, or it may simply reserve the right to make such rules and requirements as promote public confidence and safety. Sometimes provision is inserted for a bond to insure faithful performance of the franchise requirements.

There are other features of a franchise not closely identified with the "service-at-cost" plan but which promote one or more of the desirable objectives previously outlined, namely, good service, adequate extensions, reasonable fares, minimum risk in invested principal, fair return on investment, inducements for better service or lower rates; and perhaps these ought to be at least mentioned in passing. For instance, in most cases it may minimize costs if a utility is given a monopoly of all similar services in a district, and in some cases it may improve the service and be economical in the long run. This means one light and power company, one water works, one gas company, one telephone company, one traction and transportation system operating trolleys and buses.

Another feature is that the cost of the utility of doing business, and therefore ultimately the cost of service to the customers, is diminished if the tax burdens are reduced to a minimum representing the company's participation in the benefits of government. The idea is to lay upon the utility no burdens merely to lighten the loads of others but as an whole, irrespective of whether the utility caused excessive expense or enjoyed peculiar advantage.

What Distinguishes a "Service-at-Cost" Franchise

Now to come down to those features of a franchise by which the cost-of-service idea is incorporated: One of the first requirements is to write in a basic value of the utility property as of the date of the franchise and to make provision for finding the value at any future date (say as the datum value plus the net cost of extensions, betterments and replacements, and less the amount of value in the datum for property sold, destroyed or abandoned not to be replaced, and less the accrued depreciation on additions, betterments and replacements so far as it has been earned and set aside or repaid.)

A warning is necessary that this is not a formula which can be blindly followed. In order to preserve equity between the company and the customers the way in which the datum value was arrived at should be known, the extent of depreciation in the various items, the history of the property and business since the date of franchise, and perhaps other matters, should be duly considered. Such consideration is the function of an engineer, and this fits in with other features of the "service-at-cost" plan requiring engineering supervision, as will be noticed later.

What seems to be the next important distinguishing provision is that service be given and the rates be periodically adjusted, so as to cover only the "cost of the service;" but including in this "cost" all the legitimate operating expenses, adequate allowances for repairs and maintenance, a proper allowance for accruing depreciation and required annual contributions to other reserve funds which the particular plan may provide.

Very closely associated with the provision just discussed are those provisions which regulate service and expenditures by a budget, made up in advance, approved by the company and any regulatory officer provided to administer the franchise. The provisions for expenditures that have been written hard and fast into franchises have been less desirable and the inevitable revision has been so painful and difficult that a flexible basis is conceded to be preferable.

Frequent and violent changes in rates are undesirable, because of the confusion created, because of the possibilities of excessive expense to the utility company in making the necessary changes in office practice, and because of the chances of mistakes and friction. One flywheel, some reservoir, is greatly needed in any "service-at-cost" plan to absorb the short passing fluctuations but to let the rates respond to sustained rises of fall in costs of labor and materials. Changes in some utilities may be permissible three to six months apart, while in others a year may be set.

This reservoir, or flywheel, is a fund variously called the "index," the "barometer," the "emergency" or the "surplus" reserve, etc. Perhaps it may be well here to confine reference to it as the "index reserve fund," as that indicates its purpose and nature. To this fund are added the annual operating surplus and from it are paid the operating deficits. In its simplest form, two levels are fixed for it. The lower level is reached by repeated or considerable drafts for deficits, then a rise in

(Continued on Page 38)

"Don't Slam the Door"--Henry Ford to a Banker

THE New York Mail prints the following:

"Local officials of the Ford Motor Company were loath today to discuss the affairs of the company, which became a matter of renewed interest with the announcement of the resignation of the seventh executive of the company, Hubert E. Hartman, assistant secretary and general counsel.

"One solution of the mystery of the disintegration of the official personnel, however, was offered by a man close to Henry Ford, who says that some of the officials left by request.

"The list of seven Ford men now looking for jobs includes Frank L. Klingensmith, vice-president; W. C. Anderson, European chief; Louis Block, branch manager at Philadelphia; L. H. Turrell, auditor; Charles A. Brownell, advertising manager; the Rev. Samuel S. Marquis, sociologist and head of welfare work, and Mr. Hartman.

"Klingensmith's penchant for amazing his listeners by talking big sums is said to be the reason for his 'resignation.' In New York one day, 'Kling,' as his former boss called him, is said to have casually asked a banker at lunch: 'What's the chance of getting hold of $100,000,000 today?' Kling had the satisfaction of seeing the banker gasp, but it seems the latter took the proposition seriously and started out to raise the money.

"Soon after this Henry Ford's office in Dearborn began to be the mecca of men from Wall street anxious to let Ford have all or any part of the sum he wanted.

"Ford has no friendly feeling for bankers as a lot, and he refused to let any of them get near him. That is, all but one. The story is told that he decided that in the interests of anthropology he should personally inspect one banker. So one was let in.

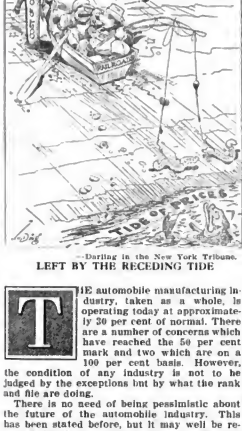
"With all the enthusiasm of his clan, this banker shop proceeded to unfold to Ford a plan for financing the great Ford plant. The plan soon revealed to Ford's satisfaction that the fellow was just like the bankers he had read about in books. The plan included a grip on the Ford industry in the interests of the banker and his associate. Ford terminated the interview in the middle by inviting the financier to pick up his hat and his bag and not to slam the door.

"Meanwhile the big Highland Park plant, just outside Detroit, has reopened, and more men are daily returning to work. And Ford himself has occupied his time when he wasn't firing assistants and dodging bankers by developing a gasoline-driven street car and increasing the efficiency of his plant by equipping it more fully with automatic machines. In his odd moments he has been experimenting with a cheap substitute for gasoline."

Digitized by Google

Sticking to the Facts

Automobile Industry Producing About 30 Per Cent Of Normal, With Only Two Concerns at Capacity



—Darling in the New York Tribune.
LEFT BY THE RECEDING TIDE



—Orr in the Chicago Tribune.
KILL TWO BIRDS AT ONCE



—Talbert in the Toledo News-Bee.
SPRING STYLES

THE automobile manufacturing industry, taken as a whole, is operating today at approximately 30 per cent of normal. There are a number of concerns which have reached the 50 per cent mark and two which are on a 100 per cent basis. However, the condition of any industry is not to be judged by the exceptions but by what the rank and file are doing.

There is no need of being pessimistic about the future of the automobile industry. This has been stated before, but it may well be repeated, for the reason that at present the condition of the industry is not as good or as satisfactory as so many exaggerated press stories make it appear. And it may be said in this connection that a good many of the officinis of manufacturing concerns who were questioned by the writer said that if the newspapers were not so anxious to overestimate facts, to exaggerate matters rather than to present the situation as it really is, it is likely that the automobile business would be better off.

The facts concerning present conditions in the industry are given herewith as nearly accurately as they could be obtained either from plant officials, manufacturers' representatives in Detroit, distributors or from other sources considered reliable, and in some instancest special reference is made to some of the exaggerated press reports already referred to.

Some Favorable News Omitted

There are a number of facts known to the writer and practically confirmed by the manufacturers, but which for some reason or other the latter do not wish to see in print or do not care to confirm. The reason for withholding publication of such information—which in every case indicates an improvement in the business of these concerns—is that these events, such as sizeable orders received or important additional releases of production, are not considered by the parties directly interested as normal.

By MARC BRAUN

"It is quite correct that we have received an order for supplies which will occupy several railroad cars and thus be a really big shipment," said one factory executive. "In fact, this is the largest shipment we will have made in many months. However, this is an exceptional order, an abnormal order, and therefore cannot be considered as a part of our regular business. As a matter of fact, regular, normal business is still low and the future is uncertain. The only thing we can do is to make a guess, and it's this guessing which has been going on in the industry which has been misleading everybody. We believe that the automobile business will improve in a marked degree, but just when and how rapidly is a matter impossible to state. Let everybody keep on working, working harder and harder, and the return of business will be hastened. That is the only positive remedy, and that is no guess either. It is a fact and the only thing that will help."

At the Continental Motors Corporation plant in Detroit there are now approximately 1,200 men at work, which is a rather considerable increase over the number only a few weeks ago, but still less than 50 per cent of normal, which varies from 2,500 to 3,500, the latter being the peak. The Muskegon plant of the Corporation is employing about 700 men, as against 2,500 to 3,500 normally. Vice-President G. W. Yeagan said to the writer that since his previous statemement as to the general business outlook in the automotive industry, made during the first week of February, matters had considerably improved.

"We have been getting re-orders and new business," he said. "By re-orders I mean that orders which had been held up are being executed. The new business, while not extraordinary in volume, shows, however, the trend on the right side of the ledger. Let's have a little more patience. Let's keep on being cautious and cool. Let's keep on working hard. The time of revival in the business is right at the door. This revival has started and it is going on slowly but surely. We are not going to have a spurt, but we are going to have the business increase gradually and sanely, and that is the safest and best way after all. No need of fearing for the future of the industry. It is as solid as the Rock of Gibraltar, taking the industry as a whole, of course. This year we will all be at it hard and working as we never did before, but I can see we are heading the ship toward a big year of business, possibly the biggest the industry has had. The concerns which will have weathered the storm of 1921 will be so much stronger next year and it will be all the better for all of us."

In Other Plants

The Liberty Motor Car Company, Detroit, is steadily increasing its output and putting on more workers, although in a measured way. Its sales executives have been making personal investigations throughout the country and in addition its district supervisors are canvassing their territory more thoroughly than ever before. Their reports indicate conditions to be very encouraging in the greater part of the country. At the recent automobile show in Minneapolis a fair number of cars were sold at retail, which was considered satisfactory, due to the fact that the falling-off in automobile business was especially marked in the Northwestern states for some months.

In Saginaw the Nelson Motor Truck Company has just announced that it has found conditions in general so much improved that production on full time basis has been started.

"We have a fair number of orders on our books for immediate shipment," said one of the officials. "Already we have made some fair shipments to our distributors in Pittsburgh, New York, Grand Rapids and a few other cities, and this only upon their request, thus indicating that there must be demand. Furthermore, the letters which we receive from many prospects throughout the country indicate a beginning of a more general revival in business."

The Saxon Motor Car Corporation, Detroit, is said to have a fair number of orders booked

Digitized by Google

and it is known that orders for a large number of bodies for its cars have been placed with one of the local body makers. Officials of the company feel confident that with the advent of spring there will be a steady increase of automobile buying.

Although it has been reported in the press that the Federal Motor Truck Company, Detroit, had been closed and had just resumed production, one of the company officials told the writer that the plant had never ceased to manufacture trucks but that output as well as employment of labor had been cut to a minimum during the period of depression.

"We have been making a number of trucks without interruption, but some people think that if a manufacturer does not produce at least 50 per cent of normal he is not producing at all," he said. "We are putting on more men this month and have increased our production schedule, and by the end of March we hope that we shall be on a 50 per cent basis."

Not Predicting

At the Packard Motor Car Company offices in Detroit the outlook is considered improved and confidence is expressed that from now on there will be an increase in sales. It is not the custom of this old-established house to make sensational statements. Officials say they expect to be able to increase Packard activities right along, but how soon they will approach normal is something they cannot predict. However, just as in the case of others, they believe that the industry is on the road to better general conditions.

The date of the reopening of Dodge Brothers is still uncertain. A rumor was current in the East that the plant would resume on Monday, February 28. It is still closed and the information was given out by an official a few days ago that nothing had been decided so far as he knew. In the industry and among dealers the continued idleness of Dodge is becoming more and more a matter of discussion.

Production with the Hupp Motor Car Corporation, Detroit, is said to be satisfactory, although not as good as it should be. Labor troubles are said to be the cause, just as in the case of several other motor car and parts making concerns.

In Flint the general situation among the manufacturers is said to be improving, although production is not anything near 50 per cent of normal, according to information from Flint dealers. One concern, the W. A. Paterson Company, is said to be more nearly on a normal basis than others, but this firm is not a large producer as, for instance, are Chevrolet and Buick. At the Hupp Motor Company offices it was said that output had reached 250 cars a day. Production at the Chevrolet Motor Car Company factory is variously estimated as being from 25 to 40 per cent of normal.

One of the most active Detroit plants is that of the Studebaker Corporation, which is now producing better than 50 per cent of normal. Only last night vice-President H. A. Biggs made the statement that a 50 per cent basis was hoped for shortly. It may be added that 50 per cent output has been attained also at the South Bend factory. The latter has a capacity at present of 3,750 cars a month and it is expected that the March production will total 2,500. At Detroit the capacity is 5,000 a month and for March a production schedule of 3,500 has been started. The Detroit plant, which has been operating on a 4-day basis, is now being run five days a week, as in the case of the Indiana plant. Orders have been coming in in fine shape, stated one of the officials. In fact the business has come back quite a bit more rapidly than had been expected. It is not believed that there will be another slump.

The Fisher Body Corporation has one of its Detroit plants in operation and one of the executives said that production was at the rate of about 40 per cent of normal.

"We are decidedly disgusted," said this official, "to see in the newspapers practically every day some story or other about business picking up 50 or 100 per cent, about such and such concern adding a thousand or several thousand or several hundred men, about this automobile maker now making so many cars a day and this other one so many a month, and to know that it is all 50 per cent and more misstatement. We know what is going on in the industry and we cannot see what good it is doing to the industry to have things so grossly misrepresented as some of the newspapers are doing. It may be that the papers thus are finding a way to increase their sales, but they are not presenting the facts to the public as they are and as the public is entitled to know them."

Paige Around 75 Per Cent

Ford activities are a matter of guessing at what is actually taking place. No two Ford dealers see the same parts manufacturers supplying the Ford Motor Company seem to know anything accurate. Some claim that thus far —meaning since the reopening of the plant at

(*Continued on Page* 16)

Trust Companies and State Bank Trust Powers

THE original theory which governed the organization of financial institutions in Michigan was to the effect that the business should be divided into certain natural classifications, and separate classes of corporations organized to handle them. On this theory provision was made for commercial banks, savings banks and trust companies, the two former under the so-called Banking Law and the latter under the so-called Trust Companies Act. These laws, in establishing these three classes of institutions, recognized the differences in reserve requirements, in suitable forms of investment and in the general conduct of the three kinds of businesses. Under the Banking Law, opportunity is afforded for the combination into single institutions of the so-called commercial and savings banks, provided that, as regards its savings business, such a combined institution shall observe the regulations governing savings banks, and as regards its commercial business, the regulations governing commercial banks. With respect to trust companies, organized under a separate Act, no provision is made for combinations with commercial or savings banks under the general principles which govern combinations of these banks with each other.

Both banks and trust companies organized under Michigan laws were contented enough under this arrangement until a new element was introduced by the action of the federal government in ruling that national banks located in Michigan must have conferred upon them trust powers in order that they might successfully compete with commercial and savings banks—which, it will be noted, do not possess those powers. Very naturally our state banks have felt that in order to meet the competition thus forced upon them, they likewise must be given the privilege of doing, at least to some extent, a trust business. A bill was accordingly recently introduced in the state legislature conferring, subject to suitable regulation, trust powers upon the state banks.

By JOHN N. STALKER

Vice-President, Union Trust Company, Detroit

The attitude of Michigan trust companies, or at least most of them, with respect to the exercise of trust powers by state banks, has been much misunderstood, and a word of explanation would not be out of place. The trust business, particularly in some of its branches, is extremely technical. The requirements which make a capable and successful country banker are by no means necessarily the qualifications which go to make a successful trust officer. The training which qualifies the staff of a bank efficiently and capably to handle its business would not qualify it to handle the legal accounting which trust work involves.

The present record of trust administration in Michigan by trust companies is one of which these companies are very proud and of which they are properly jealous. They do not particularly fear the loss in business which may result from banking competition, but they are frankly jealous of the evil consequences if complicated trust work should be undertaken by small banks not equipped to handle it. They feel that the entire corporate administration of trusts would be discredited under those circumstances, and that they, would be the chief sufferers. As far as the question of competition is concerned, they believe that the educational work which the state banks would carry on in the direction of teaching the people to appreciate the value and economy in corporate administration of trusts would more than compensate for any direct loss of patronage. These companies, while believing that their view is the broad and progressive one, make no pretense of altruism, therefore, in welcoming the state banks into the trust field under proper regulation, and frankly admit that their desire to save the state banker from losses and unprofitable business in this field, while it is partly, is by no means wholly, out of consideration for the banker's own interest.

These trust companies further feel that while, as far as is known, none of them contemplate actively embarking in the field of commercial banking, nevertheless equity and fairness demand that with state and national banks both authorized to do a trust business, they should under suitable regulation be permitted the reciprocal right of doing a banking business.

With the foregoing ideas in mind, representatives of some of the more prominent trust companies met with the sponsors of the above mentioned bill a few weeks ago and agreed on a measure acceptable to both interests, which is now before the legislature and constructive piece of legislation. This bill provides that, with the approval of the Banking Department, state banks with a capital and surplus of $150,000 or over may open trust departments, and enter upon the transaction of a general trust business; that banks with a lesser capital shall be limited in the exercise of trust powers to the administration of the estates of deceased persons, either as executor or administrator. Trust companies, on the other hand, are given the right to open banking departments as regards their banking departments, the sound regulations which are now found in our Banking Law.

It is no longer profitable to discuss the question as to whether the limitations of particular banking and trust functions to particular classes of corporations is desirable. The entire field is open to state and national banks. The question now appears to be: Are our state institutions to be given the same privileges as the federal institutions with which they compete?

[EDITOR'S NOTE—Owing to the interest aroused by the presentation of the Watson bill in the Michigan Legislature, it has been deemed advisable to publish this article on the proposition of changing our state laws to grant trust powers in some form to state banks to put them on a par with national banks. Further contributions will be welcomed.]

Digitized by Google

Screws and Screw Machines

Something About the Quantity of the Products Used In Michigan, and a Description of Their Manufacture

By HOWARD CAMPBELL

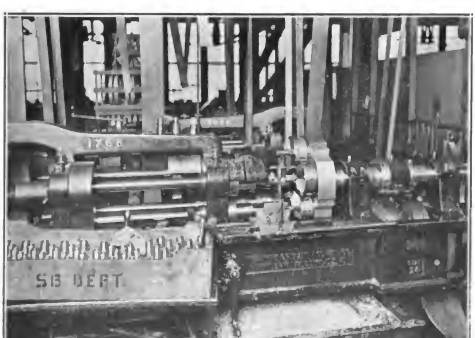
ACCORDING to Webster, a screw is "a mechanical device consisting of a continuous helical thread, with the shank from which it projects." It is generally conceded to be a most unimportant piece of the works; in fact its importance usually is recognized just after it has disappeared. However, more screws are used in modern machinery than of any other part, for without them it would be impossible to clean machinery or to replace damaged or broken parts. Consequently when one part gave out, the whole machine would have to be discarded. Having use for such a vast quantity of screws, it naturally follows that means of producing them rapidly and at low cost should be sought.

The first threads were cut with a single tool, and for many years this was the best way of making screws and bolts. The perfection of a die which would cut the thread on a great number of bolts before wearing out brought about the development of a lathe, with a turret in which several tools could be held. This turret was applied to the lathe about 1856, by an American named Stone. From this hand-operated turret machine the single spindle automatic screw machine was developed by Christopher M. Spencer, at Hartford, Conn., soon after the Civil War. This was the first machine in which a bar of stock could be turned, threaded and cut into pieces, the whole operation being entirely automatic.

The first multiple spindle automatic screw machine was designed by Spencer in 1887. This was a three-spindle machine, in which the spindles were superimposed one above the other and the tools brought into play by means of a large drum, on the outside of which were a number of cams. These machines were used for producing screws from wire in coils and were employed commercially for several years.

The four-spindle automatic machine now known as the "National Acme" was the next development, followed by Spencer's five-spindle "Universal." Then came the four-spindle "Gridley," the five-spindle "Davenport," the four-spindle "Cone" and the six-spindle "New Britain." It will be seen that the development of the multiple-spindle automatic screw machine has been a gradual increase in the number of work-carrying spindles.





The upper photograph shows a battery of Brown & Sharpe Automatics in the plant of the Burroughs Adding Machine Company. In the lower photograph a 6-spindle New Britain Automatic is shown making valve bearings in the factory of the Packard Motor Car Company. Production is 100 an hour.

The single-spindle automatic carried a turret in which were mounted various tools, which were presented singly by automatic means to the rotating work. The time of finishing the piece complete was the combined time of the several operations. The multiple spindle automatic presents each of its tools simultaneously to as many pieces of bar materials as there are spindles, and the time of finishing the completed piece is only that of the longest single operation or subdivision of that operation. It will be seen that a multiple-spindle machine must therefore have a sufficient number of spindles and tool positions to subdivide the operations without a too-complicated arrangement of cutters or an arrangement of cutters with which it would be difficult to maintain a proper degree of accuracy for continuous operation.

In this branch of machine construction, as in others, the constant aim has been to increase production and at the same time increase the accuracy of the product. Machine beds, slides and so forth have been increased in strength and weight, while moving parts, such as spindles, have been made lighter and at the same time stronger by the use of special alloy steels and heat treatment, hardening and grinding. Ball bearings decrease friction and permit of higher speeds.

Automatic screw machines are arranged to advance the stock and operate the tools entirely without the aid of an operator. As they accomplish automatically much that heretofore has

Digitized by Google



At the left is shown a New Britain Automatic making "AC" spark plugs in the Champion Ignition Company's plant at Flint. Tested production, 4,440 in 21½ hours. At the right a Cleveland Automatic is machining valves in the plant of the Michigan Engine Valve Company.

been done by hand, they are necessarily much more complicated than a hand-operated machine. When once set up, however, no further attention is necessary, except to see that the tools are kept in proper condition and to insert new stock when the bar is exhausted. Therefore one operator can easily attend to three or four machines.

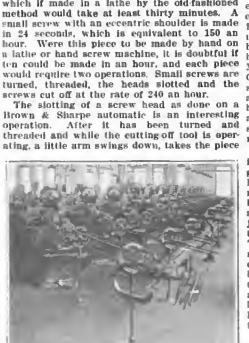
A Variety of Operations

They are so constructed as to use tools for a great variety of operations, including those of plain and taper turning, forming to practically any shape, cutting off at an angle, center and cross drilling, threading, counter-boring, recessing, knurling, milling slots or spots, generating small spiral or worm gears, castellating nuts, and various others. Thus they are suitable for manufacturing a large variety of articles, other than screws, their ability to handle different kinds of work made from the bar being almost unlimited, up to their capacity. Accordingly they are of great advantage not only for the production of screws but also of various other small parts used in the building of automatic vehicles, sewing machines, typewriters, calculating and adding machines, electrical instruments and other machines and tools having small parts made from steel or brass rods.

The vast number of screws and similar parts required for the building of automobiles, gas engines and other similar modern machinery has been the means of developing a separate industry engaged exclusively in the manufacture of these parts. Some of these plants are equipped entirely with automatic screw machines, and turn out millions of screws, bolts, nuts and similar parts a month. Among these are the Automatic Products Company, Detroit; Federal Screw Works, Detroit Screw Works and Peninsular Milled Screw Company, also of Detroit, and the Michigan Screw Company, Lansing.

One of the best automatic screw machines for producing small parts requiring a high degree of accuracy is the single spindle machine, of which the Brown & Sharpe is prominent. The largest bar of stock that can be put into this machine, however, is 1⅛ inches in diameter, although the tools can be set to turn a piece 2¾ inches in diameter. Practically every operation that can be done on a hand machine can be done on the automatic, and many of them can be done much better, as every tool is controlled mechanically and the same amount of pressure is brought to bear on the tools as each piece is made. As every cut is controlled, no gauging is necessary as in the case where forming, grooving and similar operations are done by hand. The operations of feeding the stock, reversing the spindle and indexing the turret are regulated by trip dogs on cam risers on the cam shaft, the adjustment of the dogs serving accurately to time the operations. The turret slide and cross slides are fed to the work by the action of disc cams and levers, and as these cams are always used for the same job, it is very easy exactly to duplicate a previous lot of work, both in finish and in rate of production. The use of special attachments also is provided for on the Brown & Sharpe, and screws can be slotted, nuts castellated and other operations of this nature done before the piece leaves the machine. In the Burroughs Adding Machine Company's plant in Detroit approximately 300 automatic machines are kept busy turning out small but accurate parts for use in the production of adding machines. Pieces are turned, formed and cut off with the regularity of clock-work every two minutes, which if made in a lathe by the old-fashioned method would take at least thirty minutes. A small screw with an eccentric shoulder is made in 24 seconds, which is equivalent to 150 an hour. Were this piece to be made by hand on a lathe or hand screw machine, it is doubtful if ten could be made in an hour, and each piece would require two operations. Small screws are turned, threaded, the heads slotted and the screws cut off at the rate of 240 an hour.

The slotting of a screw head as done on a Brown & Sharpe automatic is an interesting operation. After it has been turned and threaded and while the cutting-off tool is operating, a little arm swings down, takes the piece from the chuck, swings back up with it and holds it in position while a small saw cuts a slot in the head. This does away with an extra machine for slotting, and the whole piece is completed in the time required to complete it without slotting. A similar attachment is used for drilling small holes in screws, studs, bushings and other pieces of this nature, thus doing away with an extra operation of drilling.



Section of the Automatic Products Company's plant showing a battery of 4-spindle Gridley Automatics.

For Larger Work

For work of a larger variety, but which also has to be quite accurate, the Cleveland Automatic frequently is used. The Cleveland Automatic Machine Company builds this machine, and it has not only established a reputation for accuracy but also is said to build the largest automatics in the world. These machines will handle bar stock of 7⅝-inch diameter, and they machine these immense bars with the same ease, speed and accuracy that the small machines perform their work. The Bower Roller Bearing Company, Detroit, has eight of these machines for use in the production of roller bearings, which, as every one knows, have to be mechanically perfect. The Fuller & Sons Manufacturing Company, Kalamazoo, has 25 Clevelands which are used for making transmission gears, another job requiring a degree of accuracy which could only be duplicated on a hand machine by an expert operator, and the amount of production would then be only a small part of the production from one of these marvelous machines.

Nelson Bros., Saginaw, use a battery of Clevelands for the production of parts for stationary gasoline engines, and both the National and Detroit Twist Drill companies use them for making drill blanks. In this operation the drill blank is turned complete, including the taper shank, all ready for the flutes to be milled. A job which will indicate the speed with which these parts are made is that of making a nut. This is turned, formed, the hole drilled, a shoulder cut and the piece cut off in seven seconds. In the making of piston pins from solid bar stock, the hole is drilled half way through the pin from one end, the ends are chamfered and the piece is cut off, at the rate of 60 an hour. The second operation, drilling the other half of the hole from the other end of the pin, takes 40 seconds, a production of 90 an hour.

All of the foregoing examples are taken from jobs where the pieces are made from and cut off a solid bar of steel. What are known as "second operations"—operations which have to be performed on the other end of the pieces, usually have been performed in hand machines, but the Cleveland company has now developed

Digitized by Google

a magazine attachment for its machine which will hold a number of castings, forgings or parts made from bar stock in a previous operation. The magazine holds approximately 20 pieces, each of which is presented in turn as the finished pieces are dropped from the chuck. The piece is conveyed from the magazine to the chuck by means of a tool in the turret, which grasps the piece, pulls it out of the magazine, swings it around and inserts it in the chuck at exactly the right moment so that no time is lost. The magazines are built to handle work from ⅜ inch to 7⅜ inches in diameter, and not only produce them faster but also more uniform and more accurate than they could be produced by hand methods.

Multiple-Spindle Machines

Of multiple-spindle machines, the four-spindle Gridley is one of the most widely used and one of the most efficient. This machine is so arranged that four tools are working on four bars of steel at one and the same time. One tool will be turning the stock, one will be cutting the thread, a third will be forming the head or cutting the groove, while the fourth is cutting off a finished screw. Obviously, the time of making a screw is only as long as the time of the longest operation. As fast as a finished screw is cut off, the entire set of four spindles automatically indexes, presenting each bar of steel to each of the four tools in turn. The operator, of course, has to put the four bars into the machine and start it going, but from this time until the entire four bars have been used up, the machine works entirely automatically, requiring no attention unless a tool breaks or the machine gets out of order. The Automatic Products Company is one of the largest users of Gridley Automatics in Michigan, its equipment consisting of 265 four-spindle machines. The bulk of its work consists of screws up to ⅝ inch in diameter, and some of these are produced at the rate of 700 an hour from one machine. The production of screws and other small special automobile parts in this plant sometimes reaches as high as 14,000,000 pieces a month.

Dodge Brothers also use approximately 225 four-spindle Gridleys in the manufacture of screws and other small parts necessary for the great production of Dodge motor vehicles.

Another machine which is used for this class of work is the Acme Multiple Spindle Automatic Screw Machine, which is made by the same company that makes the Gridley machine. There is not much difference between the two types of machines, excepting that a number of auxiliary operations can be performed on Acmes, with the aid of special attachments, which cannot be performed on Gridleys.

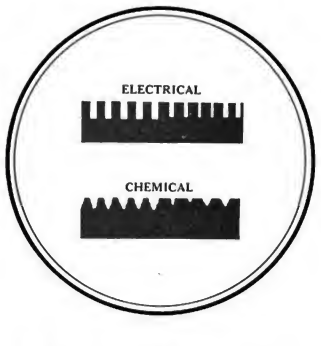
An automatic machine having five spindles recently has been developed by the Davenport Machine Tool Company, which promises to make a place for itself in the next few years. The claim is made for this machine that it will turn out small parts quite as accurately as the single-spindle machine. In this machine the "turret" tools are mounted in sliding spindles, each of which is operated by a separate cam, which is calculated to provide for a higher degree of accuracy than heretofore has been obtainable with a multiple-spindle machine. In the Davenport the turret revolves, carrying the tools with it, making it comparatively easy for the operator to set tools, change them for grinding, etc.

Although this machine has been on the market only a short time, installations have been made at the plants of the Packard Motor Car Company, Cadillac Motor Car Company, Chelsea Screw Company, Burroughs Adding Machine Company, Brown-Maclaren Company, Lincoln Motor Company, Reo Motor Car Company and other plants throughout the state.

New Britain Chucking Machine

The New Britain Multiple-Spindle Automatic Chucking Machine is another development of

(*Continued on Page 40*)



Within The Circle—

You see graphically illustrated the difference between our new Weeks Electrical Etching Process and the present chemical process of etching.

The basic difference is this—the half-tone dots of electrically etched plates are vertical in shape as opposed to the pyramid shaped dots of chemically etched plates.

This basic difference means clearer reproduction, longer-life plates and better electrotypes.

"Right across from the Board of Commerce"

WAYNE COLORPLATE CO.
Photo-Engravers
1040 WAYNE ST DETROIT

How Germany Is Succeeding In Winning Back Her Pre-War Trade

Commercial Agents Throughout Europe Underselling Rivals Because of Superior Manufacturing Methods

By P. H. MIDDLETON
Assistant Manager, International Trade Department, Guaranty Trust Company of New York

GERMANY is still a perfect industrial machine, running at low speed, it is true, but undamaged as yet in its vital parts, and would respond readily to any stimulus."

The above remark by a British government official who has recently been studying the industrial and commercial conditions in Germany sums up in a nutshell the present position of the Teutons. Undoubtedly the Germans are making a determined effort to mend the rents that have been torn by American and British manufacturers in the foreign trade net of the former German Empire. That they have made a good beginning is evident from the fact that German exports for the first five months of 1920 amounted to 23,688,000,000 marks, as compared with 10,057,000,000 marks for the entire year of 1919. It must be remembered, however, that these export figures include goods delivered to the Allies under the treaty of peace and also that from the signing of the armistice, in November, 1918, until March, 1920, an enormous volume of goods was smuggled out of Germany through the occupied territory, the so-called "hole in the West."

For the eleven months ended with November, 1920, the United States imported from Germany merchandise valued at $84,000,000, as compared with $10,608,141 for the entire year of 1919. Germany imported from the United States in the eleven months ended with November, 1920, merchandise valued at $253,000,000, as compared with $92,761,314 for the entire year of 1919.

Salesmen Throughout Europe

Thousands of German salesmen are reported to be at work not only in the former neutral countries but in all the European and Asiatic countries with which they were at war, offering low prices and long credits and promising quicker deliveries than their competitors. Buyers from many of the larger nations are now in Germany placing substantial orders for motor trucks, dyestuffs, toys, iron and steel products, pianos, glassware, knit goods, sewing machines, electrical goods and hundreds of other items.

The recent holidays have given a striking demonstration of the effectiveness of German plans to extend foreign trade. Some months prior to the end of the year warehouses in all the large cities in England were filled with German toys of all kinds. Representatives of German firms, including many Norwegians, Swiss, Danes and Swedes, canvassed the trade thoroughly, offering their wares at an average increase in price over pre-war days of about 100 per cent and promising quick deliveries. With the exception of dolls, which were priced at about 50 per cent cheaper than the English make, the general run of these German toys were priced about the same as the British toys of similar character. One German firm sold thirty different kinds of dolls in England, three of them at prices considerably below the English dolls. It is estimated that the sales of German toys in England in 1920 amounted to more than $9,000,000, compared with $1,850,000 in 1919.

In considering these results we must, however, remember that in the toy trade Germany has many things in her favor. It is a highly specialized industry, liberally supported with granis for scientific research, with technical schools maintaining special classes to teach toymaking, and that it is for the greater part an industry run on up-to-date factory lines where the advantages of large scale production are fully appreciated.

Some Other Low Bids

Other German articles which are arriving in England in large volume are clocks, chiefly of the metal alarm and china varieties, and fancy goods consisting principally of metal and glass ornaments. German nets, silk embroidered, are being offered for sale in Nottingham at a lower price than cost of manufacture in that center of the British lace industry. Godfrey Cheesman, the secretary of the National Union of Manufacturers, states that he has in his possession scores of business letters received by British firms from German manufacturers. The correspondence and catalogues are attractively written in English and most of the articles offered for sale are at about half the cost at which they can be obtained in Great Britain.

One firm in Berlin offers "Bosch" magnetos at £6 each in cases of five. These magnetos cannot be purchased in England in less than £12 each. These instances could be multiplied tenfold. Among the articles mentioned in the catalogue are German tools offered at 4 shillings each, which cost 15 shillings each in London. One German house offers vacuum flasks which are without any marks whatever. A London company has received an offer from Charlottenburg of three or four ton lorries at £600 each. A consignment has been booked by a British dealer to resell. Most of the English makes are double this figure.

Recent cargoes from Hamburg contained aluminum casseroles, dishes, saucepans, frying pans, kettles, glassware, paper, cotton gloves, sewing machines, thermometers, machinery, weighing appliances, furniture, toys, silk hosiery, motor cars, chlorides, asphalt, mouldings, brassware and meat-carving machines. Some of these goods are evidently from German pre-war stocks that could not be disposed of during hostilities.

Representatives of German dye manufacturers are carrying a wonderful range of colors in a wide variety and high quality. A British dyemaker states that the Germans are offering a certain dye which is much required in the finished trade at sevenpense to one shilling a pound, which he is unable to produce for less than four shillings a pound in a quality inferior to that of the German. Representatives of German textile houses are in England offering cloth dyed in 500 different shades. British makers state that it is impossible for them to produce cloth at the prices asked by the Germans, even after the big fall in the price of raw wools.

Former Neutrals Protest

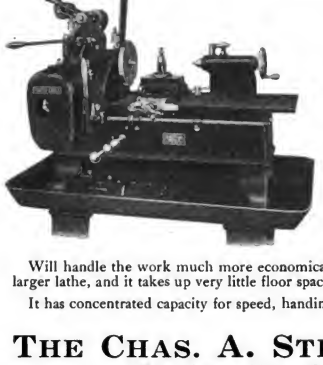
The slowing-down of some of Britain's new industries, such as dyes and chemicals, photographic materials and scientific instruments, and in some cases the actual closing of factories as the result of German competition, have brought forth vigorous protests to the government and appeals for protection. The National Union of Manufacturers has been deluged with communications from its members giving specific examples of German price cutting. One manufacturer complained that children's rackets were being sold at 72 shillings a gross, while the British article could not be sold under 156 shillings; a three-quart kettle of British manufacture is being sold for three shillings and sixpence, while the German article is being sold for sixpense; a fine grade of German nail scissors is being sold at nine shillings a dozen, while Sheffield was selling them at twenty shillings; German pianos were being sold at seventy pounds, while British instruments could not be purchased in England for twice that money; German milling machines were being offered at seventy pounds, as against an English factory cost of one hundred and eighty pounds. German first class spectacle lenses are offered at nine shillings per dozen pairs, a price one shilling lower than the cost price of English third quality lenses; German books and eyes are being sold at four and one-half pense per pound, while the wire alone costs British firms six and one-half pense.

The British government stated some time ago that if an industry was in danger of becoming overwhelmed by the importation of goods at prices below the cost of production in England owing to the state of exchanges, it would consider the advisability of checking such imports. The National Union of Manufacturers,

SOME DRIVER IS PARDEE'S SON!

NOT LONG AGO Peter Pardee, banker, of Reese, Mich., who is well known throughout the "Thumb" of Michigan and in Saginaw and Bay City, left his new Buick coupe standing in front of the bank with the ignition key handy. His son, 8 or 9 years old, is a husky like his father and a "bear" at running things; so when opportunity knocked he grasped the wheel with both hands and took five or six of his boy friends down the road at the rate of 45 miles an hour. When about three miles out, toward Watrousville, the car skidded and turned over. The boys luckily escaped serious injury, but a farmer who came upon the scene right after the accident injected some philosophy into the situation when he pulled up his team and inquired who had been driving the car. Upon being told that it was Pardee's son, he said, "That explains it. Get up!"

Digitized by Google



A Rapid Producer of Duplicate Parts

For such short turning as studs, bolts, pinion and gear blanks, reamers and mills, taps and anything of a similar nature, the

PORTER-CABLE Manufacturing Lathe

Will handle the work much more economically than it could be handled on a larger lathe, and it takes up very little floor space.

It has concentrated capacity for speed, handiness, power and rigidity.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

the Association of British Toy Manufacturers and organizations representing manufacturers of dyestuffs and other trades affected by German competition have asked the government to fulfil this promise. The first result of these protests is seen in the passage on December 23, 1920, of the act prohibiting the importation of dyestuffs into Great Britain, except under license, for ten years. No restrictions are placed on dyes imported for re-export.

Agitation against German "dumping" is active in all the former neutral countries. The Stockholm Iron Institute demands that duties be raised as much as 500 per cent, pointing out that German daily wages are about four crowns, Swedish currency, as against a daily wage of almost sixteen crowns in Sweden. The Swedish Electrical industries Association has also petitioned the government, stating that production cost in Germany is between two-fifths and two-thirds that of Sweden. Finland is faced with a similar problem.

Germany is flooding Holland with her industrial machinery, agricultural implements, wrought iron, cutlery, hardware, fancy goods, cotton piece goods, woolen manufactures and certain kinds of foodstuffs. In recent months German exports to Holland have increased to such an extent that the railways and parcel post offices have had great difficulty in keeping up with the work involved. German manufactures are invading the colonies of the Netherlands to such an extent that some branches of the overseas business in Holland are becoming alarmed. This is shown by resolutions passed by the Netherlands Association of Manufacturers, reading in part as follows:

"We observe with great disquietude the business done by Germans in our colonies and it is especially the metal branches which are offering their goods at very low prices. The danger is so great that our own manufacturers are driven from the field and our business will suffer irreparable injury unless quick measures of relief are taken. We apprehend a permanent shrinking of our export industries which will react unfavorably on our domestic situation." This resolution is addressed to the Minister of the Colonies.

In Latin-America

Large and varied consignments have reached South America—particularly Argentina and Brazil—from Germany, recent deliveries including machinery, cutlery, enameled ware, electrical supplies, weighing appliances, musical instruments, fancy goods, stationery, toys, clocks and watches, paints and chemicals. In general, the quality is reported to be as good as before the war. The League of German-Brazilian Firms, with offices at Rio de Janeiro, has recently resumed activities after suspension during the war. Many of the consignments have been in goods of the semi-manufactured variety and in small sundries such as office supplies. Similar reports of German trade activity come from Mexico and Central America.

A small but steady stream of German goods is arriving at Far Eastern ports. The recent arrival in Yokohama of 1,000 casks of German indigo created consternation in the new dye industry in Japan. Prior to the war Japan was supplied almost entirely by Germany. With the cessation of German imports, many dye plants were established, sulphur blue manufactured as a substitute for German indigo. This was made in such quantity that there was a surplus for export to China, but it is stated that the Japanese dyes were inferior in quality. Japan has recently passed a law to prevent "dumping."

A growing volume of imports from Germany is reported from Chinese ports. The consignments are mostly from Hamburg, carried in Japanese vessels, and consist largely of dyes, paper products, buttons, needles, clocks, iron and steel and bottled beer. Germans are undoubtedly well received by Chinese business men, partly on account of the long credits which they are willing to grant. German goods are also entering Egypt in considerable volume, while Egypt is exporting to Germany large quantities of raw cotton.

In the German bid for world trade Russia of course occupies a prominent part. German salesmen are to be found in the most remote parts of Russia renewing connections and making expert investigations. The economic and political condition of Russia renders it quite a fruitful field for German endeavor. Lack of materials and lack of efficient labor have resulted in a severe setback of Russian industries, which has been further intensified by the demoralization of railway transportation. It will be a long time before Russia will be restored to normal conditions and in the meantime the country must have goods. Germany is in a position to supply many lines of small hardware which are urgently needed.

The German Ministry of Foreign Affairs has recently organized a Foreign Trade Bureau to gather and disseminate commercial information. The bureau is governed by a council of thirty members drawn from other government departments. News suitable for immediate publication will be printed daily in the Information for Commerce, Industry and Agriculture. Confidential information will be transmitted to interested persons in special bulletins. The annual subscription for news relating to a special district is 100 marks and for the entire service the subscription is 1,000 marks. German newspapers are supplied with a special service. The Foreign Trade Bureau is now issuing a series of booklets dealing with foreign markets for certain commodities. German diplomatic officers, consuls and commercial attaches are supplied with up-to-date information concerning conditions in Germany.

(*Continued on Page 22*)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4038 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

Business Bills in Legislature

One Measure Revises Workmen's Compensation Upward; Other Proposals; Fight on Lord Bill Seen

[By Staff Correspondent]

LANSING, February 28.—Important amendments to the Michigan workmen's compensation law, creating additional liability on the part of employers, more clearly defining liability for compensation and raising the maximum weekly compensation for injured employes from $14 to $20 a week are included in a bill introduced in the House of Representatives by Rep. George Welsh, Grand Rapids. By the terms of the bill, sub-contractors, if under the compensation law, would be liable for injuries to employes, and if not, the employers would be responsible. All public servants, except elective officials, are also brought under the act, making municipalities, counties, state, etc., liable. This would provide for police and firemen and other public employes. Another change would give $200 in all cases for funeral expenses, while at present dependents must pay these costs out of the compensation received. Additional compensation would also be given in cases of facial and head disfigurements. The jurisdiction of the industrial accident board is made clear to cover cases in which Michigan employes working for a Michigan employer are injured outside the state.

A bill introduced by Rep. William O. Lee, Port Huron, would require the licensing of garages and service stations at $25 annually and would provide that none but an expert mechanic could be employed for intricate repair work on cars in such licensed places. A fine of $100 and imprisonment of 90 days is the maximum penalty for violation.

Sen. Oscar Ripelle, Detroit, introduced a bill which would permit employes at street railways to work but six days a week except in emergencies. Sen. Harvey A. Penney offered a bill regulating the spotlight on cars and the speed they may travel.

Authorization of a new commission to approve or disapprove the sprinkler heads used by factories in this state and to prevent discrimination by insurance companies against plants provided with approved sprinkler heads is provided in a bill introduced by Sen. Arthur E. Wood, Detroit. The members of the board would consist of the insurance commissioner and two members of paid fire departments of Michigan cities, the terms to run for four years.

To reduce theft and dealing in stolen cars, a bill of Rep. Warren D. Byrum would require, under severe penalty, a certificate of ownership, an abstract of title by every automobile owner in Michigan. Penalties for violations would range from a fine not exceeding $1,000 for operation of a car without such a certificate after January 1, 1922, to $5,000 and five years in prison as the maximum for forging such certificates. Every kind of motor vehicle is included, and manufacturers and dealers would be required to furnish such a certificate for every car.

A bill of Rep. Alfred T. Robinson, Saginaw, would compel employers to keep at some work which they might perform employes who had been injured while working for them.

A fight is looked for over the bill of Rep. George Lord, Detroit, on the taxation of foreign securities in the hands of Michigan investors. The bill was passed by the House and is before the Senate. This bill would repeal the present law which places a specific tax of one-half of one per cent on such securities and exempts them from the ad valorem taxes, and would then make such holdings subject to the same general tax as all other property. To entrench himself for the contest Rep. Lord has introduced another bill in the form of a joint resolution providing for an amendment to the constitution which would prohibit the Legislature from enacting any specific tax law in lieu of the general annual property tax as applied to bonds, mortgages and other securities of other states and foreign countries, including municipal and corporation bonds and securities. Mr. Lord says that last year $104,000,000 of Michigan money was invested in such securities and the specific tax paid amounted to only $17,000. On an ad valorem basis they would yield $2,000,000 a year. If the bill fails in the Senate Mr. Lord says he will push his joint resolution for a constitutional amendment which would go to the people. An amendment to the present trust, deposit and securities companies' law, which would bar such concerns from investing in these foreign securities, was introduced also by Mr. Lord.

Representatives of several railroads in the state appeared last week before the Senate railroad committee in opposition to Sen. B. P. Hicks' full crew train bill. The railroads claimed it would add $1,624,000 yearly to their costs without increasing safety or service.

Hearings are also being held on the bill to provide for the eight-hour day in Michigan.

STEPHENSON MILL RESUMES

The I. Stephenson Company's soft wood mill at Wells, near Escanaba, resumed activities February 21 after having been closed since the last week of December. The force taken back is about 200. For the present the mill will be operated on one ten-hour shift, but as soon as conditions warrant more men will be added and two shifts probably will be working.

BURDICK ADDRESSES ENGINEERS

"The Street Railway Situation in Detroit" was the subject discussed at the meeting of the Detroit Engineering Society, held at the Board of Commerce, Friday evening. The speaker was E. J. Burdick, assistant general manager of the Detroit United Railway. The principal feature of the address was the discussion of the "Service at Cost" plan, which the citizens of Detroit will either accept or reject at the election April 4.

The next meeting of the society is scheduled for March 8, when the speaker will be H. C. Lamme, chief engineer of the Westinghouse Electric & Manufacturing Company, Pittsburgh. Mr. Lamme's subject will be, "The History of the Induction Motor."

$2,000,000 LUMBER DEAL

Godfrey Von Platen, Grand Rapids lumberman, has purchased 172,000 acres of timber land in Houghton, Iron, Gogebic, Ontonagon and Keweenaw counties from the James C. Ayres estate, Boston. The consideration is said to have been in the neighborhood of $2,000,000.

PAINTERS CUT OWN WAGES

At a recent meeting of the Ann Arbor painters' union it was announced by Phillip D. Cressor, president, that the painters had voluntarily decided upon a reduction in wages from $1 to 90 cents an hour. Mr. Cressor is quoted as saying that the action was taken because the painters thought that only through such a course generally could the desired reduction in the cost of living be attained.

Digitized by Google

Michigan Motor Garment Co. Outlook Is Satisfactory

The following letter has been received by this paper from the Michigan Motor Garment Company, Greenville:

"We are pleased to advise you that business conditions with our company have taken a decided turn to the good. The reaction has been just as great as the depression; in fact, we are now oversold on many patterns for at least sixty days. We do not manufacture exclusively for the automobile trade, as we have a very large line of children's play suits that is selling especially well right now. The automobile trade is just beginning to buy again and of course when business is normal we enjoy a very large volume from this source.

"We have sold the Ford Motor Company some goods through its commissary department, but the volume would not keep our factory going for more than a week at a time. All contracts that we have had with this firm have been filled and paid for.

"We are now operating six factories, located at Greenville, Lowell, Carson City, Lakeview, Howard City and Cedar Springs, all in Michigan, and are now planning installing a seventh factory at Edmore. This is the fourth year that our company has been doing business. Even with the business depression of last year, we nearly doubled our sales of the previous year. Prospects are excellent for the future because the reports of our twenty-six salesmen show that inventories are especially low in our line throughout the country."

At the recent annual meeting F. E. Renney was elected president; G. C. Bower, vice-president, and R. M. Beardslee, secretary-treasurer and manager. These officers are J. H. Ritzema, E. A. Kemp, J. S. Gibson and E. W. Ranney make up the board of directors.

JONES HEADS KELLY-SPRINGFIELD

A. B. Jones, former vice-president of the B. F. Goodrich Rubber Company, has been elected president of the Kelly-Springfield Tire Company, succeeding Frederick A. Seaman, who has been acting president and will henceforth be vice-president. The company expects to open its new plant in Cumberland, Md., in the spring and dismantle the present factories at Akron, Wooster and Buffalo. The new plant's main building has 20 acres of floor space and will make possible a daily production of 10,000 tires, 50 per cent more than was possible in the three old factories.

The company in 1920 earned $1,959,293 before deductions for federal income and excess profits taxes, but after taking into consideration preferred dividends. The income thus was equal to $4.01 a share on the outstanding common stock, while in 1919 the net income was equl to $13.20 a share and in 1918 to $20.56 a share. The net before federal taxes in 1919 was $3,148,861; in 1918, $4,283,164 and in 1917, $2,573,751. The balance sheets shows total assets and liabilities on December 31 to have been $36,292,942, as compared with $23,796,029 in 1919; $19,147,995 in 1918 and $15,395,835 in 1917. Assets include $2,182,089 cash; $2,104,359 accounts receivable; $9,751,389 inventories; $21,248,649 properties, patents, etc.; while among the liabilities the principal items are: Preferred stock, $3,237,100; second preferred stock, $5,860,200; common stock, $8,084,241; notes payable, $8,155,969; reserve for depreciation of inventory, $510,535; surpins subject to deduction of federal taxes, $9,365,375.

FORD GRANTED WATER RIGHTS

The Federal Power Commission has approved the application of the Ford Motor Company to develop a $2,500,000 water power project on the Hudson river at Troy, N. Y. The power development is said to be a part of the Ford company's plans to establish a plant at Troy



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins — *Valve Roller Pins* — *Roller Clutch Pins* — *Dowell Pins Hardened Straight* — *Oil Pump Plungers* — *Roller Bearing Rollers Straight* — *Differential Gear Pins* — *Headless Shuttle Bolts* — *Universal Joint Pins* — *Small Gear Shafts*

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 575

Digitized by Google

Need an Elevator?

Ask LEITELT

Modern Designs

Superior Construction

LEITELT IRON WORKS

Office and Factory

315 Mill Ave., Grand Rapids, Mich.

Eastern Michigan Service

1900 N. Mich. Ave., Saginaw, Mich

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building

524 Griswold Street

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks

Investment Houses

Trade Associations

IRENE WILLIAMS

104 South Michigan Avenue

CHICAGO

OPPORTUNITY FOR A MANUFACTURER

to procure services of a Sales Representative. A married man with a good sales record. At present employed by a large Steel Corporation covering the States of Michigan and Indiana. Available April 1st. For a personal interview address O. A. W., Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

FREE FACTORY SITES

At Harbor Springs, Michigan.

On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

Sticking to the Facts

(*Continued from Page 8*)

the end of January— there has not been a day when 1,500 cars were made; others say even less, but a few others venture that the 2,000-car-a-day mark has been reached. If it has, so much the better for the thousands of good people who depend on Mr. Ford for their livelihood.

"I am not in favor of exaggerating things, but the Paige-Detroit Motor Car Company is now on a 75 per cent basis and we expect to be on 100 per cent production within another 30 days."

Thus spoke Vice-President F. L. Jewett to the writer, Monday.

"Our business has increased most wonderfully within a comparatively short period, inasmuch as we were on a 25 per cent basis the early part of the year," Mr. Jewett continued. "However, sales have been increasing fast and today we have no more orders on the books for early shipmeot that we are going right ahead further to increase our output. Conditions throughout the country, as our sales force reports, are improving everywhere. Out on the coast, Los Angeles, San Francisco, Seattle and other larger cities, all are in better mood and sending us better reports than for a long time. No doubt the return to full production is not yet general, but there need be no fear, for the industry as a whole is coming back rather strong and it will be a matter of only a few more months before most of us will have forgotten the 'slump days.'"

The Liberty Starter Company, Detroit, which does work for the Ford company exclusively, reopened its plant last week with 150 men—not 750, as had been reported in the newspapers. Every day it is intended to add more, and possibly before the middle of March the total force will be 750, or half the 1920 normal. Company officials have not given out information as to the number of starters they are making for the Ford Company but they point to the fact that they have gone back to work for the Ford company as evidence that activities at the latter plant must be increasing.

"If they were not selling more cars, we would not be back in production today," said one of the officers of the Liberty company.

Production of the Lincoln Motor Company, Detroit, is being increased this month, according to an official, who said:

"We have been producing cars without interruption—only a small number. We have been adding a few men right along, but not hundreds. Because we, as well as other manufacturers know of have not been doing 'big things' for some time, some of the special writers and press reporters seem to have reached the conclusion that Lincoln and these others have been dead idle. That is not only wrong but strictly misleading. There is a difference between small production and no production at all, and mis-statements of that sort under past and present business conditions are sometimes used expressly for no good or honest purposes. We are optimistic here at Lincoln and feel that gradually sales of motor cars will be increasing. The general revival has not yet reached a very high mark, but undoubtedly we are traveling on a much better road than the one we went over during the previous few months."

An average total of 65 to 75 Hudson and Essex cars are being turned out daily by the Hudson Motor Car and the Essex Motors, Detroit.

"We did not close down entirely at either plant," said an official, "and we have been turning out a few cars daily with practically no interruption all of last year and thus far this year. Much that has been rumored and printed in the daily press has been either exaggerated or quite a bit misleading. However, that period is over now, and we feel confident that within a short time business will be very much improved. However, without hard work it can't be done. Talking and suggesting is all very fine but it is up to the sales forces to do it."

Of all the automobile manufacturers in the country, the Reo Motor Car Company, Lansing, is said to be the only one besides the H. H. Franklin Manufacturing Company, Syracuse, N. Y., now on a 100 per cent operating basis, with the leadership in favor of the Wolverine concern owing to its much larger output. The following statement from one of the Reo officials gives the facts:

"We are now operating on 100 per cent basis and shipping about 150 cars a day. Working force is over 5,000 men, and with the exception of a few inefficient men, we kept our whole force all year round. For a comparatively short period the plant was operated on a half-time basis, later increased to three-quarter time. A few days ago we shipped 184 cars one day. Thursday last we shipped 30 to Sweden, thus showing that even foreign business is not a matter of history, at least with us. Production and shipping schedule for the month just ended called for 3,350 Reos, of which 1,800 were trucks and 1,550 passenger cars. This February record is better than the January schedule by 1,350 cars and it is expected that the March activities will likely be better than those of last month. As evidence of the condition which exists now, trainload orders have been received in the last two weeks from Harrisburgh, Pittsburgh, Hartford and Toledo. Trainloads call for 70 to 75 railroad cars carrying 100 to 150 automobiles. Business is also picking up at various points, as for example, Spokane, Wash., which has been quiet, and from where orders for several carloads were received this week.

Another Detroit concern which recently resumed is the C. R. Wilson Body Company. However, as contrary to reports in the press, the reopening was not with a force of 600 men.

"We took back several hundred and expect to have 600 or more on the job ere many days have passed," said a Wilson executive. We are not back to 50 per cent of normal but probably will get there before the end of this month. We have received increased orders from such concerns as Reo, Paige, and Sheridan and the general outlook is much better. The outlook, you understand."

The Motor Specialties Company, Muskegon, has put in a full week of six days since the fall slump and has one-third of its normal force working 10 hours a day.

"Sales made at the automobile shows account for much of the business now on hand," said F. C. Whitney, plant manager. "The company's regular customers have also greatly benefitted by these shows, especially those held in the larger cities, and the result has been that orders long on the books have thus been released. Another encouraging feature is that our experimental and sample department is ahnormally busy for this time of the year. This is undoubtedly due to the fact that many of our customers are taking advantage of the present breathing spell to refine their motors, incorporate new features and test out changes which their engineers have been working on, to improve their product. In this respect the let-up in production may be a good thing for the industry."

In Jackson the Sparks-Withington Company, which makes a variety of automobile accessories, is said to be working with a full force and on one of the largest production schedules. The Briscoe Motor Car Corporation, in the same city, is reported to be increasing its production gradually. As far as is known the production schedule for this year is based on 750 to 1,250 cars a month, with the hope that the total for the year will be 16,000 cars.

Digitized by Google

Nothing definite has been received from the Dort Motor Car Company, Flint, but it is learned from good sources that the company has been receiving many orders for its new models and will increase its output this month.

Another indication of the upward trend is to be found in the following announcement of the Curran-Detroit Radiator Company, Detroit:

"We are pleased to report that notwithstanding the abnormal warm weather and general trade conditions, we are enjoying a continued growing demand for our radiators. We continue to receive inquiries from a large number of dealers an auto makers, inquiries coming from Mexico, Alaska, Australia and other foreign countries, thus indicating a growing foreign demand for American goods. We continue to specialize in our patented Ford model, and the reason the Curran factory has been operating full time all winter and has not been handicapped in collections is probably accounted for by the fact that our goods are distributed over a wide territory."

There is no question that the production of the Ford Motor Company is increasing due to growing sales. A variety of reports, some attributed to Henry Ford, have appeared in different papers, and practically every one gives different figures. A number of parts makers or material suppliers for the company, when asked, agreed that they did not believe the production had reached more than 1,500 to 1,800 cars a day. Ford officials couldn't tell, for they didn't know. However, one of the Ford dealers in a Michigan city in an advertisement published in his home town paper starts out as follows: "Less than 2,000 cares a day. * * * The present bedrock prices were based on a 4,000 per day production. We're mighty afraid of an increase most any time."

From Akron, O., the tire manufacturing center, comes a report that several of the big concerns recently have received fair sized orders, some of these for the Ford company. An interesting letter on the situation has been received by this paper from the B. F. Goodrich Rubber Company, part of which is quoted:

"It would be impossible for us to give you any information regarding business for 1921 that would be of benefit to you, because whatever we said might be mostly guess-work. It seems to us as if one man's guess is as good as another's. We believe that there will be a marked improvement, but just when it will come and how rapidly it will develop we cannot say.

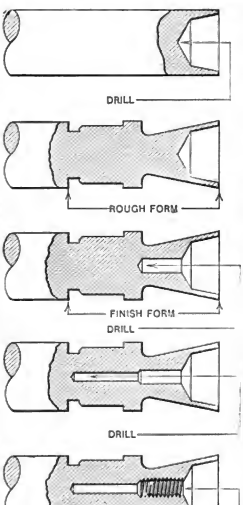
"We agree with you that there is much misinformation being printed in the press and we thoroughly appreciate your attitude in not printing an item unless it has been officially confirmed. There has been much confusion of names and frequently a distortion of facts."

"It is no exaggeration to say that the automobile industry is at 30 to possibly 35 per cent of normal, taking it as a whole," said one of the officers of the Timken-Detroit Axle Company, Detroit. "Some concerns are doing better than others, but we must consider the thing not from the exceptional standpoint. We hope that conditions will continue to improve. We were more active in February than in January and will be further ahead at the end of March than we were at the beginning of the month. We hope that April will still be better. We cannot tell how much better things will be in 30 or 60 days. Nobody really can, because business conditions in general are still far from normal. Manufacturers all are cautious. It is well known that in very few cases are schedules made with the parts makers for more than a month ahead."

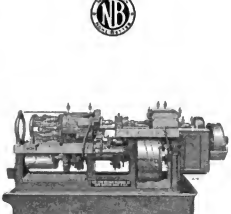
THEIN JOINS SEELYE-BROWN

Robert R. Thein has been made vice-president in charge of service for Seelye & Brown, Inc., Detroit advertising agency. Mr. Thein has been connected with numerous large agencies in the East and had an agency of his own at one time.

The Choice of Those Who Know



Gasoline Engine
Cylinder Primer Body
163 Per Hour



ALMOST THREE A MINUTE! That's the way these priming cups drop from the lair at the W. G. Nagel Electric Co. plant, at Toledo. And work is held within close limits—in spite of this unprecedented rate of output.

The nature and variety of the operations involved practically necessitated the selection of a "Six-Spindle" Automatic for the work. Yet the simplicity of tooling made possible by the greater number of spindles reduces the "down time" to a minimum.

This job is an excellent illustration of the New Britain's ability to accommodate revolving drilling spindles. These may be applied in the 2d, 3d, 4th or 5th positions to speed up small drills, gripping them in chucks and running them against the direction of work rotation. Their use accelerates production, reduces drill breakage, and insures concentricity of hole with outside.

The rapid addition of others, following the installation of a single machine in a plant, is convincing evidence of the *accuracy* and *unequalled productive capacity* of "New Britain" Six-Spindle Automatics—*the choice of those who know.*

We will gladly submit production estimates from samples or blue prints; or, if preferred, our representative will call at your plant to thoroughly investigate the possibilities for increasing production and reducing your costs.

The New Britain Machine Company
New Britain, Conn., U.S.A.

DETROIT 4612 Woodward Avenue
PHONE Glendale 1354

The "Six-Spindle" Automatic

Digitized by Google

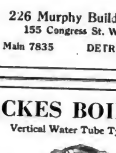
MORTON AUDIT COMPANY
1201 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS

INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

H. S. DODSON
R. V. CARD
Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

WICKES BOILERS
Vertical Water Tube Type



Man Stands Erect Cleaning
Ask for Bulletin:
Reducing Costs in the Boiler Room
The Wickes Boiler Co.
SAGINAW, MICHIGAN
Michigan Sales Office:
1116 Penobscot Building, DETROIT, Mich.

Automotive

PICKING UP IN LANSING

The New Way Motor Company, Lansing, is receiving orders from all parts of the United States, and Harry J. Sproat, secretary and factory manager, reports that the ouiput has been increased to 40 per cent with 60 men employed. C. C. Carleton, secretary of the Motor Wheel Corporation, announces that this concern is operating on a 50 per cent basis and will go to 75 per cent in March. The corporation began taking back better grade of employes this week. Samuel H. Carpenter, secretary of the Atlas Drop Forge Company, reports his firm as working on an 80 per cent basis and expects to continue at this rate for some months, with 200 men employed and more being added.

CALUMET BODY GIVEN A NAME

Directors of the Calumet Truck Body Company, a concern recently organized, have decided to call their product the Calumet All-Purpose truck body. The company does principally a local business but expects to expand later. At present there are 12 men on the payroll as shop workers. Thus far 15 bodies have been made and there is material on hand for 100 more and additional materials on the way for another 100.

BUICK BRANCH MOVES SALESROOM

The Detroit branch, Buick Motor Company, has moved its salesroom and offices from the Woodward and Alexandrine avenues location to the new General Motors building in West Grand Boulevard. A new service station and parts department building is being erected in Canfield avenue, between Cass avenue and Second boulevard.

GOODYEAR INCREASES PRODUCTION

The Goodyear Tire & Rubber Company, Cleveland, is operating its plant on a five-day schedule, eight hours a day, and the production has been increased to 60,000 tires a week.

BEARINGS SERVICE DIRECTORATE

William N. Sweet has been added to the board of directors of the Bearings Service Company, the other directors being as follows: Heman Ely, Alfred K. Hebner, L. M. Klinedinst, B. G. Koether, Harry J. Porter, Alfred P. Sloan, Jr., and William N. Sweet. Officers elected by the new board are: Alfred K. Hebner, president; L. M. Klinedinst, vice-president; William N. Sweet, vice-president; Dana H. Torrey, secretary; William A. Brooks, treasurer. Main offices of the company are in Detroit.

CHANDLER SHARES EARN $15

A preliminary statement as to the business of the Chandler Motor Car Company, Cleveland, for 1920 shows the net profit to have been $4,213,111, after allowances for taxes and depreciation. This was equivalent to a little better than $15 a share on the 280,000 outstanding shares of stock. The earnings, or rather operating profit, before allowances was $7,543,204. From this there was deducted $2,428,250 for federal income and excess profit taxes; $736,139 for depreciation of inventory to conform with market prices, and $165,702 as loss on sale of government bonds.

THE YEAR HAS ONLY START[ED]

The automobile dealers of Pontiac held a meeting and banquet a few days ago and the opinion of the speakers was that the general outlook was good and that there would be plenty of sales this year.

"Why, 1921 has just started," said one man, "and some people would make you believe that we are already near December 31. Business is only beginning and there is no need for the live dealer, the worker, the business-getter to think that he will not be able to sell cars this year." President E. B. Hodges said much was to be expected from the farmers this year.

HELM'S COMMENT ON BUSINESS

In addressing the members of the Exchange Club, of Cadillac, a few days ago, C. J. Helm, secretary of the Acme Motor Truck Company, said, according to the Cadillac News:

"The industrial outlook in the East is much better than it was 60 days ago. The mere fact that the men with whom I talked while in the

PISTON PINS
Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production
MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

Direct Wires to New York Stock Exchange and New York Curb
Special Report on any Security on Request
Phone Cherry 6305
Investment Service
Investors will find it to their advantage to consult
Our Statistical Departments
before making commitments. This service costs you nothing.
Write, Phone or Call
WEBB, LEE & CO.
Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit
Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6502
680 Fort St., E. DETROIT

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

Digitized by Google

East only a few days ago were not commenting on general conditions impressed me favorably. Two months ago everyone was wondering if the bottom had been reached and generally speculating on the turn affairs would take. In November and December our agents were very quiet without even inquiries as to business coming in. But their mental attitude is much different now and they are hustling for business. They are not discussing conditions; they are meeting them."

VICTOR RUBBER PERSONNEL CHANGES

H. S. Berlin, division plant manager of the Firestone Tire & Rubber Company, Akron, has been elected president of the Victor Rubber Company, Springfield, O. Allard Smith, vice-president of the Union Trust Company, of Cleveland, was elected a member of the board of directors. H. H. Durr, of the financial department, was elected secretary, and A. L. Felck, until recently with the Dunlop Tire & Rubber Company, Buffalo, N. Y., was appointed manager of the sales promotion and advertising department.

SCHWARTZ TRUCK IN PRODUCTION

The Schwartz Motor Truck Corporation, Reading, Pa., is now in production. A single model, known as the Schwartz Highway Express, capacity 1,500 to 2,500 pounds, and selling at $1,485, is being made.

REFINANCING PORTAGE RUBBER

Stockholders of the Portage Rubber Company, Barberton, O., will form a permanent committee to take care of the refinancing of the concern, according to a report from Akron. It is said that probably not over $1,500,000 is involved.

GOODYEAR GETS MORE TIME

Arrangements have been perfected, says the Cleveland Plain Dealer, for a 30-day extension of the $15,830 inventory loan of the Goodyear Tire & Rubber Company, Akron, with an option for a further extension of 60 days.

FOUNDRY ON 40% BASIS

The Gerson-Carey Company, Lansing, is operating its foundry at about 40 per cent of normal engaged on Reo Motor Car Company work. The company makes a specialty of brass castings and brass work.

U. S. MOTOR REGISTRATION

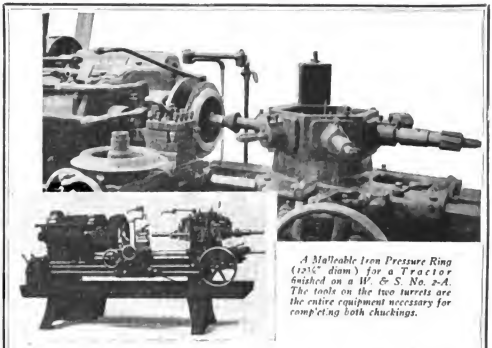
Some idea of the sale of motor cars in 1920 is furnished by the report of the American Automobile Association, to the effect that the registration of 8,234,490 passenger cars and 946,826 trucks in that year was 2,114,670 more than in 1919. Motorcycle registration was 271,230.

THE BIGGEST DEALER "AD"

The Hubbell Auto Sales Company, Saginaw, ran a five-page advertisement in the Saginaw News Courier's special show issue. This is not only the largest single advertisement ever placed by any business firm in Saginaw, so far as is known, but is believed to be the largest single "ad" ever run by any automobile dealer in Michigan. The company handles the Ford products in Saginaw and six adjoining counties and has a branch in Bay City. During 1920 the company's business in the latter county totaled $624,131 and in its Saginaw territory sales amounted to $1,839,811.

EMPLOYES DECIDE TIME POLICY

After having been closed for several weeks, the plant of the Albion Bolt Company, Albion, is again in production. A full force has been taken back and is working three days a week for the present. It is expected that within a few weeks the time schedule will be increased. The plan adopted was the result of an investigation made among the employes, representatives of whom suggested that it would be better for all concerned, to take back all the men to work only half a week than 50 per cent of the force on a full time basis.



A Malleable Iron Pressure Ring (12½" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x 44"—21" Swing to ⅝"x 4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office—Ford Building
Chicago Office—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

Detroit United Lines
(EASTERN STANDARD TIME)
In Addition to Local Cars
FAST LIMITED CARS
Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

CHERRY 6785

The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Chicago—An $11,000,000 ship concern to be known as the Petoskey Transportation Corporation has been organized and a charter filed at Dover, Del. The corporation will establish a freight-carrying service on the Great Lakes, transporting coal, stone and cement principally, and will build three boats immediately, it is announced. John C. Huckbee, Chicago; Albert D. Kilze, Petoskey, and Jonathan B. John, Newago, are three of the promoters.

Detroit—G. W. Eckerle, who has been assistant to the president of the Detroit, Toledo & Ironton Railroad, has resigned to become private secretary to Frank H. Alfred, president and general manager of the Pere Marquette.

Washington—The Interstate Commerce Commission (investigation and Suspension Docket No. 1235) has found that the proposed cancellation of certain specific rates on saw logs and bolts from points on the Chicago, Milwaukee & St. Paul Railway and the Wisconsin Northern Railway in northern Wisconsin and Michigan to Wisconsin points, when for manufacture and reshipment via lines of the respondent, are justified, and has vacated the orders of suspension to that extent. The proposed cancellation of joint rates from points served by the Copper Range and Mineral Range railroads have been found not justified and the proposed schedules have been ordered canceled. The case was submitted on January 20, and decided February 9, 1921.

Detroit—The Grand Trunk Western Railway has leased the Dodge Brothers building, Jefferson avenue and Brush street, for offices. The headquarters of the company formerly were in Montreal, but were moved to Detroit during the war. The building, which is seven stories high, is being altered.

WARNER BUYS VAN SICKLEN

An important event in the automotive industry is the announcement of the Stewart-Warner Speedometer Corporation, Chicago, that it has purchased the Van Sicklen Speedometer Company, Elkin, Ill., one of the largest manufacturers of speed indicating and other automobile devices in the country. The deal involves close to $1,000,000, as far as could be learned from non-authoritative sources. Stewart-Warner also announces that it has sold to the Central Trust Company of Illinois, Chicago, and Hambleton & Company, New York, $2,000,000 of five-year, 8 per cent convertible debenture bonds for the purpose of providing the purchase price of the patent rights and certain assets of the Van Sicklen Company, and also to retire $200,000 of bank loans and provide additional working capital. According to the Chicago Herald-Examiner, the Van Sicklen company is to retain its corporate existence.

GRAND RAPIDS TIRE

The Grand Rapids Tire & Rubber Corporation, Grand Rapids, incorporated in 1920, announces that the first unit of its plant at Fuller avenue and the Grand Trunk has been completed and that it is expected that 400 persons soon will be employed. It is planned to produce 1,000 tires and 5,000 tubes a day. The concern is capitalized at $1,000,000. L. A. Brown, former western sales manager for the United States Rubber Company, is president, and M. J. Goldner, who was branch manager for United States Rubber, secretary-treasurer. H. H. Swan, production manager, formerly was with the Portage and Goodyear tire companies.

GOOD ORDER FOR GILLETT

Important additional orders have been received by the Gillett Motor Products Company, Howard City. These orders, which are said to total approximately $750,000, are for such products as bodies, floor and running boards, automobile dashes and instrument boards. They will necessitate additional manufacturing space, more men and more capital, it is reported.

TWO MICHIGAN SHOWS

The annual Grand Rapids Automobile show, held last week, may be considered the best in the history of the Furniture City. Former attendance records were passed by a large margin. Delegations of dealers as well as prospective buyers came from several other cities, such as Kalamazoo, Muskegon and Battle Creek. From Detroit there came a number of the bigger distributors, while factory representatives from several of the manufacturing concerns were present. Sales are reported to have been made in plenty, both as to passenger cars and trucks. One of the assistant sales managers of a Michigan concern is quoted as saying: "The large attendance was expected, but what is more important and pleasing is the actual number of real prospective buyers on the notebooks of salesmen."

Saginaw also had its annual automobile show the past week and from what dealers said it was entirely satisfactory, everything considered.

LOWER IRON ORE PREDICTED

According to mining men, iron ore prices on 1921 delivery will be cut 75 cents to $1 below the basis of last season, says the Bessemer Herald. It is also contended, adds the paper, that the lake transportation companies must be prepared to make lower rates for the carrying of ore from the Lake Superior ports to the Lake Erie docks in the event of the season's ore prices being reduced.

A CORRECTION

In the February 19 issue of the Michigan Manufacturer and Financial Record it was stated that J. W. Wilford, of Lansing, had been called to Detroit to become general manager of the Central Forge Company. This was a misstatement of fact. Mr. Wilford, who has been identified with Lansing industries for 14 years, was appointed general manager of the Central Gear Company, Detroit. Both the gear company and forge concern are subsidiaries of the General Motors Corporation.

TO ORGANIZE TRUCKMEN

The National Team & Motor Truck Owners' Association will meet in Lansing about the middle of March to begin a campaign to organize territory in Michigan not now embraced in the organization. F. L. Henk, secretary of the Association, with headquarters in Detroit, was in Lansing last week to make preparations for the meeting.

Among the American manufacturers of brushes who have petitioned Congress for a higher tariff on brushes is the Grand Rapids Brush Company. Unequal competition in the business is due principally to Japanese firms, it is said. It is asked that the present duty of 25 per cent ad valorem be raised to from 40 to 60 per cent, according to the different kinds of brushes.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

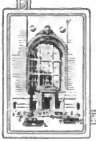
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

MOTCH AND MERRYWEATHER
THE MACHINERY CO
METAL WORKING MACHINE TOOLS
DETROIT OFFICE
MAJESTIC BUILDING

THE NATIONAL PARK BANK
OF NEW YORK

extends to financial institutions and other concerns the facilities of a bank which has had 65 years of world-wide commercial banking experience



Established 1856

Safe Deposit Vaults

Digitized by Google

Germany Regaining Her World Trade

(Continued from Page 13)

All the firms and associations engaged in foreign trade were recently welded together into one great organization known as the Association of German Export Firms, with headquarters in Berlin. This organization includes manufacturing and shipping. One of the most important activities of the Association has been the classification of export markets for machinery and engineering products into two categories—those engaged in operations in which the competition of the United States and Great Britain is likely to be negligible and those in which the competition is expected to be keen. In the first classification the German plan is standardization and simplification of all machines and tools, and for the latter a policy of shaping output to meet the exact needs of individual markets. While Germany lacks raw materials and her labor is not yet as efficient as in pre-war days, industrial plants are being operated to their utmost capacity by the systematization of every process and by the amalgamation of allied lines to an extent never before attempted.

Concentration of industry is the keynote of the German industrial reorganization. A typical instance is the merger of the Stinnes coal and iron trust with the Siemens-Halske Electrical Company, whereby 200,000 workers are controlled by one concern producing electrical power and manufacturing the most complicated machinery. As a result of this merger, Berlin, the Lower Rhine and Bavaria are brought much closer together. In the field of banking a similar tendency is noted in the fusion of the Deutsche Bank with the Hannoversche Bank, the Braunschweigische Bank, the Siddeutsche Bank, the Wuertenbergische and the Hildesheimer Bank, with an increase of capital of 125,000,000 marks. Here it is interesting to note that the German Overseas Bank at its recent annual meeting declared a dividend of 30 per cent. In October, 1920, there was established in Munich an organization for promoting German trade in the Near East—the Levante Bevisen Aktiengeselischaft, with a capital of 20,000,000 marks—which will interest itself principally in the tobacco business in Turkey, Greece and Asia Minur.

With the exception of East Africa, East Asia and Australia, all important parts of the world are again being served by German steamship lines, with chartered ships, ships of their own or in collaboration with foreign shipping companies. All German shipbuilding yards are turning out freight carriers of all kinds, coal and oil burners and sailing ships with auxiliary engines and motors.

The former German finance minister, Gothein, who has advocated the allowing of German prices to rise to world-market levels, as with completely free export and import, they would speedily do, shows in the Berlin Tageblatt that the main causes of low German production cost are the artificially limited domestic and factory rents, state-subsidized food and very low railway fares and freight rates. Many of the items of production cost are far lower, in gold, than before the war, this although gold prices in all free markets have risen greatly. Herr Dahlberg, an official of the Import and Export Licensing Bureau, estimates that German production cost is about a third of English. As Germany loses by dumping, although her individual exporters, who charge foreigners more than they charge natives, gain, Herr Dahlberg things that prices to foreign buyers should in the future be calculated in gold (the actual payment might be made in any currency at its gold exchange) and he suggests as a general basis the pre-war gold price, plus 150 per cent, also in gold. This would make German's gold export prices two and a half times as high as in 1914, which would roughly bring them to world-market levels.

The German state system of checking unjustifiable dumping has so far been unsuccessful. The Foreign Trade Boards have in principle refused to sanction exporting at prices materially below those of world markets. The prices of each export deal are considered in the light of the exchange of the day. But the Trade Boards, overridden by the Reichswirtschafts-Ministry and retarded by a needlessly involved procedure, work slowly; on the other hand the exchanges (not to mention the profit-devilish cost in marks and the production cost in foreign markets) fluctuate very rapidly. And so the price-testing mechanism fails.

German manufacturers have of course an advantage over the manufacturers of other countries owing to the low value of the German mark. How ever, it must be borne in mind that an export trade based on such conditions is not likely to add greatly to the wealth of Germany as a nation, for the fall of the mark adds a corresponding increase to the cost of the necessary imports of raw matcrials. If, however, Germany is able to sell her products to nations whose currencies are at a premium as compared with the mark and can obtain her imports of raw materials from countries like those of Eastern Europe, including Russia, whose currencies have a low value, Germany is in an advantageous position.

Many economists and business interests contend that it would be a serious blunder to deprive Germany of any advantage that she may be able to acquire legitimately in the markets of the world. They hold that it is obvious that rehabilitation of Germany's foreign trade is vitally important to a country poor in natural resources and faced with the necessity of paying an enormous war debt and indemnity. These authorities point out that in order to develop her industries, Germany must have copper and cotton from the United States, rubber from Brazil, hides and skins from Asia and South America, nitrates from Chile, zinc from various British colonies and numerous minor staples. Economists insist that in order to pay for these imports of raw materials Germany must export her manufactured goods.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—Building activities in four Michigan cities showed a gain for January, according to the compilations of the American Contractor, while in five other Wolverine centers there was a loss, as compared with January, 1920. The totals were as follows: Kalamazoo, $77,475, as compared with $38,800, gain 97 per cent; Lansing, $83,740, as against $49,035, gain 71 per cent; Battle Creek, $24,775, as compared with $18,348, gain 38 per cent; Bay City, $47,000 as against $37,000, gain 27 per cent; Flint, $46,926, as compared with $852,965, loss 94 per cent; Saginaw, $25,694, as compared with $52,415, loss 50 per cent; Grand Rapids, $267,247, as compared with $528,455, loss 49 per cent; Jackson, $14,160, as against $26,181, loss 46 per cent; Detroit, $3,981,943, as compared with $5,658,830, loss 29 per cent.

Grand Rapids—Thirty-four permits, the largest number taken out in a week thus far this year, is the record for the week ended February 18. The amount involved is $75,483 and is the second largest total among the seven weeks since the first of the year. The largest item is for a brick factory building in connection with the Fuller station of the Grand Rapids Malleable Works. It is to cost $25,000.

Detroit—Bids on cement submitted to the department of public works and the street railway commission have been turned down for the reason that they were considered too high. The majority of the bids were for $2.41 a barrel, although there were two bids at $2.39 and $2.29 respectively.

Grand Rapids—Business men of Grand Rapids are among the stockholders of the Belmont Sand & Gravel Company, recently organized here. Those mentioned as incorporators are Peter W. Decker, Bert S. Decker, Fred Raymond, M. Sluyter and Isaac Blamford. The Owen-Ames-Kimball Company is said to own a block of the stock. The company will take over about 120 acres of gravel land in Belmont, the gravel bed being on the Rouge River. The gravel is to be used for county road building in northern Kent and Muskegon counties.

Industrial Cost Chapter Organizing in Detroit

The Detroit Chapter of the Industrial Cost Association was formally launched this week when two score accountants from Detroit manufacturing concerns attended the inaugural dinner at the Hotel Tuller. A. W. Stannard, of the American Autoparts Company, was elected chairman of the Detroit organization committee, and A. Rae du Buell, of the Adams X-Ray Company, secretary. The other members of the committee are J. W. Baillie, Detroit Lubricator Company; E. M. Brown, American Blower Company; R. J. Honner, Penberthy Injector Company; W. F. Kennedy, Detroit Creamery Company; Stanley E. McGill, Art Stove Company, and F. W. Smith, Roberts Brass Manufacturing Company.

The Industrial Cost Association, which has its headquarters in Pittsburgh, is rapidly becoming an important factor to the industrial world and in a number of important cities organization of local chapters is under way, while in others they already exist. For instance, in addition to Pittsburgh there is an organization now in New York, and Detroit is the third large city to get in line. A Chicago chapter will be formally inaugurated March 8, while other cities to have chapters include Cleveland and San Francisco.

The principal object of the association is to make itself the voice of American industry on the problem of manufacturing costs, says an official announcement. It is not the voice of any special line of business, nor along with private interests to promote or to advertise, but purely and simply the voice of American industry as represented by the authorized executives of its manufacturing plants and associations of manufacturers.

Secretary-Treasurer A. A. Alles, Jr., of the parent body, enlightened the guests at the Detroit gathering as to the activities of the Association, which will include a program of methods to standardize cost and accounting terminology and to bring about mutual aid and discussion.

Digitized by Google

Builders Rap Combines Which Keep Prices High

The following resolutions were adopted at the tenth annual convention of the National Association of Builders Exchanges, in Savannah, Ga., February 14 to 17:

"That the convention raise its voice in protest against unreasonable prices as fixed by certain building material associations and that every means be employed to eliminate such practices.

"That such practice as the limitation of production, the restriction of the use of tools, the secondary boycott and other things of like nature be condemned.

"That the excess profits tax be repealed.

"That home ownership be encouraged and that each constituent body take up and carry on a campaign to this end."

About thirty members of the Detroit Builders & Traders Exchange attended the convention. President Charles W. Bernhardt, of Atlanta, Ga., was re-elected and it was decided to hold the 1922 convention in Memphis.

MARSH DIRECTS LINCOLN SALES

Ward H. Marsh, advertising manager of the Burroughs Adding Machine Company, Detroit, resigned to become sales and advertising manager of the Lincoln Motor Company, Detroit, March 1. Mr. Marsh first joined the Burroughs staff as a member of the creative division of the advertising department, but rapidly arose to assistant advertising manager and then manager. At one time he was with John Deere & Company. He has gained prominence as a writer and speaker on advertising subjects.

FRANKLIN GOES UP AGAIN

The H. H. Franklin Manufacturing Company, Syracuse, N. Y., has announced an increase in prices of Franklin cars, effective March 1, and ranging from $100 to $200. This is the second increase made this year, the first having been announced in January. Including both of these advances, the new prices will still be a few hundred dollars below the schedule in vigor in September, 1920, when the company was the first in the industry to follow the example of Ford. It reduced its war-time prices on an average $600. Franklin, it has been announced recently, is operating at capacity.

INDUSTRIAL ENGINEERS MEET

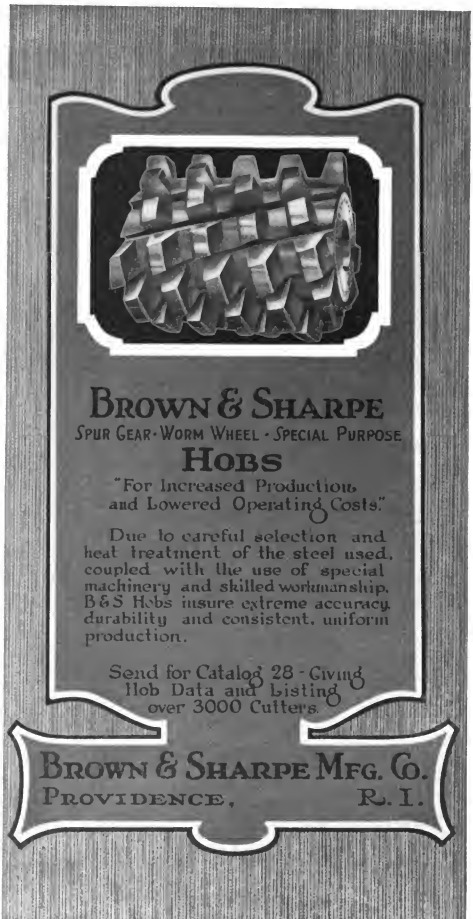
The March meeting of the Detroit Chapter, Society of Industrial Engineers, was held Thursday. The principal speaker was Johnson Haywood, of Miller, Franklin, Basset & Company, New York, consulting, industrial and production engineers, and auditors and accountants. The subject was "Is An Adjustment of Wage Rates Necessary to Meet Present Industrial Conditions?" Others who addressed the meeting were J. E. Morrison, president of the J. E. Morrison Company, and Gordon Stoner, assistant to the vice-president of the Detroit Pressed Steel Company. The meeting was held at the Board of Commerce.

BUILDING ACTIVITY FORECAST

James E. Beavis, field superintendent for the Michigan Employers' Casualty Company, Lansing, reports prospects bright for renewed building activities in Michigan. Building and road contractors, he says, are preparing for a strenuous season.

BEET CONTRACTS SENT OUT

The Michigan Sugar Beet Growers' Association sent out the 1921-22 contracts this week to the 9,000 members, asking them to adopt this contract and not sign agreements with manufacturers for less money. The Michigan prices will be based upon the Idaho growers' and approved by the American Farm Federation. These call for $6.45 a ton for beets with 5-cent sugar; $7.74 for 6-cent, $9.03 for 7-cent and $10.33 for 8-cent sugar. Cost of sugar is not expected to go above the latter figure.



Digitized by Google

Out-Of-Ordinary Features In Howell Motor Design Insure Dependability and Long Life

TO CONSTRUCT a motor in which the defects most common in the ordinary induction motor would be eliminated—has always been the objective of Howell Red Band Motor builders.

Ask any engineer why the usual electric motor fails in actual service and he will undoubtedly give you three reasons as follows:

Bearing troubles.
Insulation breakdown.
Defective rotor construction.

Rejecting the customary practice in electric motor design Howell engineers have constructed a motor characterized by the absence of these three principal imperfections most frequently contributing to uncertain motor performance.

The Howell Red Band Motor has a patented recentering feature in its bearing. This provides for quick adjustment when wear ultimately occurs, and eliminates long delays while awaiting replacement parts.

Large slots in Howell stators furnish ample space for the heavy slot insulation. Enameled wire, double cotton covered, provides against insulation breakdown.

With its end rings cast directly onto the rotor bars, the Howell Red Band rotor is unusually strong and stable, and is not affected by temperature changes. The Howell Red Band Motor has large overload capacity, with conservative temperature rating, 40° centigrade.

Because of the many superiorities in Howell design American industries everywhere place implicit faith in the ability of the Howell Red Band Motor to give never-faltering service.

Sizes of Howell Electric Motors are one to one hundred horse power. Write or wire your requirements.

Howell Electric Motors Company
Howell, Michigan
Export Office: 90 West Street, New York

New York, Philadelphia, Chicago, Minneapolis, Milwaukee, Grand Rapids, Buffalo, Cleveland, St. Louis, Toledo, Detroit, Pittsburg, Dallas, Seattle, Los Angeles, San Francisco, Boston, Kansas City, Denver, Atlanta, Saginaw, Charlotte, N. C., Montreal, Toronto, Winnipeg, Vancouver

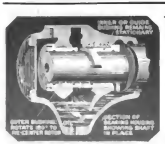
(6)

Profitable Business For Motor Dealers

THE Howell dealer organization is being enlarged to keep pace with our greatly increased manufacturing facilities.

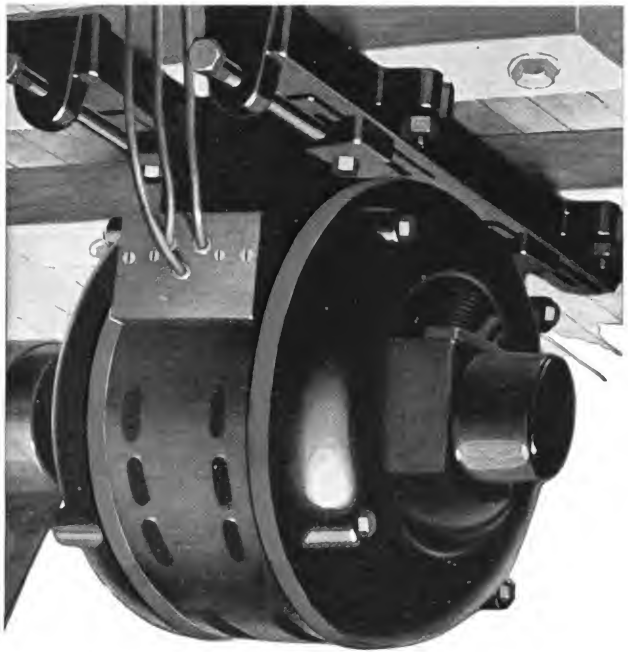
And motor dealers who are qualified to render high standard service—the unusual type of service expected by the Howell motor user—will find the Howell agency a most valuable asset. Every Howell Motor dealer is offered 100% co-operation direct from the factory—co-operation which results in the sale of motors, and builds up a profitable business for the dealer. Write today for complete information regarding the Howell franchise.





Howell

Digitized by Google



RED BAND
ELECTRIC **Motors**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Walton, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, MARCH 5, 1921

Let the Stockholders Have a Chance

THE NEW CODIFICATION of the corporation laws of Michigan is designed, among other things which are good and orderly, to make it difficult to procure lists of stockholders in Michigan corporations, which is not good or orderly. At present, corporations organized under the laws of Michigan, or domesticated in Michigan if organized outside the state, are required to file annually lists of their stockholders. These lists are open to the inspection of whomever chooses to look into them, and are, as a matter of office practice, copied by the Secretary of State and furnished to whomever cares enough for them to pay a cent a name therefor, which is about the cost of copying them. One of the uses to which such lists have been put in the past has been that of the brokers, who have used them as a basis of circularizing the stockholders with a view to interesting them in other investments, and the frequent receipt of overtures for such investments by people already stockholders in some or other company has been held by some people to be a bit of a nuisance. Hence the suggestion that the publication of such lists be suppressed, unless the inquirer be a stockholder in the corporation whose stock list is desired.

It is quite the custom of officials and legislators to propose new laws to meet private convenience rather than to promote the public good, and the increasing of the difficulty of getting at the lists of stockholders is one of these cases. To begin with, it is entirely out of harmony with the theory upon which corporations are organized. The corporation is composed of a group of people who put their joint capital into a given enterprise, each expressing for himself the limit of his liability either in his subscription for stock or his holding of the same. Where he has expressed his limitation in his subscription, it may turn out that he has not actually paid up, and exigencies have been known to arise in the histories of corporations where it is extremely useful for creditors to know to what extent stockholders have obligated themselves. Even where subscriptions have been fully paid up the actual or prospective creditors have a right to easy access to the stock list so that they may know to what extent the great names held out as directors, for instance, are backed up with substantial interests in the corporations. Very often people who have the director habit—and that form of human vanity is not uncommon—are used as "come-ons" for other stockholders or to give a fictitious credit to the corporate organization. Where directors have substantial interests the presumption is that they attend to the business of direction. Where they have small qualifying interests the reverse is often only too frequently the case. In any event, either the stockholder has a right to know how deeply his directors are interested in the business, or the actual or prospective creditor has a right to know the extent of the liability of each and all of the stockholders.

The concealment of the lists of stockholders has a tendency to limit the ability of the individual stockholder to look out for own interest. In these days of promoted companies, whose stock is sold broadcast by the hordes of energetic stock salesmen, one group working here and another group working there, there is absolutely no community of interest or neighborhood among the stockholders. As a matter of fact, such a community of acquaintance and neighborhood was actually presumed in the early days of corporations, the corporate form being devised as a method for the union of the joint capital of people closely allied, whose individual capital was not sufficient to undertake the enterprises which were possible under the corporate form. Today the same is quite generally true of a certain class of corporations. It is equally not generally true of that class of companies whose capital is assembled by the methods of the promoters. The individual stockholder, especially in a newly-formed company, who has made his investment upon the glowing showing of the glib stock salesman, is absolutely unacquainted with the body of the stockholders. The most that he has in the way of acquaintance is with his friend who asked him to come in, or with the friend whom he himself asked to invest. Now most of these companies are badly managed. Many of them are deliberately crooked in their management. If it is going to be made difficult for the stockholders in such companies to find out who the people are who are in the same hole with them, there is absolutely no method for them to associate a reasonable stockholding interest with themselves to protect what is left of their investments. We have in mind a group of insurance companies which were organized in this state a few years ago, the capital and subscribed surpluses of which were murderously scalped by the so-called "fiscal agents" in combination with the organizing officers. In these cases the stockholding lists not being on file with the Secretary of State, it was next to impossible for stockholders who wished to protect themselves to discover whom were their partners in distress.

No good can come from the suppression of lists of stockholders. It may be a little annoying for people who are fortunate enough to be owners of stock in prosperous companies to be importuned from time to time to make other investments. But they should be philosophic and cheerful, like the colored gentleman who was asked to change the twenty-dollar bill and who expressed his thanks for the compliment. Their convenience should not be made an excuse for the adoption of a system which would make every group of scalped stockholders helpless so far as communication with each other is concerned, whether for the organization of a committee for mutual protection or for getting the law on the fellows who have done them out of their capital.

The Beginning of a New Regime

THIS WEEK the people of the United States go under another government, using the term in the sense which the English do when they pass from one theory of administration to another. The official tenure of President Wilson and of most of the people who hold office by the grace of his commission ended with the inauguration of President Harding on Friday of this week. The country having given a commission to the candidates of the Republican party to do the executive part of its governing, following an earlier similar commission respecting the legislative part of the government, passed this week into a condition in which it has not been for some time, namely one in which the executive and legislative departments are in complete political harmony. The portion of the executive department which is most important is that which is located in Washington. That portion which merely carries out orders is not of so much importance. It makes little difference what is the political persuasion of the postmasters, the collectors of customs and revenue the district attorneys, the federal marshals and other officials of corresponding classes, because, luckily, there have usually been enough citizens found in both the leading political parties to do the work of these places quite acceptably. But the executives at Washington are important. They are the people from whom administrative orders issue, which can put one complexion on the statutes in one case, and quite another complexion in another case. That this group is going to be changed is quite an important matter to the country, if it is made important.

Digitized by Google

For reasons not wholly chargeable to the outgoing administration, the last eight years have constituted a period during which much of our federal government has been by administrative and executive order rather than by statute. The exigencies of the war had a good deal to do with this condition, although they did not have all to do with all of it. As a result, in the relations of the government with labor, and in the relations of labor with employment, we have seen times when the views of Secretary Wilson and Assistant Secretary Post, and the influence on their views of Mr. Samuel Gompers have had results that surely were never contemplated by our lawmakers. In the administration of our revenue-producing laws we have had interpretations and executive and administrative orders which seemed to be more clearly directed by the class consciousness of office-holders drawn from the southern part of the country—a class consciousness which directed the official mind along the lines of making the northern taxpayer pay that "nigger bill of 1861-65"—than by any clear study and interpretation of the law. The same system of administrative and executive control affected the management of the railroads and the communication systems. It had to do with the application of statutes affecting other forms of business. It may have been time that the growth of such conditions was given impetus by the needs of the war. But it is equally true that the habit, once fastened during the war, was not loosened after its close.

At any rate, the war in now over, and the gentlemen who take executive office under our new President are not bound, either by habit or tendency, to the plan of government by executive or administrative order, unless they, too, find it convenient to go outside the statutes and into forced interpretations to do the governing. If there is any one thing that the new administration owes the American people it is a return to the rule of law. We have not been under that rule nearly as much as we should have been for the last four years. Part of this was due to the war, part of it to the intellectually superior attitude of the President just retired, and part to the disposition of office-holders who were only too glad to take their cue from the chief executive, especially when it tended to increase their powers or to make their responsibilities less exact. This condition can happen among Republican office-holders just as well as among Democratic ones, because the first impulse of the average office-holder is to become a petty tyrant. Some of them become such from alleged moral views, some from intensity of disposition, some from the profit that comes out of it. Unless the chief executive insists on the rule of law, his underlings are very apt to supplant its salutary rule by the emotionalisms and uncertainties of administrative orders. Frequently these pass as progressiveism and as protests against reaction. To the American who knows his constitution they never pass as law.

Mr. Harding's administration may bring many salutary changes in our national economic system and in our financial schemes. It is sincerely to be hoped that this will be the case. But the first thing it should bring is a surcease from personal and varied interpretation of the law by petty officials. When we need our laws interpreted, the doors of the courts are open. When recourse is had to them, the interpretations will at least have the merit of being uniform.

Secretary Denby

DETROIT gave one of her best citizens to the nation, this week, when Edwin Denby went to Washington to be Secretary of the Navy. It was not the first time she had given Mr. Denby, for he went away to serve his country back in '98 as a common sailor, and again, four years later, as a member of Congress, and again in 1917 as a private of Marines in the World War. Each time, his work accomplished, he has come home full of honors. No one doubts he will come home again, when this task is done, with a record of equal distinction.

From his pronouncements made since his appointment, one gathers that Mr. Denby has a very definite policy in mind, and those who have watched his career—and that includes everybody in Michigan—know that when he sets out to accomplish a purpose, he is not easily diverted from his course. Withal, Mr. Denby's personality and his methods are anything but belligerent. Whether the country is in or out of sympathy with his ideas, it will never be out of patience, acrimonious, with him, for Mr. Denby is, above all, a most likeable man—a man who always has and always will appeal to the popular fancy. Moreover, there's a glamour attaching to "the 'gob' who rules the Navy." It is easy to predict that within three months Mr. Denby will be the most sought-after member of the Harding cabinet.

Edwin Denby should grace the Secretaryship, first because the Navy, perhaps, was his first love; second, because his experience should enable him to bring to bear on the Navy's problems a mature understanding of its traditions and its problems; but probably most important, because he is "Ned" Denby—broad, kindly, whole-souled, a born diplomat.

Short Measure Stuff

PRAYERS

I hear the auto owner pray
He is hard up, I ween.
I hear him say, "Give us this day
Our daily gasoline."
—Luke McLuke.

I hear the pious baker pray.
He is hard up, I know;
I hear him say, "Oh, Lord, give us
"This day our daily dough."
—Hastings, Neb., Tribune.

I hear the pious lawyer pray,
With tears upon his face,
He says, "Oh, Lord, give me today
"A fat and juicy case."
—Warren Daily Tribune.

I hear the meek munitions man,
Praying for all he's worth,
"Dear Lord, don't let there be too much
Of this here peace on earth."

* * *

THE FIRST ROBIN SWEEPSTAKES

The First Robin Sweepstakes certainly started something. A batch of letters have arrived from entrants with all sorts of alibis but no affidavits. It would appear that everybody everywhere is waiting for the first robin to appear. We have at least helped revive his popularity and perhaps taken a few minds off other things that can't be helped very much anyway, such as the business depression, the cabinet, the inauguration, the tariff, the state income tax, the Detroit United Railway and, as our learned contemps, R. Lardner, would say, and etc.

J. L. W. writes from Saginaw: "Lay off the robins and talk about the robbers why don'cha? When they get through there won't be nothing left but a few crumbs, hardly enough for the birdies to live on."

F. E. T., of Detroit, was moved to poetry, tf you don't care what you say. He screams:

"Believe me, old top, if coming close counts, you had better ship the plate glass toothbrush right along." Listen—

A twitter in the tree, Oh, by gee,
The plate glass toothbrush belongs to me,
Sneaked up the alley, heart a-throbbing,
To get a look at the first spring robin;
Curses my kingdom for a bow and arrow,
Another one of those pesky sparrows.

L. F., Benton Harbor, writes: "My coal pile is getting pretty low and I don't want to buy any more, so every time I drop another teaspoonful into the furnace, I climb upstairs and look around for a robin, to tell me that soon I might be able to let 'er go out for the summer. If I see him, I'll contribute another prize to the sweepstakes, a barbed wire mattress that has been in the family for several years, and grandpa's favorite toothpick. Wire me at my expense as soon as the robin turns up. If one lands hereabouts, I shall be so tickled, I'll call him in and give him a nice plate of soup."

* * *

President Harding, we greet you. Take good care of our Ed and send him back as kindly and genial as ever.

* * *

The boys who found their neighbors' sidewalks too narrow when they came home at night, now find sidewalks of their own too wide when they come to shovel off the snow.

* * *

San Antonio has two new industries, the product of Detroit capital. They are turning out glass arms and charley horses in quantity production.

* * *

Now that the legislature has done most of its investigating and probing, the lawmakers are apt to get to work most any time.

—A. F.

Digitized by Google

FINANCIAL

THE BUSINESS OUTLOOK

By PHIL S. HANNA

IT IS NOW more than five months since the price of Ford cars was slashed without warning. While the cut was an effect rather than a cause of the depression, as many erroneously presume, yet it was about September 21 when it became difficult to find a market for that second-hand car and when men began to think seriously about meriting their own continuance on the payroll. And notwithstanding the bulk of opinion to the contrary, normalcy in many respects began just at that juncture in business consciousness.

One of the prime requisites of normalcy in business is that we regulate expenses so that a portion of earnings may go into savings accounts or other forms of reserved wealth and that we invest such wealth in constructive enterprises which will provide more jobs and, concurrently, additional savings. But it is a strange perversion of mind that urges less savings when margins of profit (or margins of earnings over necessaries) begin to increase, as was commonly the case before September 21 But now there is testimony from a large number of banks that notwithstanding the drop in aggregate volume of savings deposits, each day since September 21 has seen new faces at the savings window, and the explanation in each instance is precisely the same, i. e., that the depression brought home, as nothing else could to many easy spenders, the necessity of having a reserve.

The former secretary of commerce, William C. Redfield, gave a talk at the Board of Commerce last week which should have been heard by every business man, large and small, in Detroit. And what he said has considerable connection with normalcy. The gist of it is that the United States cannot be normal without foreign trade. The thought came up frequently during his remarks, What would have been the course of business in the United States if the war had not come when it did? Economists have often pictured the isolation commercially to which we were drifting in 1913 and 1914, but now, with England loaded with huge debts and our debts to her largely paid up, we have the advantage and the opportunity which is golden. Yet apathy reigns so far as going into the fight for foreign business is concerned. The name of the new foreign trade bank is significant. It is something larger than a mere machine for collecting foreign accounts, for, as the name "Foreign Trade Financing Corporation" implies, one of its chief functions will be to finance the purchaser at the other end.

It is difficult to understand why more corporations have not signed up readily for stock. As Mr. Redfield pointed out so forcefully, one of the main reasons for England's control of Brazilian and other South American markets is her enormous investments in railroads, factories, plantations and public utilities in those countries. When any goods are needed England gets the order as a natural consequence. And what is more noteworthy to prospective stockholders in this country, to whom foreign investments may seem a trifle speculative, the large English companies that have been investing in foreign enterprises for many years have found that the average of losses is comparable favorably with losses on domestic enterprises, to say nothing of comfortable dividends since way back in 1600 when England began her foreign trade campaigns.

In the local markets the bull fever is catching and we are glad to see the malady again. It has been some little time since we have met a bullish broker, but one of them explains it all by saying that the feeling has come because the public has gotten used to abbreviated margins of profit and abbreviated incomes. This is fine and will give quite a little momentum toward clearing the March 15th hurdle when income taxes are due; but let us not get rash in our expectations, for there is a bill of some 65 millions which Detroit must pay before the tide may be expected to flow permanently inward again, and that bill is figured from the bank statements which made their appearance the past week. On February 21, thirteen of the larger banks had capital, surplus and undivided profits totaling approximately $59,900,000, whereas those same banks had borrowed money liabilities totaling $68,800,000; on the same date deposits in the banks included in the computation were $404,000 while loans and investments were $405,900,000. The excess of loans over deposits is approximately equal to the total capital, surplus and profits, $59,900,000. Had our banks been less interested in the welfare of their clients and in the prosperity of Detroit they might have justifiably shut off loans long since but they are behind the merchant and manufacturer to the limit, which fact, according to sentiment coming from some quarters, is not now appreciated. After present difficulties are passed and sober reflection sets in possibly Detroit banks will get credit for their labors.

WOLVERINE PORTLAND CEMENT

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS

	(cents omitted) Dec. 31, '20	Dec. 31, '19
Permanent assets, bldgs., real estate, etc.	$ 825,406	.....
Current assets, supplies, etc	350,065	.....
Capital assets	$ 873,786	
Deferred items	29,124	11,328
Cash	4,956	31,994
Bills receivable	106	11,226
Accounts receivable	55,190	25,881
Cement in bins at market value	102,372	185,828
U. S. Liberty bonds at cost	40,250	40,250
White cement at market	676	.....
Total assets	$1,209,942	$1,190,225

LIABILITIES

Capital stock	$1,000,000	$1,000,000
Surplus	16,494	135,812
Accounts payable	46,795	19,601
Bills payable	50,000	.....
Payroll, etc.	479	2,158
Miscellaneous	93	.....
Customers' account on sacks	55,459	.....
Reserve for sack redemption	22,918	21,663
Insurance reserve	18,100	12,100
	$1,209,942	$1,190,225

The annual report states that "inventories have been substantially written down so that the company will not be handicapped by having to take into 1921 operation losses of 1920." Production for the year was 344,600 barrels, instead of 550,000 as planned, on account of shortage of coal, and mill troubles

GLADYS BELLE OIL LIST

Both preferred and common shares of the Gladys Belle Oil Company have been removed from the listed stocks on the Detroit Stock Exchange and are now traded in the unlisted department.

The annual meeting of the S. S. Kresge Company will be held March 25, but the books will not be closed. Stock of record March 10 will be listed for the purposes of the meeting.

WESTERN KNITTING MILLS

Comparative Balance Sheet, December 31, 1920, with November 25, 1919.

ASSETS

	(cents omitted) Dec. 31, '20	Nov. 25, '19
Current—		
Cash	$ 47,977	$ 168,604
Accounts receivable less reserve	129,378	426,925
Notes receivable	24,507	6,000
Claims against common carriers	1,993	.....
Inventories after depreciation	1,042,681	909,612
	$1,246,538	$1,522,555
Fixed—		
Land, buildings, equipment, including water rights at $100,000	$1,542,694	$1,276,373
Other Assets—		
Organization expense	$ 60,177	.....
Deferred charges	77,625	7,203
Total assets	$2,927,035	$2,806,132

OTHER ASSETS acp.

LIABILITIES

Current—		
Notes payable, $620,524; accts., $3,827	$ 649,352	$ 183,337
Net Worth—		
110,950 shares of common stock of no par	2,277,694	2,622,795
	$2,927,046	$2,806,132

SAXON MOTOR CAR CORP.

Comparison of Dec. 31, 1920, with April 1, 1920.

ASSETS

	Dec. 31, 1920	Apr. 1, 1920
Cash on hand and in banks	$ 62,569.76	$1,601,153.60
Receivables, notes, drafts, accounts, reserves	412,504.94	301,483.00
Material inventories, less reserves	1,770,036.46	747,402.00
Prepaid items, insurance, taxes, etc.	32,111.98	74,567.00
	$2,279,211.14	
Deferred Charges to Future Operations—		
Engineering and development	$ 98,260.12	269,604.27
Sales agencies development	171,511.15	
Machinery, equipment, tools and dies, less reserves	216,045.32	84,274.00
Patents, models, service business (48,000 cars produced)	4,557,329.66	4,587,329.00
	$7,321,092.81	$6,336,417.00

LIABILITIES

Bank loans	$ 500,000.00	
Notes and trade accept.		
payable	$ 61,467.91	
Current accounts	120,225.91	
	184,694.92	$ 174,081.00
Advanced on drafts for collection	15,558.00	
Dealers' deposits on sales contracts	$ 25,825.00	
Accruals and reserves	21,017.35	
	46,842.35	49,839.35
Outstanding preferred stock, par $100	1,500,300.00	1,359,600.00
Interest applicable to common stock, 147,000 shares at $5	5,321,700.54	5,402,816.00
	$7,321,092.81	$6,342,417.00

(Information concerning earnings and expense not furnished)

President C. A. Pfeffer comments in his annual reports as follows: "The net of our position is that we are in a liquid position—with no accumulation of unsold merchandise on hand—with a car representing advanced engineering principles attracting both dealer and public interest, and a dealer organization carrying only a nominal supply of cars."

Digitized by Google

Current Investment Offerings

HALSEY, STUART & CO., DETROIT

	Rate	Maturity	Price	Yield Pct.
Empire District Electric Co. 1st lien & general mortgage	5	1949	100.00	5.00
Gulf Oil Corp. sinking fund debenture bonds	7	1933	98.00	7.25
Paris-Orleans R. R. Co. bonds	6	1956	97 flat	6.50
Southwestern Bell Tel. Co. notes	7	1925	86.50	8.00
Phoenix, Ariz., Union High School district	5½	1940	100.00	5.50
Wilson, N. C., st. improv. water, sewer	6	1923-28	100.00	6.00

BOLGER, MOSSER & WILLAMAN, DETROIT

Harrison Co., Tex., road	5	6-10-24	....	6.15
Shelby Co., Tex. rd. dist. No. 5	5	1922-49	....	6.50 to 7.00
Upshur Co., Tex., road	5½	1941-55	....	6.00
Morrison Hotel of Chicago, Ill., 1st & ref. mtge.	6	1922-30	....	7.00
Mid-Co. Petroleum Co. 1st mtge. serial sinking fund	6	1922-27	....	8.75
Wis. Chair Co. serial	7	1922-24	....	9.00

FENTON, CORRIGAN & BOYLE, DETROIT

Rep. of Chile ext. loan	8	2-1-41	....	8.10
Louis. & Nash. Elec. Ry. equip. trust	6½	Serially	....	6.50
Province of Ontario	5	5-28-22	....	7.50
University of Alberta	4½	1-1-24	....	7.50
Empire Dist. Elec. Co. 1st lien & gen. mtge.	8	11-1-49	....	8.00
State of Mich. highway improvement	5	10-1-25	....	5.50

A. B. LEACH & CO., DETROIT

Det. Edison Con. deb.	8	10-1-31	101.00	...
Hercules Corp. sinking fund gold	9	1-1-36	99.50	...
Public Service Corp. of Northern Illinois	8	9-1-30	100.00	...
City of Chicago gold	4	1-1-20	....	5.30
City of Detroit sewer	6	1-1-25-8	....	5.15
Chelan Co., Wash., road	6	12-1-27-40	....	5.60 to 6.00

BANCHETT BOND CO., CHICAGO

Ada Co., Idaho, drainage	7	1925-31	Par	7.00

CHAS. A. PARCELLS & CO., DETROIT

United Rys. of Havana Equipment Trust	7½	1926	99.00	7½
Detroit Edison	8	1931	101.00	7.75
Riordon Co., Ltd.	8	1940	99.00	8.20
Steel & Tube	7	1951	95.25	7.40
Ludington City	5	1940	....	5.40
Deere & Co.	7½	1931	99.00	7.65

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6	1924-30	....	7.00
The Bemb-Robinson Co.	6	1926-27	....	6.00
Coplin H. Colwell	6	1924	....	6.00
Chas. Steinberg	5	1922	....	6.00

Cleveland Stock Exchange

Reported by Otis & Co.
Tuesday, March 1, 1921.

	Bid	Asked
American Multigraph	..	18½
Dow Chemical	..	200
Firestone T. & R.	69	78
Do, pfd.	..	78
Fisher Ohio Body	18	20
Do, pfd.	67	..
Goodyear T. & R.	13	14
Do, pfd.	31	32
Grant Motor	2¼	2¾
Grasselli Chemical	130	135
Interlake Steamship	..	210
Jordan Motor	..	125
Miller Rubber	49	51
National Acme	20	21
Peerless	22½	23½
Portage Rubber	19	20
Do, pfd.	..	25½
Prod. & Ref. Corp.	4¾	5
Standard Parts	1¾	2
Do, pfd.	7	8
Stearns Motor	22	23
Victor Rubber	13½	14
White Motor	39	39½
Youngstown Sheet & Tube	69	71
Do, pfd.	103½	..

RESERVE CITY BANKERS ANNUAL

The annual convention of the Association of Reserve City Bankers will be held at the Lafayette Hotel, Buffalo, N. Y., June 2 and 3, according to announcements just received by Charles H. Ayers, vice-president of the Peoples State Bank, Detroit.



HARRIS, SMALL & LAWSON
150 CONGRESS ST., W.
DETROIT

GOVERNMENT BONDS



MUNICIPAL BONDS
Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

CARO GETS ANOTHER INDUSTRY

A new manufacturing enterprise has been started in Caro by W. O. Berry and A. C. Wilson. Safety steel clevises and trailer hitches will be made. Mr. Berry has obtained patents on these two articles.

CALUMET CAPITAL DOUBLED

The Calumet Garment Company, Calumet, has increased its capital stock from $25,000 to $50,000. The new stock will be offered to present stockholders and whatever is not subscribed for by them will be sold to the public.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MARCH 2nd

LISTED STOCKS	Bid	Asked	Par	High-Low 1921 to date	High-Low 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Ls. & Trac. Co., com.	111	111½	100	114 - 69	204 - 65	6%	4%	Quarterly	Feb. 15, 1921	1½	1%	1½	1%	$23,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$4,236,200
Auto Body Co.	4¾	5¾	10	5¾ - 4¾	12⅜ - 5½				Jan. 1, 1921		25%			$1,074,000
Do., pfd.			7		10¾ - 10⅜	6%		Semi-Ann	Feb. 1, 1921	3%		3%		$527,600
Bower Roller Bearing Co.	13	15	100		19⅜ - 18	Varies		As Decl'd	Jan. 1, 1921	2%				$600,000
Chaconal Iron Co. of America, com.	2¼	2¾	10	2¾ - 2	8¾ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd. XD	3¼	3¾	10	3⅜ - 3¼	12⅜ - 3				July 1, 1919	3%				$3,217,250
Cities Service Co., com. XD	239	244	100		355 -250½	96%		Monthly	Mar. 1, 1921	1½	1½%	1½	1½%	$42,877,869
Do., pfd.	67¾	69¼	100		70 - 65	6%		Monthly	Mar. 1, 1921	½		½		$76,620,400
Conbulls Lead & Zinc Co.	14	1	16	16 - 12½	25 - 8	Varies		As Decl'd	Nov. 15, 1917	20%				$300,000
Columbia Sugar	12	12¾	10	14¾ - 10¾	20⅜ - 11½	12%		Quarterly	Jan. 1, 1921	3%		3%		$3,000,000
Consumers Motor Car Co.			10	7¾ - 7¾	18½ - 6¾	12%		Quarterly	July 1, 1920	3%				$500,000
Com. Pw. Ry. & Light Co., com.		13½	100	15¾ - 13½	45¾ - 10¾	4%		Quarterly	Nov. 1, 1917	1%				$18,584,900
Do., pfd.	34	36	100	35 - 34	44 - 27	8%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$17,953,000
Continental Motor Co., com.	6½	6¾	10	7¾ - 5¾	14⅜ - 5¾	4%		Quarterly	Dec. 20, 1920	½				$7,295,360
Do., pfd., XD.		91½	100		100½ - 83	7%		Quarterly	Jan. 15, 1921	1¾		1¾%		$2,131,700
Detroit & Cleveland Navigation Co.		78	50	73¼ - 71	100 - 67	8%		Quarterly	Feb. 1, 1921	2%		2%		$6,038,000
Detroit Creamery Co.	21¾	21	100	25¾ - 22¾	38¾ - 10	8%		Quarterly	Jan. 24, 1920	2				$1,800,000
Detroit Edison Co., XD.	96	97½	100	98 - 95¾	114 - 92½	8%		Quarterly	Jan. 15, 1921	2		2		$27,655,200
Detroit Brass & Malleable Works		97½	100	98 - 89	96 - 93	8%		Monthly	Mar. 1, 1921	⅔		⅔		
Detroit United	XD		90			8%		Quarterly	Mar. 1, 1921	2		2		$15,000,000
Edmunds & Jones, com.	13	15	Non	14¾ - 13½	34 - 9¾	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,000 shs.
Do., pfd.	75	80	100		78 - 72	7%		Quarterly	Jan. 1, 1921	1¾		1¾		$843,200
General Motors			10	10 - 13¾	42 - 12¾	3%		Quarterly	Dec. 15, 1920	25c		25c		20,563,581 shs.
Federal Truck	22	23	10	22¾ - 18¾	82 - 18¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	278	281	100	290 - 220	440 - 232	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.			10	11¾ - 11	11¾ - 11	Varies		As Decl'd	Oct. 1, 1920		5%			$1,962,750
Gladys Belle, com., XD.	52	55	100	73 - 42	1 - 58	16%		Quarterly	Jan. 15, 1921	4		4		$6,407,000
Do., pfd.	60	67	1.00	80 - 51	1 48 - 61	16%		Quarterly	Jan. 15, 1921	4		4		$2,000,000
Godchaux Sugar, com.	20	25	Non		80 ⅝ - 39½									$ 70,00 shs.
Do., pfd.	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾		1¾		$3,500,000
Hanna Furnace, com.	27	30	100	36 - 26										$1,893,000
Do., pfd.	96¾	99	100					Quarterly	Dec. 1, 1920	2				$750,000
Hall Lamp Co.	13½	13¾	10	15 - 14	32½ - 10	Varies		As Decl'd	Dec 24, 1920	2½				$750,000
Hayes Mdlg. Co., com.	3	3¼	10	4¼ - 2¾	12 - 3½	Varies		As Decl'd	Dec 24, 1920	1½				$2,000,000
Holland-St. Louis Sugar Co.	8¼	8¾	10	10 - 7¾	19¾ - 7¾	12%		Quarterly	Oct. 15, 1920	6				$2,000,000
Iron Silver Mining Co.	185		10		220 - 220	20c		Semi-Ann	Dec. 1, 1920	10c				$1,000,000
S. S. Kresge, com.	125	145	100	96¾ - 96¾	151 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	101	103	100			6%		Quarterly	Jan. 2, 1921	1½		1½		$2,000,000
Lindeman Steel, com.	12	15	10		24¼ - 15¼	6%		Quarterly	Jan. 2, 1921	1½		1½		$1,068,000
Lincoln Motors, Class A	14¾	19	10	21¼ - 17¾	34¾ - 14¾	$3.00		Quarterly	July 15, 1921	$1.25				$8,000,000
Maxwan Crude Rubber Co.	6		10	6¾ - 6½	13⅜ - 6½				Dec 1, 1914	3%				$750,000
Michigan Drop Forge, com.	XD		40	None	90 - 28¾	$3.00		Monthly	Jan. 1, 1921	25c		75c		112,500 shs.
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾		1¾		$250,000
Michigan Stamping Co., com.	XD	17¾	100	17¾ - 17¾	30 - 10	8%		Quarterly	Jan. 1, 1921	2		2¾		$1,800,000
Michigan Sugar Co., com.	XD	7¾	8¾	10 - 6¾	13¾ - 7¾	4%		Quarterly	Dec. 1, 1920	2%				$7,471,100
Do., pfd.		8	10	8¾ - 8	10 - 7¾	6%		Quarterly	Dec 15, 1920	1½				$3,000,000
Miles-Detroit Theater Co.	16¾	20	Non		21 - 13¾	*16%		Quarterly	Jan 10, 1921	4		4		$350,000
Motor Products		44	Non	43 - 42	63½ - 37¾			Quarterly	Jan. 2, 1921	$1.25		$1.25		$ 100,000 shs.
Motor Wheel	11¾	12	10	11¾ - 8¾	13¾ - 8¾	*8%		Quarterly	Nov. 20, 1920	2%				$6,500,840
Murray Mfg.			10	10 - 10	10 - 10	*8%		Monthly	Feb. 1, 1921	⅔		2%		$733,400
National Grey Co.	8¾	9	100	9¾ - 8¾	156 - 156	*8%		Quarterly	Jan. 2, 1921	2		2		$2,000,000
Do., pfd.	86		100		137 - 90	6%		Semi-Ann	Jan. 2, 1921	3		3		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	103	110	100	1 26-1 00	2.00 - 05	*18%		Quarterly	Jan. 2, 1921	4½		4½		$1,000,000
Packard Motor Co., com.	11¾	11¾	10	11¾ - 9¾	28¾ - 9½			Quarterly	Oct. 31, 1920	2½				$11,885,100
Do., pfd.	XD	75	100	79 - 69	96¾ - 69	7%		Quarterly	Dec. 15, 1920	1¾				$15,223,500
Paige-Detroit Motor Car Co.	20	21¼	10	20¾ - 13¾	43½ - 12			Monthly	Dec 10, 1920	1				$2,000,000
Parke, Davis & Co.	90	95	25	97 - 89	117 - 89	*10%		Quarterly	Jan. 1, 1921	2½		8%		$11,841,800
Pesberthy Injector, pfd.			101			8%		Quarterly	Jan. 1, 1921	2		2		$500,000
Reo Motor Co.	22¼	22¾	10	23¾ - 17¾	29½ - 16¾	8%		Quarterly	Jan. 3, 1921	2½		2½		$6,337,000
Scotten-Dillon Co.	X-Stock		10		33 - 29	8%		Quarterly	Jan. 3, 1921	2%	50%	2%	50%	$1,500,000
Timken Axle, com., XD.	30	30¾	100	34¾ - 26½	*63½ - 26	8%		Bi-Annual	Jan. 3, 1921	4		4		$3,000,000
Do., pfd.	XD		100		93¼ - 84	7%			Mar. 1, 1921	1¾		1¾		$5,000,000
True Con. Steel Co., com., XD	27¾	28¼	100	29¼ - 27¾	39¾ - 27¾	16%		Quarterly	Mar. 1, 1921	4		4		$1,450,250
Do., pfd.	XD		100		9¾ - 9¾	7%		Quarterly	Mar. 1, 1921	1¾		1¾		$1,632,200
U. S. Radiator, com.	15	17¾	100		31½ - 20									$4,000,000
Do., pfd.	75	85	100		95¾ - 80	7%			Jan. 25, 1921	1¾		7%		$2,800,000
Waring Hat Co., com.			None											
Do., pfd.		62	100			8%		Quarterly	Jan. 1, 1921	2%		2%		
Western Knitting Mills			None	11 - 8¾	30¾ - 8¾	$2.00		Quarterly	Nov. 25, 1921	50c				1140,050 shs.
White Star Line		42	50		50½ - 50½	7%		Aug. & Nov	Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.	2¾		10	2½ - 2	5¾ - 2				Dec 15, 1919					$1,000,000

*Old 300-370; new 6⅔% 27. $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Bonds. $350,409, Ed. & J. 1 Book value, $3,719,327, Godchaux Book value, $2,277,094 00 Western Knitting Mills 4 Book value $5,084,450 Motor Products. 7 Old 3 Taken from other exchanges
Note—Gladys Bell Oil stocks have been removed from list Feb. 24, 1921 See Mar's Investor stocks for quotations

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Mar. 1, 1921
Canada	1.0000	.85	.8500	.87625
London	4.8665	3.6275	3.8500	3.8850
Switzerland	.1930	.1675	.1662	.1655
Paris	.1930	.0599	.0786	.0720
Belgium	.1930	.0625	.0743	.0753
Holland	.4019G	.3162	.3375	.3430
Italy	.1930	.03465	.0266	.0266
Greece	.1930	.0763	.0735	.0760
Spain	.1930	.1378	.1393	.1390
Vienna	.20283	.0023	.0028	.0027
Berlin	.23821	.01335	.0158	.0130
Denmark	.26799	.1595	.1910	.1780
Norway	.2682	.1595	.1860	.1690
Sweden	.2680	.2045	.2190	.2245

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Mar. 1, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
1st Liberty 3½s	81.06	93.50	90.00	91.08	99.20	99.75	99.59	99.99
1st Liberty 1st 4s	87.10	85.50	85.32	85.06	93.00	94.90	93.00	94.19
1st Liberty 2nd 4s	86.20	86.20	84.10	85.00	91.59	93.84	92.04	94.10
1st Liberty 1st 4½s	86.88	86.35	85.50	85.19	93.46	95.14	99.50	....
1st Liberty 2nd 4½s	86.74	86.30	84.34	85.09	93.20	94.06	96.70	....
1st Liberty 3rd 4½s	99.99	99.84	87.20	88.22	94.65	96.10	94.44	....
1st Liberty 4th 4¼s	87.00	86.16	84.96	85.56	93.75	100.10	....	....
Victory Bonds, 4¾s	97.44	96.48	94.30	88.50	94.00	95.09	95.62	96.22

Digitized by Google

Michigan Bank Stocks

Name	Last Published Statement Book Val.	Capital	Deposits	Dividends Annual Rate	How Paid
American State	147	$1,000,000	$15,584,766	10%	J-A-J-O 1st
Detroit Savings	251	1,500,000	23,152,629	12%	2 Jan-Jul 1st 2 Fe Jan
Dime Savings	266	1,500,000	32,794,120	14%	1 Monthly 1 Jan-Jul
First and Old Detroit National	105	5,000,000	57,365,542	*12%	J-A-J-O 1st
Central Savings Bank	140	1,000,000	16,528,911		
First State	161	1,000,000	11,903,285	10%	J-A-J-O 1st
Highland Park State	196	1,000,000	13,790,118	20%	J-A-J-O 1st
Merchants National	166	1,000,000	16,003,295	8%	J-A-J-O 1st
National Bank of Commerce	239	1,500,000	22,982,716	10%	J-A-J-O 1st
Peninsular State	167	2,500,000	29,446,042	12%	J-A-J-O 1st
Peoples State	280	5,500,000	92,906,336	12%	J-A-J-O 1st
United Savings	159	500,000	6,989,905	12%	Monthly
Wayne County Home	258	4,000,000	71,393,857	10%	Monthly
American Loan and Trust	121	300,000	x5,416,942	6%	J-A-J-O 1st
Bankers Trust	117	500,000	x2,231,188	8%	J-A-J-O 1st
Guaranty Trust	172	300,000	x2,421,827	8%	J-A-J-O 1st
Detroit Trust	256	2,000,000	x11,310,434	14%	J-A-J-O 1st
Security Trust	338	500,000	x4,114,984	12%	J-A-J-O 1st
Grand Trust	192	1,000,000	x6,754,603	8%	J-A-J-O 1st
Commonwealth-Federal	123	750,000	9,006,167		
Bank of Detroit	159	1,000,000	10,672,397	10%	J-A-J-A 1st
Continental Bank	120	700,000	705,000	0%	
Michigan State	110	2,500,000	2,150,938	0%	
American State, Dearborn	125	100,000	521,163	6%	Jan-Jul
American State, Highland Park	132	200,000	3,098,453	8%	J-A-J-O 1st
Peninsular State, Highland Park	220	100,000	1,264,536	12%	J-A-J-O 1st
Kresge State Bank	118	50,000	352,845	....	
Industrial Morris Plan	119	500,000	*826,780	0%	J-A-J-O 1st
Hamtramck State	435	25,000	2,634,208	....	
River Rouge Savings	256	50,000	1,216,414	....	
City National Bank, Battle Creek	131	250,000	3,708,782	....	
First National, Bay City	295	200,000	3,580,022	10%	J-A-J-O-1st
Bay County Savings, Bay City	282	100,000	1,676,373	10%	J-A-J-O 1st
Genesee County Savings, Flint	200	500,000	6,893,155	10%	Jan-July
First National, Flint	232	200,000	3,247,770	....	
Grand Rapids Savings, Grand Rapids	204	400,000	10,235,117	12%	J-A-J-O 1st
Fourth National, Grand Rapids	197	300,000	4,349,367	12%	J-A-J-O 1st
Commercial Savings, Grand Rapids	134	300,000	3,257,946	8%	J-A-J-O 1st
City Trust and Savings, Grand Rapids	138	200,000	2,566,059	....	
Peoples Savings Bank, Grand Rapids	163	200,000	2,941,751	....	
Kent State, Grand Rapids	266	500,000	11,562,817	....	
Grand Rapids National City, Grand Rapids	139	1,000,000	13,303,350	5%	Semi-Ann.
Grand Rapids Trust Co, Grand Rapids	165	300,000	x988,328	....	
Michigan Trust Co., Grand Rapids	139	1,000,000	x3,911,070	....	
Morris Plan Industrial, Grand Rapids	156	50,000	† 527,500	....	
Peoples National, Jackson	196	150,000	4,426,987	12%	J-A-J-O 1st
Jackson City Bank, Jackson	260	200,000	2,341,775	16%	J-A-J-O 1st
National Union, Jackson	183	400,000	4,156,024	12%	J-A-J-O 1st
Kalamazoo National, Kalamazoo	143	500,000	5,008,168	....	
Capital National, Lansing	190	300,000	4,115,430	12%	J-A-J-O 1st
City National, Lansing	239	250,000	3,774,509	18%	Jan-Jul. 1st
American State Savings, Lansing	182	500,000	7,560,063	10%	
Pontiac Commercial and Savings, Pontiac	140	750,000	9,629,522	13%	J-A-J-O 1st
Oakland County Savings, Pontiac	....	250,000	3,177,223	....	
American Savings Bank, Pontiac	....	400,000	1,326,924	....	
National Bank, Pontiac	....	200,000	1,326,319	....	
U. S. Savings, Port Huron	161	100,000	1,289,978	8%	

*Under one ownership—stock combined.
†Nominal quotations.
‡Investment Certificates
xTotal Assets
Note: Corrections as of Feb. 21 have been made where obtainable.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Feb. 23, 1921	Feb. 18, 1921	Feb. 27, 1920
Total reserves	$2,556,999,000	$2,542,996,000	$2,683,215,000
Bills discounted—Sec'd by Gov't war obligations	1,002,975,000	999,188,000	1,573,980,000
All other	1,332,279,000	1,374,326,000	880,531,000
Bills bought in open market	170,563,000	166,874,000	331,367,000
Total bills on hand	2,566,757,000	2,531,282,000	2,984,878,000
U. S. Government bonds	35,849,000	26,848,000	26,778,000
U. S. Victory notes	19,000	19,000	68,000
U. S. Certificates of indebtedness	261,519,000	261,759,000	267,511,000
Total earning assets	2,854,135,000	2,819,908,000	3,279,232,000
Total resources	5,861,101,000	5,856,031,000	6,416,356,000
LIABILITIES			
Capital paid in	100,790,000	100,557,000	96,702,000
Surplus	202,026,000	202,026,000	120,120,000
Government deposits	62,984,000	48,457,000	133,913,000
Due to members—reserve account	1,722,019,000	1,740,389,000	1,871,961,000
Deferred availability items	469,811,000	423,613,000	810,402,000
Other deposits, including foreign govt credits	32,305,000	25,808,000	95,026,000
Total gross deposits	3,379,019,000	3,238,181,000	2,911,302,000
F. R. notes in actual circulation	2,053,796,000	3,050,416,000	3,019,984,000
F. R. Bank notes in circulation—net liability	189,226,000	198,178,000	237,191,000
All other liabilities	38,25,000	32,172,000	37,117,000
Total liabilities	5,861,101,000	5,889,491,000	6,416,356,000
Ratio of gold reserves to net deposits and F. R. note liabilities combined	49.9%	48.6%	43.5%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	58.1%	57.6%	47.1%

Public Utility Bonds

Yielding 7.40% to 8.00%

WE offer well secured bonds of established public utility corporations serving large cities.

Special offerings will be made to investors upon request for List D-96

Merrill, Lynch & Co.

Members New York Stock Exchange

1056 Penobscot B.dg , Detroit

Chicago, New York, Milwaukee, Denver, Los Angeles

MANAGED BY MEN YOU KNOW

Win the Confidence of Your Stockholders

Corporations which appoint a disinterested agent such as the Grand Rapids Trust Company as Registrar or Transfer Agent for registering, issuing and countersigning Stock Certificates, receive the confidence of their stockholders.

Such action assures the owners of the corporation's securities a certified, impartial check on the movement of the stock certificates.

GRAND RAPIDS TRUST COMPANY

Grand Rapids, Michigan

CAPITAL AND SURPLUS $450,000.

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Digitized by Google

Phone Betterments Paid For by Allied Companies

Notwithstanding increased rates, the Michigan State Telephone Company finished 1920 with an excess of expenses over income amounting to $1,230,485. Furthermore, the deficit occured in spite of the fact that no dividends were paid. In comparing the balance sheet of December 31, 1921, with December 31, 1920, it is interesting to note that approximately all of the money invested in plant improvement and extension was furnished by affiliated corporations and not from local sources. Had the company been obliged to operate as a home concern, relying on its own earnings structure as a basis of credit, it is doubtful whether any extensions or improvements could have been made, to say nothing of improved service. Plant account increased $5,091,000 and the reader will note a corresponding increase of $5,073,000 in the item "advances from system corporations."

A comparative statement follows:

	A888798 .	(Cents omitted)
	Dec. 31, 1920	Dec. 31, 1919
Plant—		
Intangible capital		$ 9,800
Land and buildings	$ 5,345,758	4,996,696
Other telephone equipment	41,199,388	36,551,576
General equipment	788,097	585,521
	$47,334,153	$42,143,004
Other Permanent Investments—		
Investment securities ...	$ 362,945	$ 363,611
Miscellaneous investments	17,572	35,124
	$ 380,518	$ 398,735
Cash and deposits	$ 424,485	$ 425,418
Bills receivable	29,522	146,447
Accounts receivable	1,595,595	1,687,802
Materials and supplies ...	778,408	753,215
Marketable securities and other current assets	2,643	9,867
Total working assets....	$ 2,831,854	$ 3,022,551
Accrued income not due..	359	4,510
Deferred Debit Items—		
Prepayments	$ 121,517	$ 86,237
Unamortized debt, discount, expense	57,905	75,492
Other items	460,425	181,527
	$ 639,359	$ 343,888
Total assets	$51,186,115	$45,922,360
LIABILITIES		
Common stock	$ 6,000,000	$ 6,000,000
Preferred stock	4,000,000	4,000,000
Funded debt	9,911,600	9,911,600
Advances from system corporations	21,537,595	16,464,462
Accounts payable	1,257,088	1,344,589
Accrued liabilities not due	979,062	826,140
Insurance and casualty reserves	24	164
Liability for employees benefit fund	215,000	215,000
Other deferred credit items	178,978	128,984
Reserve for accrued depreciation	8,866,837	7,436,977
Reserve for amortization of intangible capital	25,271	19,827
Corporate deficit	1,064,435	426,190
	$51,186,115	$45,922,360

Note—Statement of earnings and expenses was given in last week's issue.

In his report to the stockholders President Frank C. Kuhn says in part:

"In the face of great difficulty in securing adequate quantities of material and labor during the greater part of the year, much has been accomplished in improving the condition of the property and substantial additions to the plant have been completed. Because of restrictions on the use of material during the war, coupled with the great demand for service since the Armistice, it has not been possible to restore the margins of plant that normally it is desirable to have. It has been possible, however, to meet nearly all the demands for service, and except in a few sections of the larger cities, facilities are available or are planned for the immediate future.

"Great improvement has been made in the transmission over toll circuits. Very extensive tree-trimming work was necessary in the late summer and early fall, but the improvement in transmission resulting from this work is very satisfactory.

"Through the meetings of supervisory forces, departmental managers and executives throughout the state an esprit de corps has been developed that is going to mean much to the employees and the company. Everyone now has come to appreciate that his or her success and welfare is absolutely dependent upon the success of welfare of every other employe and of the company. Each one who is doing his best realized that those not putting forth every effort are a drag on the company and on the sincere workers. Elimination of those who are inefficient has been going on and will continue until the highest possible grade of efficiency is attained.

REVENUE BUREAU WARNING

In last week's issue of this publication there was an extended reference to the now famous case of Brewster vs. Walsh, in which the federal court for the District of Connecticut held that profits arising from sale of capital assets ined not be reported as income. Comment was also made that until the Connecticut decision had been reversed by the United States Supreme Court it would be advisable to hold up income returns for 1921.

According to advices since received from W W. Richards, manager for Jonathan B. Cook & Company, certified public accountants, Muskegon, the Internal Revenue bureau at Washington has gone on record during the last week as officially announcing that because of the severe penalties provided by law for false and fraudulent Income tax returns, taxpayers are warned not to omit from their returns for the year 1920 gains and profits derived through the sale of capital assets.

Members of the accountants' profession who have followed closely the trend of developments as regards income taxes have been expecting such a ruling for some time, and it therefore behooves those liable to taxes on profits from sale of capital assets to weigh well the question of whether or not such profits be omitted from their 1920 returns.

LANSING GAS ASKS EXTENSION

The Lansing Fuel Gas Company is asking the holders of its 5 per cent consolidated mortgage gold bonds, due April 1, 1921, to agree to a 10-year extension at 7 per cent because the entire revenue is now employed in operation and maintenance. New coupons will be attached to the old bonds and interest paid semi-annually. The company is now retiring $910,000 of these bonds also $743,000 in 5 per cent first refunding and extension mortgage bonds, due October 1, 1927. The capital stock is $700,000.

A DECISION ON EXCHANGE

Arthur E. Gordon, Detroit, justice of the peace, held a few days ago that the Highland Park State Bank must refund $500 to Peter Moroz which the latter paid for a transfer in 1917 of bonds to Poland. Owing to the war conditions the bank's correspondents were unable to deliver the money to the beneficiary in Poland and Moroz asked for a refund at the same rate of exchange as when he bought the draft in 1917. It is expected on appeal that the justice's decision will be reversed owing to the lack of decisions in like cases, but nevertheless the ruling has resulted in several of the foreign exchange agencies in Hamtramck, where there is considerable Polish business, incorporating a statement in their receipts that the sellers of the foreign exchange are not liable for refund except at current rates of exchange.

MOTOR WHEEL DIVIDEND

Directors of the Motor Wheel Corporation, Lansing, have declared a cash dividend of 2 per cent, payable March 21, to stock of record March 10.

Unusually Fine Bank Home For the Caro State Savings

There will be no more climbing up or slipping down the ugly front stairs of the State Savings Bank of Caro, which opened for business February 23 in its new $100,000 building, one of the most complete structures for a city of the size of Caro in the state. On Washington's birthday the bank was thrown open to the general public and a formal reception was held from 3 to 5 In the afternoon and from 7 to 9 in the evening. During both periods the lobby, the space back of the counters, the officers' quarters, the vaults and rest rooms were thronged with local people and visitors from surrounding cities. There were delegations from Bay City, Saginaw and Detroit, and the floral offerings vied with the visitors for floor space.

The exterior and interior of the new building are finished in Vermont marble. The Nachtegal people, Grand Rapids, put in the fixtures, which are the last word. There are rest rooms for the ladies, consultation rooms for the farmers and a treasurers' room on the second floor, where the township and village treasurers may hold forth during tax collection time.

One of the unique features making for safety is the large vault, which is split up into three compartments, one for the bank's money; one for depositors' safes, and there has been installed 300 safe deposit boxes, and one for the use of the abstract department of Ealy & Company, in the main vault there is a telephone running underground which connects with the central office by an independent line, and should all the employes be locked in by bandits, there is ventilation, food, water and communication with the outside. Another feature is the enclosed room for the machine bookkeepers, so that the noise of the equipment will not be disturbing. Then there is the publicity department arrangement, with 14 lines inside the bank connecting every department. As indicative of the spirit with which the officers have given over the rest and consultation rooms to the public, there has been hung in each room the following sign: "This is your home; use it accordingly."

The completion of this building is the culmination of plans which J. McNair Ealy has been nursing for some years and is a fitting milestone in the long and honored career of this institution, which was started in 1888, when the present J. McNair Ealy's father bought out A. T. Slaght & Company. In 1904 the bank was incorporated as the State Savings Bank, with J. W. Atwood as president and the elder Ealy as cashier. The latter became president when Atwood died in 1917, and when Mr. Ealy died, in September, 1918, the son succeeded to his position.

The bank has adopted the slogan, "The Thumb's Greatest Bank." Officers are: President, J. McNair Ealy; vice-president, Grant H. Slocum; cashier, Louis Wean; assistant cashier, C. R. Myers; directors, the above and L. R. Stewart, Walter S. Wixson, Peter Pardee, David J. Evans, John W. Quinn, H. F. Bush, Charles W. Stacey, W. P. Campbell and Amos L. Kinney. December 28 the bank had deposits of $989,855.

ELLIS REAL ESTATE COMPANY

Guy W. Ellis, who has been general manager of the Frischkorn Real Estate Company, Detroit, has organized the Guy W. Ellis Real Estate Company, Inc., with offices at 420 Griswold street, Detroit. Mr. Ellis is president of the company; L. S. Trowbridge, vice-president, and F. B. Ellis, secretary-treasurer.

INCOME TAX GUIDE

The Peoples State Bank, Detroit, is handing out a valuable income tax guide made up in the form of a government return, with arrows running from each blank space to be filled in, to an explanatory clause on the margin of the page.

Digitized by Google

Banks and Bankers

ANOTHER NEW BANK ON FOOT

Subscriptions are being taken by John Morton, formerly manager of credits of the Dime Savings Bank, Detroit, for stock in a new bank in Detroit to be known as the Commercial State Savings. Plans call for $1,000,000 capital and $200,000 surplus. It is the intention of Mr. Morton to obtain a large number of small stockholders, thus distributing the ownership of the institution as widely as possible.

OFFICE QUARTERS ENLARGED

The Bank of Saginaw has put in a stairway leading to the third floor of its building on East Genesee street and has equipped this entire floor to house the transit and bookkeeping departments. There is also installed a complete printing plant for the purpose of printing up supplies of all kinds, records, etc. Floor space has been a problem with the bank for some little time past and this arrangement will give more room on the main floor for tellers and officers accommodations.

IRON COUNTY NATIONAL

The Iron County National Bank, Crystal Falls, has increased its capital stock from $50,000 to $100,000. The bank, which was 21 years old on February 17, was founded by Jas. F. Corcoran and was known as the Iron County Bank. In 1904 Mr. Corcoran decided to incorporate the institution as a national bank, which resulted in the present name. The officers then elected were Mr. Corcoran, president; Charles H. Watson, vice-president, and J. J. Gaffney, cashier. The capital stock was $25,000 until March 1, 1907, when $25,000 was added. The business has been growing steadily and the bank today has more than $1,000,000 of deposits. The savings department has custody of nearly $750,000. Mr. Corcoran is still president of the bank and Mr. Gaffney is cashier, but H. C. Neely has succeeded Mr. Watson as vice-president.

NOW A STATE BANK

The bank of Byron Center has been reorganized under the state banking laws. R. O. De Weerd is president; S. Andriga, vice-president; Peter Holleman, cashier, and James Block, assistant cashier. The directors are Dan Burgess, Paul France, John Homrich and Messrs. Andriga and De Weerd. The capital is $25,000.

NEW OFFICES AT BOYNE CITY

The Peoples State Bank, Boyne City, soon will be located in its new quarters, which will provide much room and be more up-to-date. The furniture and fixtures are being installed and the vault has been completed.

BOOKLET ON INCOME TAX

Halsey, Stuart & Company, Chicago and Detroit, are distributing a pamphlet of 128 pages entitled "1921 United States Income and War Tax Guide." Complete rulings, regulations and examples are included. The index feature of the booklet should commend it to persons liable to income taxes.

MERCURY MFG. OFFICE CHANGE

Arthur W. Leet, transportation engineer, representing the Mercury Manufacturing Company, of Chicago, has moved his offices from the American Trust Company building to 403 Real Estate Exchange building, Detroit.

CUTLER-HAMMER CHANGES

The following changes in the personnel and district office territory of the Cutler-Hammer Manufacturing Company, Milwaukee and New York, have been announced by W. C. Stevens, sales manager: G. S. Crane, who has been manager of the Cleveland office, will become manager of controller sales at the main office in Milwaukee. L. B. Timmerman will be in charge of the Cleveland office and will act in the capacity of assistant to A. G. Pierce, manager of the central district. The Cincinnati office will become a part of the Central district, with R. I. Maujer as branch manager. In N. E. Lightfoot will assume the title of manager of the heating department, with headquarters at the New York works, and will be in full charge of all matters relating to the sale of electric heating devices.

THE OLDEST HOUSE IN MICHIGAN

WOULD you be interested in a $10,000 paid-up life insurance policy which matured in nine years, returning $27,000 for the original investment?

We can offer you an investment which is an obligation of a Canadian trunk line railroad, owned and operated by the Dominion of Canada, which will at maturity entitle the purchaser to the equal of 7% compound interest and approximately 90% profit, if he is willing to forego interest for nine years. We believe this investment will prove interesting to large income tax payers.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIG DEEP

Before you purchase an investment security, dig deep to find what underlies it.

Don't be satisfied with the appearance of the surface. Penetrate the sub-soil—get down to bed rock—then make your decision.

Our First Mortgage Bonds will stand analysis. You will find, first, an obligation of responsible men; second, collateral security worth twice the mortgage; third, the unqualified guarantee of this corporation, with resources of $7,000,000.

6%

DETROIT MORTGAGE CORPORATION
Real Estate Exchange Bldg.
Third Floor

Digitized by Google

Let the D. U. R. Help You to Lower Taxes

By FRANK W. BROOKS
(President the Detroit United Railway)

The one item of living costs that has gone highest during recent years is TAXES.

And, instead of coming down with most other costs, taxes seem to be going HIGHER.

For Public Officials, national, state and city, are placing on your shoulders many additional burdens.

In Detroit they are today asking you to finance a Street Car System for which we stand ready to furnish EVERY CENT.

Pass the Service-At-Cost Ordinance

YOU can avoid this whole expense by passing the Service-At-Cost Ordinance, April 4.

This Ordinance relieves YOU of all tax levies and bond issues for Street Car Service, and places the whole burden and risk on US.

* * *

THE time has come for every citizen of Detroit to look this problem squarely in the eye. Nor can you allow yourself longer to be deluded by any distinction between TAXES and BONDS.

Taxes are debts you pay each other.
Bonds represent borrowed money; interest on them is paid from taxes.

And the taxes of today go largely to pay off the bonds of years that have gone before, for a bond, like any other mortgage, must be paid at maturity.

* * *

EVERY CITIZEN of Detroit, whether a property owner or not, pays city taxes.

High taxes mean high rents, and high rents mean high prices for everything you buy, for the merchant must always set his prices high enough to pay his rent.

In Detroit we will be wise to halt immediately every effort directed at higher taxes. Taxes CAN be made so high as to drive people out of town.

* * *

DETROIT has far better uses for your tax money than any investment in stub ends of street car lines, implying double fares to you, and stupendous yearly losses you must surely be taxed to pay.

Better schools, a better water system, park improvement, street paving, public wharves, a subway or an elevated—all these are needed. And, either directly or indirectly, THEY WILL PAY.

* * *

BUT PUT THE BRAKES ON WASTEFUL CITY EXPENDITURES!

Vote "Yes" on the Service-At-Cost Ordinance, the broadest and most liberal offer ever made a city by a public utility!

F. W. Brooks

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Columbia Nat. Fire	25	26
Detroit Mortgage, com.	3½	4½
Detroit Mortgage, pfd.	5½	6½
Detroit Copper & Brass	15	25
Detroit National Fire	25	26
Detroit Life	55	63
Federal Bakeries Co.	28	30
Federal Discount Co.	7	7½
Fisher Body	81	83
Gladys Bell Oil, com.	47	49
Gladys Belt Oil, pfd.	56	59
Great Lakes Engineering, new	11	14
*Great Lakes Engineering, o'd	55	65
Hoover Steel Ball	14	15
Hayes Wheel Co.	15	17
Interstate Fire	20	25
Jewett, Bigelow & Brooks	9	11
Little Wonder Stove	2	3½
Monroe Binder Board	39	45
McCord Manufacturing, com	6½	7½
McCord Manufacturing, pfd.	65	68
Michigan Copper & Brass	15	17
Noble Oil, com.	58	61
Petoskey Portland Cement	10	12
Peninsular Fire Ins.	20	30
River Rouge Paper	12	15
Tripoussee Mfg. Co.	7½	8½
Union Mtge. 1907 com.	9	11
Union Mtge. 1907 com.	8½	

Range During 1920, Approximate

Hoover Steel Ball	24¾	18
Columbia Motors	14	4
Noble Oil, com.	1.20	.58
Mich. Copper & Brass	26	13½
Detroit Mtge., pfd.	6¾	5½

Motor Stocks	Bid	Asked
Briscoe Motors	16	17
Columbia Motors	4¾	5
Chalmers	1	2
Chevrolet	175	200
Cole	240	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	3	6
Denby Truck	1	2
Elgin Motors	5½	6½
Harroun	¾	1
Haynes	150	175
Hupp	13¾	13¾
Jackson, com.	¾	1½
Jackson, pfd.		2½
Keystone Tire	16¾	5½
Lafayette Motors	38	60
Liberty Motors	5	7
Liberty Motors, pfd.	50	70
Lee Tire	21	21¾
Locomobile	2	3
Mercer	4½	5½
Nash	276	300
Pierce-Arrow Truck	26	26½
Republic Truck	21½	24
Saxon Motors	4¾	4¾
Scripps Booth	25	40
Stevens Duryea units	80	90
Stromberg Carburetor	84½	87
Wilson Truck	5¾	5¾

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,662,994	$121,492,201
January 12	80,173,447	120,667,009
January 19	101,895,982	131,311,067
January 26	79,015,697	97,641,652
February 2	87,985,925	91,772,632
February 9	76,696,452	101,049,806
February 16	78,021,933	101,293,570
February 23	67,711,031	93,628,757
March 2	88,325,592	127,098,854

Month of		
January	389,430,236	467,221,870
February	302,841,688	435,266,896
March		376,426,229
April		540,378,969
May		484,286,853
June		555,766,267
July		522,634,146
August		533,389,066
September		561,582,960
October		516,425,750
November		465,023,440
December		452,951,245
Yearly totals, 1920		$6,103,323,503
Yearly totals, 1919		$4,594,886,158

DIME SAVINGS BANK

United States Depository—Member of Federal Reserve System
Detroit, Michigan.

Statement of Condition at the Close of Business February 21, 1921.

RESOURCES.

Real Estate Mortgages and Bonds	$17,563,591.90
Collateral Loans	4,095,583.34
Other Loans and Discounts	9,377,596.71
U. S. Liberty Bonds and Certificates of Indebtedness	4,488,488.80
Stock in Federal Reserve Bank	112,500.00
Other Real Estate	13,745.29
Banking Houses and Fixtures, including Safe Deposit Vaults	936,095.53
CASH ON HAND AND IN BANKS	4,254,541.31
	$40,842,142.88

LIABILITIES.

Capital Stock paid in	$ 1,500,000.00
Surplus	2,250,000.00
Undivided Profits, Net	241,595.77
Bills Payable, Federal Reserve Bank Secured by U. S. certificates and bonds	2,184,000.00
Bills Rediscounted with Federal Reserve Bank, secured by U. S. Govt. Bonds	521,000.00
Commercial Deposits	12,819,030.00
Savings Deposits	19,975,096.50
Bond Account	1,295,700.00
Reserve for Interest and Taxes	55,720.61
	$40,842,142.88

Branch Offices:

Woodward Avenue, Corner of Milwaukee Avenue.
Jefferson Avenue, Corner of Beaufait Avenue.
Gratiot Avenue, Corner of Russell Street.
Grand River Avenue, Corner of Lawton Avenue.
Woodward Avenue, Corner of Willis Avenue.
Michigan Avenue, Corner of Eighth Street.
Fourteenth Avenue, Corner of Ferry Park Avenue.
Broadway, Corner of Witherell Street.
Oakland Avenue, Corner of Holbrook Avenue.
Grand River Avenue, Corner of Highfield Avenue.
Harper Avenue, Corner of Frontenac Avenue.
Mt. Elliott Avenue, Corner of Davison Avenue.
Chene Street, Corner of Sherman Street.
Dix Avenue, Corner of Artillery Avenue.

BRANCH UNDER CONSTRUCTION:
Michigan Avenue, Corner of Military Avenue.

Digitized by Google

Transfer Agent and Registrar

The responsibility laid by law upon corporations in connection with the registering and transferring of their stock makes it very important for this work to be handled with accuracy, promptness and definite legal knowledge.

Our new booklet on this subject shows the efficient manner in which Security Trust Company furnishes this service.

Copies free on application.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

MAXWELL MASTER IN INDIANA

Claims against the Maxwell Motor Company, Inc., filed by stockholders or others in Indiana, following the merger of the Maxwell and Chalmers interests, will be received and adjusted by Charles Martindale, appointed master in chancery for the Maxwell company by an Indianapolis court.

AUTO BODY COMPANY

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS (cents omitted)

	Dec. 31, '20	Dec. 31, '19
Current:		
Cash on hand and in banks	$ 32,863	$ 46,819
Liberty bonds	130,750	238,250
Accounts and notes receivable	116,318	143,511
Accrued interest	2,427	2,727
Work in process	252,429	278,166
Lumber	611,067	311,684
Steel	133,656	91,727
Mailables	33,771	31,622
Hardware	59,160	29,829
General stores	16,705	9,901
Outside inventories, lumber	126,856	.....
	$1,515,006	$1,211,709
Investments in other companies	12,000	10,000
Fixed Assets:		
Land	59,500	58,000
Buildings	618,881	612,774
*Buildings—Acme	15,480	17,459
Machinery	202,003	207,546
Factory equipment	85,987	79,384
Forms and patterns	50,377	52,588
Tools	18,799	19,023
Motor truck equipment	7,365	77
Teams and wagons	2,662	3,357
Furniture	8,011	6,969
	$1,065,329	$1,006,743
Prepaid expense and deferred charges	52,569	26,764
Total assets	$2,674,906	$2,339,216

LIABILITIES

Current:		
Notes payable	$ 998,891	$ 597,829
Accounts payable	68,045	96,654
Payrolls payable	2,823	18,857
Unclaimed wages	719	1,501
	$1,070,490	$ 714,824
Contingent liability on sales contract	3,000	5,000
Reserve for income taxes	3,280	24,500
Common stock outstanding	1,018,500	1,017,400
Preferred stock outstanding	531,600	527,600
Surplus	46,035	49,782
	$2,674,906	$2,339,216

*Amortized monthly 10% per annum as rental charge.
Fixed assets depreciated 1919-1920, $105,349.07.

ATLAS DROP FORGE CO.

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS (cents omitted)

	Dec. 31,'20	Dec. 31, '19
Current:		
Cash on hand and in banks	$ 117,452	$ 83,465
Accounts and notes receivable	465,089	209,553
Investments, U. S. bonds	20,000	170,000
Inventories	86,873	97,580
Capital Assets:		
Real estate	98,795	75,452
Machinery and equipment	146,183	94,319
Total assets	$ 934,174	$ 730,580

LIABILITIES

Current:		
Accounts payable	$ 4,792	$ 3,835
Accrued payroll	8,879	5,000
Reserves; income tax, etc.	131,468	79,755
Capital stock outstanding	406,400	406,000
Surplus:		
Bal. Jan. 1, '20... $154,789		
Earnings for year 244,211		
	$519,101	
Less reserve 131,468		
	387,633	235,989
	$ 934,174	$ 730,580

Fiscal year was changed during 1919 from May 31 to December 31.

Net earnings after taxes applicable to dividends for seven months of 1919 ending December 31, 1919, were $66,345.10.

D. T. A. MOVES HEADQUARTERS

The Detroit Transportation Association, formerly located at 319 Fort street west, has moved its offices to 1050 Third avenue, where it will have plenty of room for the executive offices, reading room and meeting hall. The rapid growth of the association and its steadily increasing scope of activities rendered the old quarters too small.

Digitized by Google

C. M. HALL LAMP COMPANY

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS (cents omitted)

Current:	Dec. 31, '20	Dec. 31, '19
Cash	$ 83,324	$ 36,556
Accounts receivable	115,168	364,042
Bills re ivable	.....	.....
Inventories	768,263	744,414
Liberty bonds	.....	2,200
	$1,007,925	$1,037,212
Fixed:		
Land	$ 40,527	$ 40,262
Buildings, machinery and equipment less depreciation	483,329	478,631
Other:		
Kenosha Homes Co. stock	4,000	.....
Deferred charges	4,132	4,329
Patents, goodwill, etc.	1	1
Total assets	$1,539,988	$1,561,007
LIABILITIES		
Current:		
Accounts payable	$ 20,631	$ 102,619
Accrued payroll, expenses, etc.	6,188	22,126
Accrued taxes	6,174	72,625
Notes payable	.....	57,000
	$ 32,994	$ 254,375
Capital:		
Common stock	$1,000,000	$ 750,000
Reserve for contingencies	344,994	344,994
Surplus	164,612	211,251
	$1,539,988	$1,561,007

GENERAL ALUMINUM & BRASS

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS (cents omitted)

Current:	Dec. 31, '20	Dec. 31, '19
Cash	$ 22,690	$ 246,155
Accounts receivable	227,698	448,133
U. S. securities	186,000	201,194
Notes receivable	5,600	.....
Merchandise inventory	1,118,582	1,027,618
Deferred charges	57,271	50,026
Due from employes, stock subscriptions	72,256	91,052
	$1,693,099	$2,171,231
Permanent:		
Land buildings, equipment, less depreciation	1,550,864	1,114,046
Total assets	$3,243,963	$3,285,280
LIABILITIES		
Current:		
Accounts payable	$ 33,310	$ 260,773
Notes payable	452,000	.....
Accrued payroll	6,675	.....
Taxes accrued, reserved, etc.	45,737	135,000
	$ 526,723	$ 395,772
Capital:		
Preferred, par $100	1,000,000	1,000,000
Common, par $10	1,188,850	1,862,720
Surplus	528,390	826,786
	$3,243,963	$3,285,280

(Earnings and expenses not reported.)

AMERICAN LIGHT & TRACTION

Comparative Balance Sheet December 31, 1920, with March 31, 1920.

ASSETS

(cents omitted)

	Dec. 31, '20	Mar. 31, '20
Investment account	$35,271,006	$34,469,852
Temporary investments	2,165,604	3,142,898
Earnings, subsidiary companies: Earnings receivable plus reconstruction reserve $2,014,412 and $5,541,778	7,555,888	7,947,325
Bills receivable	3,111,981	3,999,924
Accounts receivable	317,981	372,745
Miscellaneous	11,234	27,704
Note discount	549,796	.....
Interest and dividends receivable from temporary investments	55,927	24,566
Cash	1,339,223	1,660,217
Total assets	$57,219,751	$53,457,761
LIABILITIES		
Preferred stock	$14,236,200	$14,236,200
Common stock	27,198,300	25,661,900
Five-year 6% notes	6,000,000	.....
Warrants	167,824	139,167
Miscellaneous	4,155	26,160
Accrued taxes, etc.	320,640	93,247
Interest accrued on 5-year notes	60,000	.....
Accounts payable	19,561	405
Dividends accrued	686,228	1,425,452
Surplus and reserves	9,026,335	9,916,790
	$57,719,751	$53,457,761

An Understandable Statement

MEMBER FEDERAL RESERVE BANK

At the Close of Business February 21st, 1921

I—Cash ..... $ 1,308,085.99
(Gold, Bank Notes and Specie) and with legal depositaries returnable on demand.

II—Checks on Other Banks ..... $ 213,855.17
These checks are payable in one day.

III—Loans to Individuals and Corporations ..... $ 8,093,912.84
This is the amount we have loaned (after a thorough investigation) to individuals and corporations on their notes end against approved collateral.

IV—Mortgages on Real Estate, and Bonds ..... $ 4,467,340.60
These are salable securities issued by the U. S. municipalities and other corporations of first quality; also first mortgages on high-class real estate.

V—Stock in Federal Reserve Bank ..... $ 42,000.00

VI—United States Securities ..... $ 556,745.00
This includes U. S. Government Bonds, War Savings Certificates, Revenue Stamps and United States Certificates of Indebtedness.

VII—Branch Banking House and Furniture and Fixtures ..... $ 394,879.27
Eleven of these branches, all located in the city of Detroit.

VIII—Other U. S. Government Bonds and Certificates of Indebtedness ..... $ 615,600.00
Left with us for safe-keeping.

Total Assets $15,692,418.87

Total Deposits Entrusted to Us, Feb. 21st, 1921 ..... $14,079,114.30
The officers and directors always have this in mind when making loans and see to it that the assets are in such form as to enable them to meet all requests made by depositors.

This Leaves Capital Stock, Surplus and Undivided Profits of ..... $ 1,613,304.57
Which becomes the property of the stockholders after the depositors are paid in full, and is a guarantee fund upon which we solicit new deposits and retain those which have been carried by us for many years.

ESTABLISHED 1853

First State Bank of Detroit

Main Office: Lafayette and Griswold Street

Eleven Branches:

Gratiot and Hastings	Hamilton and Webb	Jos. Campau and Newton
Chene and Gratiot	Ferndale and Springwells	Forest and Van Dyke
Mack and Mt. Elliott	St. Clair and Mack	Linwood and Vicksburg
Woodward and Eliot	Grand River and Virginia	Park

Digitized by Google

Public Service Operations at Cost

(Continued from Page 6)

ta es automatically is indicated as necessary, and repeated rises may be indicated if the index reserve still continues to fall. On the other hand, when the upper designated level is reached, a decrease in fares is automatically indicated to be in order and repeated decreases are to be put in force if the index reserve fund still continues to grow.

The size of the reservoir of capital and separation of the two levels of course fixes the time lag between changes in costs and changes in rate. Make the fund too big and the levels too far apart, and the adjustment is unnecessarily slow; make it too small and the levels too close, and the fluctuations are not sufficiently ironed out. Moreover, as a system grows, the normal size of the index reserve fund and the separation of the levels should grow too.

The Extent of the Reservoir

Four to 12 per cent the value of the system seems to be a size at normal level which has been used. We find that in some cases where the plan has been applied, the index reserve fund is drawn upon in case other reserves like the depreciation reserve fall below a safe figure. This seems a logical thing to do, provided the withdrawals to restore other reserves are not made in too big lumps and cause a double fluctuation in rates (once up and then shortly down again) that would be unnecessary with a longer spread. The necessity of having funds tied up in this index reserve fund disturbs some persons as being uneconomical. If it were necessary to keep this fund in the bank at 2 per cent or in high grade quickly marketable securities, that might be a valid criticism. Even then, the benefits would be worth the price. But nevertheless it is not essential to preserve this fund in just this way. It may be treated as a bookkeeping reserve and cash put to work—in the same manner that the depreciation reserve is now commonly handled.

The Murder of the Incentive

One fault that was laid to some early efforts to work out a "service-at-cost" franchise was that it killed all incentive for progressive management. In that it fixed a dead level of return on interest which would be earned anyway and could not be exceeded by the same management. So it is seen to be highly desirable to give the company some participation in economies of operation and finance.

It would seem that such an incentive should be double-barreled—there should be one division of economies secured, for the company, and that means for the stockholders. There should be another division of the economies for the men and management, and that would forget all about the stockholders. Unless the incentive or bonus which you try to work into a cost-of-service plan is double-barreled in this way, it only partly rises to its possibilities.

Economies are reflected in the level of the index reserve fund as well as drops in prices of labor and materials. I think that it is entirely practical to base two specific inducements on its levels: First, when rates drop in a certain way, the annual return on value shall go up; and, secondly, that salaries and wages shall correspondingly have a percentage bonus. Perhaps it would be well to say that the basis of figuring these two bonus incentives should be recase every five, ten or fifteen years, so that as the peculiar economies of one property and management are overtaken by the general progress of the art, the public shall not continue to pay the bonus. This is in a way an extension of the idea of patents for inventions.

Control of the Bonus

It is not sufficient to say that the bonus either to the stockholders or to the men and management, should merely rise as rates fall of or fall as rates rise. Costs and rates naturally tend to rise as prices rise, and it will not do to cut off the inducements for economies and efficiencies at this time when they are not needed. The thing to do is to set up parallel ranges of base rates as base costs as measured, say, by bank loans (or the Dun index figures for price of all commodities and labor might be used.) From such a table a base rate can be found that is normal for prevailing cost of money (or prevailing prices of commodities and labor). Then for each step that actual rates are lower than this normal rate, let the bonuses be stopped up in accordance with the bonus schedule or scale.

Suppose we found by careful investigation that fares of a certain street railway under normal operation with fair profit were more or less as follows:

3½ fare	3½ per cent money
4 fare	4 per cent money
4½ fare	4½ per cent money
5 fare	5 per cent money
5½ fare	5½ per cent money
6 fare	6 per cent money
6½ fare	6½ per cent money
7 fare	7 per cent money
7½ fare	7½ per cent money
8 fare	8 per cent money

This is purely illustrative and it is not intimated that these figures apply to any specific railway.

If actual fares were 7 cents and bank money was being loaned out at 6 per cent, then this hypothetical company would get no bonus, for the normal fare for 6 per cent money was 6 cents. If, however, by good management and effective co-operation by the employes the fare has been brought down to 5½ cents in times of 6 per cent money, then the company and the employes would get one step of a bonus—say ½ of 1 per cent extra return on the franchise valuation for the company, and for the men 1 per cent bonus on their yearly wage. If continued progress by company and employes brought the fares down to 5 cents as money still stayed at 6 per cent, then the company would be allowed 1 per cent extra return on valuation and the men would get 8 per cent bonus on wages.

The Practical Rather Than the Perfect

One condition here must frankly be faced. There are various arrangements which can be demonstrated, at least to other engineers, or to business men and to lawyers, to be scientific, fair and promoting service and economy; but under some local conditions they may become too "high-browed" and so open to such misconception that their attempt is unwise. It is necessary to take the practical view, then,

---

TO CHANGE TIMBER TAX SYSTEM

Acting upon the suggestion of F. H. Sanford of the Michigan State Farm Bureau, department of forestry, the Michigan Hardwood Association has appointed a committee of three, with W. L. Saunders, Cadillac as chairman, to work with the farm bureau to effect corrective tax legislation with respect to Michigan timber lands. Investigations by the farm bureau department shows timber owners disapprove present tax methods, which levy a yearly tax on assessed valuation of standing timber, whereas the owner may realize on this but once, when he cuts and markets the lumber. This, it is claimed, forces owners to lumber off their holdings as rapidly as possible, and brings about over production and depletion of supplies. The Bureau and Association proposes a system of deferred taxation whereby the annual tax will be based upon the bare land value when the timber is marketed.

of using the best plan which stands a chance of being accepted.

It was stated earlier in this discussion that a cost-of-service plan would hardly take care of itself, with perhaps a little oiling and winding up once in awhile. There should be some supervisory authority to see that the provisions of the franchise are carried out, to have a voice in making of the utility's budget, to determine whether or not that amount and quality is adequate with due economy, to exercise some audit over the accounts to see that operating costs are separated from capital expenditures for improvements and extensions, and to see that the payrolls are fair. The man for this supervisory job is an engineer, and as capable a one as can be secured with the available means to pay him. He is to have such few engineering, clerical and accounting assistants as the size of the system warrants.

Freedom of Supervisors

Where the regulated utility has a very large property, a board or commission of two or three engineers may perhaps be advisable instead of overloading a single individual or making his duties too general.

It should be particularly insisted that he be paid as one of the operating expenses of the company but that he be not an employe of the company, it is usually to be insisted that he is responsible to the public, but that he be not a part and parcel of the city government departments. He must be free of coercion and have authority commensurate with his responsibility. He should be removable from office only for cause or at the expiration of a given term.

It becomes a bit of a problem how to afford a good enough utility supervisor under a "service-at-cost" plan in a smaller municipality. But if in these smaller towns various utilities are all put under the "service-at-cost" plan and all put under the security of one supervisor, the cost of a good man can be spared without undue burden on anyone.

Where all the municipal utilities have systems too small to support the proper caliber of supervisor, it would seem possible that the state public service commission could develop such a staff of engineers to administer the "service-at-cost" features of a large number of small franchises with capable men at low cost. Such supervisory engineers should certainly not be required, or able, to act in any sense as a manager of the utility. He should regulate but not manage. He should report when a service is inadequate or uneconomically liberal, when quality is poor or extravagantly gilt-edge; he should suggest or fix a reasonable medium but not decide too closely the detail or how this is to be attained. He is to correct improper accounting but he is not to be the company's auditor and bookkeeper. And when his directions and reports are contested by the utility, there must be left open an avenue of appeal therefrom.

Conclusion

This, then, is the story of the "service-at-cost" idea—what it is; where it stands; how it can be secured; what it will do. The story has purposely been kept very general; the plan has not been described for any one community or any one utility. All that has been said applies to New York or to Grand Rapids or to San Francisco; it applies to a street railway or to a water company or a gas supply.

In working out a plan or any particular place and utility, the franchise had better be kept as simple and unobscured as possible, lest complex details tend to bind it hand and foot or strangle it before it can demonstrate its great usefulness. It seems safer to err on the idea of crudity than refinement.

Digitized by Google

Detroit Listed Bonds

Name	Feb. 21, 1921 Bid	Ask	Last Sale
Cons. Pow Co.—5s, 1936	80¼	81¼	81
Detroit & Flint—5s, 1921	97	98½	93
Det., Ft. W. & B. I.—5s, 1927	40½	56	75
D., M. & T. Short Line—5s, 1933	60	81	..
Det. & Northw'n—4½s, 1921	98	99	93
Detroit & Pontiac Ry.—5s, 1922	95	99	95
Detroit & Pontiac—4½s, 1928	..	84	..
Det. & Pt. Huron S. L.—5s, 1940	..	..	..
Detroit Railway—5s, 1924	..	86	..
Det., Ypsi. & A. A.—6s, 1924	..	100	..
D., Y. & A. A., Jackson—5s, 1926	..	86½	..
Det. United Ry.—4½s, 1932	..	..	..
Detroit Edison Co.—5s, 1933	85	..	..
D. Ed. Co.—1st & ref. 5s, 1940	81	81½	80
East Mich. Edison—5s, 1931	78	..	..
Detroit Edison Deb. 7s, 1928	95½	98	..
Detroit Edison deb. 7s, 1929	94	96	93½
Detroit Edison deb. 6s, 1931	100½	100½	94½
D. C. Gas Co., G. M.—5s, 1913-23	..	91½	..
D. C. Gas Co., F. L.—5s, 1923	..	93½	94½
Detroit & Sub. Gas Co.—5s, 1928	..	85	..
Mich. State Tel.—5s, 1924	87½	88	..
Tol., Freon't & Norw'k—6s, 1920	..	..	..
Wyan. & Det. River—5s, 1918	..	..	..
Ry.-Prod. Coke Corp.—6s, 1930	..	..	..
Detroit Rock Salt 6s, 1933	..	..	..

Lansing Stocks

Closing quotations on the Lansing Stock Exchange, Monday, March 1, are reported by G. N. Murchey & Company, as follows:

	Bid	Asked
Auto Body Co.	4½	6¼
Auto Body, pfd.	..	7
Hew Motor Car Co.	22½	23½
Duplex Truck Co.	6½	8¾
Bates & Edmonds Motor Co.	..	16
Motor Wheel Corp.	11½	12
First Bond & Mortgage Co.	28	33
Michigan Mortgage Co.	8½	9½
Michigan Screw Co. (ex. stock div.)	18	28
Lansing Co.	38	45
Atlas Drop Forge Co.	24	28
Federal Forge Co.	8	10
Nuvo Engine	22	27

Interested in: Petoskey Portland Cement, Peninsular Portland Cement, Federal Discount, Columbia Motor, Union Mortgage, Grange Life Assurance Co.

Grand Rapids Stocks

Close March 1, as reported by Howe, Snow, Corrigan & Bartles:

American Public Utilities, com.	7	11
American Public Utilities, pfd.	18	23
Cities Service, Bankers	28	28½
Cities Service, Debenture "B"	125	131
Cities Service, Debenture "C"	93	96
Cities Service, Debenture "D"	84	87
United Light, com.	22½	24
United Light, pfd.	56	58

MARCH 1 RECORD DAY

March 1 was a record day on the Detroit Stock Exchange in point of volume of sales. The total amounted to 337,305.00 and in shares the total was 18,138. Activity in American Light, which touched a new high of 114, Ford of Canada, which went to 291, and interest in Continental Motors, Lincoln, Timken, Packard and Reo accounted for the increase.

DETROIT EXCHANGE GROWING

Sales on the Detroit Stock Exchange for the period January 29 to February 26, inclusive, totaled 457,452 shares. For the year 1920 total sales were 2,494,789 shares. The detailed list of sales will be published March 12.

STONEHAM SELLS TO CLARKE

E. H. Clarke & Company, New York, have taken over the Detroit office of C. A. Stoneham & Company, 904 Real Estate Exchange building. The same personnel will be retained in the office and J. H. Irwin will be the manager.

UNITED LIGHT MEETING

The annual meeting of the United Light and Railways Company will be held March 15. Common stock books will be closed at 3 p. m., Friday, March 4, and will remain closed until the final adjournment of the meeting.

Condensed Statement of

MERCHANTS NATIONAL BANK

Detroit, Mich.

At the Close of Business, February 21, 1921.

RESOURCES.

Loans and Discounts		$13,113,580.52
Bonds, Securities, etc.		694,769.00
U. S. Liberty Bonds		612,450.00
Overdrafts		3,474.98
Interest Earned but not Collected		15,131.49
Customers' and Bankers' Liability Account, Acceptances Executed by This Bank		320,000.00
Cash Resources—		
Cash on Hand and Checks for Clearing House	$ 448,445.32	
Due from Federal Reserve Bank	1,011,947.06	
Due from Banks and Bankers	633,233.96	2,093,626.34
		$16,853,032.33

LIABILITIES.

Capital Stock	$ 2,000,000.00
Surplus	1,000,000.00
Undivided Profits, Net	320,622.27
Interest and Discount Collected but not Earned	92,571.91
Reserved for Interest	21,286.14
Reserved for Taxes, Dividends, Etc.	92,406.56
Customers' and Bankers' Acceptance Account	320,000.00
Bills Payable	447,850.00
Notes and Bills Rediscounted	2,555,000.00
Deposits	10,003,295.45
	$16,853,032.33

OFFICERS	
JOHN BALLANTYNE	President
DAVID GRAY	Vice-President
JOHN P. HEMMETER	Vice-President
BENJ. G. VERNOR	Vice-Pres. and Cashier
ALFRED T. LERCHEN	Vice-President
WALTER R. JOY	Assistant Cashier
CHAS. K. BARTOW	Assistant Cashier
FRANK A. DUWE	Assistant Cashier
R. W. SCHWEITZER	Assistant Cashier

DIRECTORS
JOHN BALLANTYNE
WALTER O. BRIGGS
JOHN ENDICOTT
LUMAN W. GOODENOUGH
DAVID GRAY
OREN S. HAWES
JOHN P. HEMMETER
ALBERT B. SLEEPER
FREDERICK W. STEVENS
EMIL STROH

W. J. PEOPLES & CO.

Stocks
Bonds
Foreign
Exchange

First Floor
Penobscot Bldg.

Phones
Cherry 8640

We solicit your inquiries

SEND US YOUR ORDERS

for gray iron castings, finished or in the rough. Motor blocks our specialty. We are equipped to give you prompt delivery. Address:

Boyne City Chamber of Commerce
BOYNE CITY, MICHIGAN

Digitized by Google

Screws And Screw Machines

(*Continued from Page* 11)

the hand-operated, single-spindle turret or capstan lathe. This machine is built with six chucks held on a large circular plate, five toolholding rotating spindles being opposed to five of the chucks. The sixth chuck is used as a loading position at which point the operator casting or forging. All other operations are automatic. The face plate, holding the six pieces, advances toward the tools and each piece of work receives a separate operation. The face plate backs off, indexes and advances, bringing each piece of work to its successive operation so that after passing each of the tool positions a finished piece of work is presented at the unloading position. The time of finishing the piece, as in the multiple-spindle automatic screw machine, is only as long as the time necessary to load and unload the work is removed the finished piece and inserts a rough saved, as this is done while other pieces of work are receiving other machining operations.

The New Britain Automatic Screw Machine is also made with six spindles, which permits of the simplest form of tooling and consequently the highest degree of accuracy. By subdividing the operations and distributing them over the six spindles, a maximum amount of production is obtained. On simple work requiring not more than three operations to complete, two finished pieces can be produced at each indexing of the machine. On extremely simple work, such as studs, bushings, rollers, etc., stock may be fed in all six positions and six finished pieces cut off simultaneously. The efficiency of this machine was demonstrated recently in a test made by the Champion Ignition Company, Flint, in which 4,440 spark plug shells were produced in 21½ hours. The time per piece was 14½ seconds, and the stock used was 1⅛-inch hexagon bar steel. The result of this test was the placing of an order for 31 New Britain machines.

Other Installations

The Buick Motor Company has approximateri 85 New Britain machines which are used in the production of parts for the Buick automobile. The Packard Motor Car Company has 60 New Britain machines of both kinds, which are also used in the production of motor parts. The speed with which castings are machined in the chucking machine is shown by the fact that this company machines valve bearings on the New Britain machine at the rate of 100 an hour. All the operations of turning, facing, boring and reaming are done automatically, the operator having only to remove the finished pieces and replace them with unfinished castings.

The New Britain machine is very popular with firms who manufacture brass valves, as valves can be machined with this equipment approximately three times faster than by using a hand turrent machine, which is the older, though more usual, method. New Britain machines are used for valve work by the Capitol Brass Company, Peaberthy Injector Company, Michigan Lubricator Company, Scott Valve Company, American Lubricator Company and others in Michigan engaged in the machining of brass castings.

Another interesting job done on this machine is the making of piston pins as done by the Machine Specialties Company, Ann Arbor. The operation is that of drilling a hole through the length necessary for a pin and cut off. The six tool positions are arranged as follows: the first is a centering tool which starts the hole for the drills, the second, third, fourth and fifth are drills, each of which is set so that it drills one-fourth of the hole, and the sixth is the cut-off tool, which operates on a cross-slide. The production on this job is from 120 to 180 an hour, depending on the size of the piston pin.

LANSING BUYERS ORGANIZE

Buyers for factories and wholesale and jobbing houses in Lansing meet the first of the week to perfect a buyers' club, which is to be one of the units of the Western Michigan branch of the National Association of Purchasing Agents. The executive committee consists of L. D. Maxson, Olds Motor Works; Carl C. Richardson, Prudden anit of the Motor Wheel Corporation; Ed. L. Smith, Briggs Company; A. T. VanDervoort, VanDervoort Hardware Company; J. W. Gier, Gier Pressed Steel unit of the Motor Wheel Corporation, and Clifford K. Gleason, Novo Engine Company.

SCREW COMPANY BACK TO NORMAL

The Michigan Screw Company, Lansing, returned to a 100 per cent basis the first of this week, jumping from a 25 per cent schedule as a result of a quantity of orders from eastern points. The company has been employing about 100 men, which force has been increased to 500. During the last week the plant was overhauled and new equipment installed.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163 CAD. 6164

C. C. COREY
COAL COKE
1203-4 MAJESTIC BLDG. DETROIT, MICH.

STEEL STAMPINGS OUR SPECIALTY
STEEL STAMPING AND SHEET METAL PARTS FOR AUTOMOBILE AND OTHER USES
QUALITY AND SERVICE
STEEL FURNITURE CO., Grand Rapids, Mich.
Detroit Representative E. H. WELKER CO., INC. 222 W. Larned St. DETROIT

TRADING DEPARTMENT
Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.
JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation, 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
Member Federal Reserve System
45-47 Fort St. West, Penobscot Building
14 Branches

Digitized by Google

New Corporations

FOR WEEK ENDED FEBRUARY 26, 1921

A. C. Belanger & Sons, Inc., Detroit; general contracting; Arcelia C., T. A. and A. J. Belanger, 1221 Twenty-second St., Detroit ..... $ 10,000

Progressive Engineering Co., Detroit; to manufacture and operate all kinds of machinery, etc.; Albert A. Kickhofel, 3520 Milwaukee Ave., E.; Rudolph Gosike, James A. Purvis, John W. Purvis, Detroit 10,000

Taylor Typewriter Store, Inc., Grand Rapids; to deal in general office supplies; Louise R. Taylor, Adele Scott, Edith M. Moore, Grand Rapids 25,000

Goebel Garment Co., Chelsea, Washtenaw county; manufacturing ladies' aprons and other wearing apparel; Fred Goebel, Carl M. Rutan and John Kalmbach, Chelsea 10,000

W. A. Bisbell Co., Jackson; wholesale and retail groceries, provisions, etc.; William A. Bisbell, Charles H. Wellss, James D. Rodel, Jackson ... 100,000

McCaul Lumber & Coal Co., Ferndale; to retail lumber, fuel, hardware, building and agriculture supplies; S. Hawes, 1610 Ford Bldg., Detroit; G. Judson, Redford, Mich.; Fred C. Bueden, Detroit 50,000

William Goodyear & Co., Ann Arbor; to manufacture, buy, sell and deal in all kinds of clothing, dry goods, notions, jewelry, boots, shoes, etc.; William Goodyear, Paul L. Pround, G. S. Cossar, E. S. Schroer, Ann Arbor ... 200,000

Rickenbacker Garage Co., Detroit; to conduct garage, buy, sell, hire and keep and repair automobiles, accessories, fuel, etc.; William Rickenbacker, 2988 Canton Ave.; Rawson L. Harmon, Edwin C. Lewis, Detroit 5,000

Prohibition Drug Co., Detroit; to conduct general retail and wholesale drug business; Ben and Mitta M. Tannenholz, Holel Stevensen, A. P. Breitenbach, Detroit 25,000

Ideal Commercial Corp., Grand Rapids; to buy and sell merchandise at retail; Anthony Suzalski, John Banasak, Michael Cutowski, Grand Rapids 50,000

Cook Coffee Co., Detroit; to manufacture, roast, buy, sell and deal in both wholesale and retail coffees, teas and other groceries; Clement C. Broder, 234 Leicester Court, Max Freedman, Leslie J. Hayes, Detroit .. 10,000

Western Oil & Gas Distributing Co., St. Johns, Clinton county; to operate automobile filling station; J. H. Seasions, William Exelby, C. A. Johnson, St. Johns 25,000

James W. Campbell Co., Detroit; purchasing, holding and dealing in real estate; James W. Campbell, 3609 Mack Ave.; John A. Bass, Albert J. Stocker, Benjamin H. Pribotsky, Detroit 5,000

Lola Oil Co., Iron River; purchase, sale and distribution of petroleum products at wholesale or retail; Angelo Lola, Victor Bellagamba, Madulena Bellagamba, Iron River 17,000

G. William Davis, Inc., Lansing; to manufacture, buy, sell and deal in generally all kinds of merchandise; G. William Davis, Saginaw; Carrie E. Schlatter, Woodhaven, N. Y.; Wayne R. and Mark M. Schlesinger, New York, N. Y. 10,000

Oxford Overall Co., Detroit; to manufacture, buy and sell overalls and garments for men, women and children; Wesley S. Thompson, Oxford, Mich.; Israel Cohen, 1829 Second Ave.; Arthur A. L. Cohen, Detroit 10,000

Pierce-Miller Co., Jackson; buying and selling at wholesale and retail groceries and food commodities of all kinds; Frank L. Pierce, Lawrence A. Miller, Frank D. Hamilton, Jackson.. 25,000

Manistique Dairy Products Co., Manistique; to buy and sell at wholesale and retail milk, cream, ice cream, butter, eggs, cattle, hogs and farm produce; Edward G. Amos, George F. Kingsting, Edward W. Miller, Manistique 30,000

Nalbandian & Co., Detroit; to conduct wholesale and retail tobacco and candy business; Nishan Nalbandian, 134 Helen Ave.; Arsen H. Mugardichian, Habanes Dewlouyallan, Detroit 20,000

Lind & Marks Co., Detroit; manufacturing, buying and selling at wholesale and retail, records, talking machines and accessories; Samuel E. Lind, 1701 Edison Ave.; Mec Ehrlich,

Write for Your Copy of

INVENTORY VALUATION

For Federal Taxation and Banking Purposes

Free on Request

FEDERAL Income Taxes are now engaging general interest. It was not strange, therefore, that when we published an authoritative discussion of Inventory Valuation in a recent issue, that there should have been a demand for copies which exhausted the supply and required us to prepare reprints.

The article was an extract from an address made by William M. Lybrand, President, National Association of Cost Accountants, before the January meeting of the Detroit Chapter of that Association.

The opinion and judgments of a specialist and unprejudiced observer on this important topic is presented. We want every banker, manufacturer, accountant, attorney and merchant to have a copy, which is why it was reprinted in booklet form for general distribution.

Inventory Valuation will prove helpful to those who seek or give credit, plan for the future or are concerned with the preparation of Federal Tax returns.

It summarizes principles of valuation that have stood the tests of time and that are governing in the present conditions.

Copies will be mailed free on application to

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

611 Free Press Building — Detroit, Michigan

Smith-Hinchman and Grylls

Architects and Engineers

"Incorporated 1903" — Detroit, Mich.

Digitized by Google

Production Managers—



Continuous Heat Treatment Furnace.

The following advantages are secured by the Continuous Method of Heat-Treatment:

Increased production per unit of floor space.

Reduction in manual labor per unit of production.

Uniformity of product, resulting in decreased scrap, following less dependence upon the human element.

The fuel economy that naturally follows the direct transfer of heat in spent gases to incoming material.

Improvement in working conditions by cooler shop.

In short, the saving in cost of the finished product due to economy in labor, time, fuel, floor space, decreased rejections, etc.

Do these advantages appeal to you?

Write nearest branch for Bulletin 217-B and learn whether this method is adaptable to your product and manufacturing conditions.

W. S. ROCKWELL COMPANY

Furnace Engineers and Contractors

50 Church St. (Hudson Terminal Bldg.), New York.

We Make Industrial Heating Furnaces for Every Requirement.

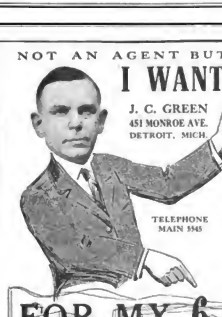
"FURNACE AND FUEL TO SUIT CONDITIONS"

Branches: Chicago Cleveland Detroit
Ellsworth Bldg. Hickox Bldg. Majestic Bldg.

W.S. ROCKWELL CO. INCORPORATED NEW YORK

NOT AN AGENT BUT A MANUFACTURER

I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.

TELEPHONE
MAIN 3945

MAY I SERVE YOU?

CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES

Production Machine Work

PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS

SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES

CAPABLE OF PRODUCING $500,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL
TWIST DRILL & TOOL CO.
DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Morrie Marks, Louis Marks, Detroit.. 100,000
Crescent Amusement Co., Detroit; to own, lease and operate circuses, traveling shows and entertainment of all kinds; Alexander Brown, W. A. Dyer, Hotel Norton, R. A. Sloan, Detroit 100,000

CHANGES OF OFFICE

Peninsular Portland Cement Co., office located at Cement City ..... $ 368,750
Lewellyn & Co., office located at Grand Rapids 100,000
Detroit Seamless Steel Tubes Co., office located at Springwells 200,000

CHANGES OF NAME

Harris Music Co., Inc. (name changed to Harrison Music Co., Inc.), Detroit.. 100,000
Rutka-James Roofing Co. (name changed to C. C. James Roofing Co.), Grand Rapids 5,000
Sturtevant Lumber & Coal Co. (name changed to Sturtevant & Blood Co.), Owosso 100,000
C. Groening & Sons (name changed to Groening Brothers & Wilde), Ludington 50,000
Durant Building Corporation (name changed to General Motors Building Corporation), Detroit 3,000,000

INCREASES

Bancroft Elevator Co. (name changed to Bancroft Drilling and Elevator Co.), Bancroft, from $25,000 to 35,000
Schewaling Co-operation, Schewaling, from $30,000 to 60,000
Grant Oil and Gas Company, from 250,000 to 1,000,000
National Projector Film Corporation of America (F.) (Ill.), Chicago, Ill., Niles, from $100,000 to 200,000
Elizabeth Lake Estates, Detroit, from $10,000 to 125,000
D'Arcy Spring Co., Kalamazoo, from $75,000 to 1,000,000
Barker, Tool, Die and Gauge Co., Detroit, from $15,000 to 30,000
Loose-Wiles Biscuit Co. (F.) (Ill.), Chicago, Ill., Detroit, from $250,000 to 750,000
Michigan Star Furniture Co., Zeeland, from $110,000 to 160,000
Firestone Radiator Mfg. Co., Detroit, from $10,000 to 75,000
Morton Salt Co. (F.) (Ill.), Port Huron, Chelsea, Ill., from $1,500,000 to..... 4,000,000
Denver & Co., Denton Harbor, from $75,000 to 100,000
C. M. Smillie & Co., Detroit, from $25,000 to 100,000
Campbell Stone Co., Afton, from $50,000 to 100,000
Abell Elevator Co. (F.) (Ky.), Louisville, Ky., Detroit, from $5,000 to.... 125,000
Flint Lumber Co., Flint, from $80,000 to 240,000
Beaver Realty Co., Detroit, from $100,000 to 300,000
St. Joseph Iron Works, St. Joseph, from $60,000 to 250,000
Detroit Casket Co., Detroit, from $30,000 to 175,000

DECREASE

Banner Cigar Mfg. Co., Detroit, from $100,000 to 1,000

NOTICES OF CHANGES OF ATTITUDE

United Creamery Co., Dalton 6,000
Kalamazoo Utilities Co., Kalamazoo ... 10,000
Union Truck Sales Co., Bay City 10,000
Gratiot Tire & Auto Supply Co., Detroit 15,000
Pellston Farm Land Co., Pellston..... 25,000
Escanaba Hotel Co., Escanaba 75,000
H. B. Hamburger & Co., Detroit 7,500
Hampton Stock Farm Co., Crestwood 50,000
Polska Spolka, Bay City 15,000
Ray E. Bassett Co., Ann Arbor 1,000

NOTICES OF DISSOLUTION

Premier Machine Co., Detroit 5,000
Wills Motor Co., Detroit 100,000
Bill Hayes Co., Detroit 10,000
Niagara Iron Mining Co., Michigamme, North Tonawanda, N. Y. 100,000

NOTICES OF WITHDRAWAL

Central Concert Co. (F.) (Del.), Wilmington, Del., Detroit .....
Schaffer Loomis Co., Inc. (F.) (N. Y.), Buffalo, N. Y., Detroit 100,000

LANE MADE SALES MANAGER

F. J. Lane, who has been connected with the purchasing department of Dodge Brothers, has been appointed sales manager of the General Spring & Wire Company, Detroit.

MOORE DROP FORGE BRANCH

The Moore Drop Forge Company, Springfield, Mass., has opened a Detroit branch office at 133 Brighton avenue, with Norman C. Wolfe in charge.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Fifteen Cents a Copy

Five Dollars a Year

GENERAL LIBRARY
MAR 1 1921
UNIV. OF MICH.

Cutting the Serpent Into Pieces
How Motor Bodies Are Made
The Investor and the Farm Industry
Creating a Copper Market
Banking and Foreign Trade

DETROIT, SATURDAY, MARCH 12, 1921

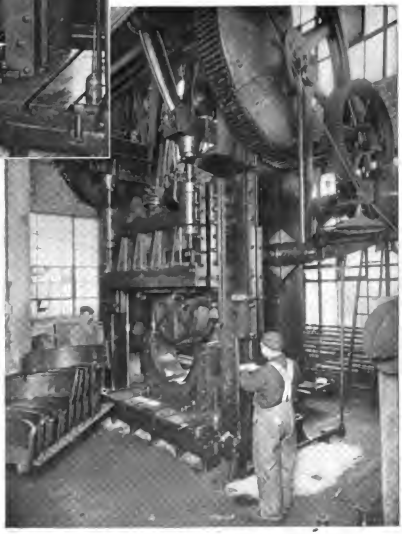
Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 11*

Digitized by Google



Fenders
of Pressed Steel

Formed at one stroke by "Bliss" No. 409-C Toggle Drawing Press



The upper picture is a close-up photograph showing in detail the punch and die of this press, which is in the plant of the International Metal Stamping Co., of Detroit.

In the lower picture the main working parts of this big machine can be seen, together with a truck loaded with finished Fenders.

BLISS 1857

E. W. Bliss Company

Main Offices: BROOKLYN, N. Y., U. S. A.

American Factories: BROOKLYN, N. Y., HASTINGS, MICH., CLEVELAND, O., SALEM, O.

BLISS 1921

SALES OFFICES

CHICAGO, People's Gas Bldg. DETROIT, Dime Bank Bldg. CLEVELAND, Union Bank Bldg.
CINCINNATI, Union Trust Bldg. BUFFALO, Marine Bank Bldg. ST. LOUIS, Boatmen's Bank Bldg. PITTSBURGH, Keenan Bldg

FOREIGN SALES OFFICES and FACTORIES

LONDON, ENGLAND, Pocock Street, Blackfriars Road, S. E. PARIS, FRANCE, 100 Boulevard Victor-Hugo, St. Ouen

(No. 82)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Cutting the Serpent Into Pieces

Rationals in North Dakota Not Content With Pulling Townleyism Fangs, Now That Operation's Under Way

By PHIL S. HANNA

THERE USED TO BE a popular boyish theory that the tail of a dead snake wiggled until sundown, or sun-up. Sundown or sun-up, the tail of the Townley organization is still wiggling in North Dakota. The Legislature has the serpent on the operating table with an X-Ray right on its vitals and has its horny mouth propped open with the clubs of the sergeant-at-arms of the House of Representatives.

The Townley gang is obstructing the examination in every way possible and has even been so gracious as to admit that an operation removing the fangs of the reptile might be agreed to; but the rationals are bent on nothing short of cutting the thing into bits and chucking it into the Missouri river, or cremating it. And their stand is well taken, for even with the fangs removed, the Townley machine has an enormous appetite for funds, which is not likely to abate readily.

But first let's correct any impression that even at its worst the state is bankrupt or anywhere near it. South Dakota, a commonwealth of similar area, population and resources, has a bonded debt of $40,950,000 and its credit is considered good, while North Dakota has a bonded debt of $340,000, to which at the outside not more than $19,000,000 will have to be added to clean up the mess caused by Townley et al. J. J. Earley, president of the North Dakota Bankers' Association, writes this paper as follows: "Please bring out the fact that the people of North Dakota are not downhearted and are not going to regret or grumble about the cost of the prescription necessary to cure the patient." E. G. Quumme, head of the Federal Land Bank of St. Paul, says that North Dakota has more per capita wealth than any other state and looks at the muddle as temporary. And there is much evidence of capital's going back into the state for private enterprise.

But the credit of North Dakota, while suffering under the present regime, will be better in the end than before the fuss because of the value of the lesson which the people have learned regarding radical and socialistic doctrines put into practice. The flour mill at Drake and the grain elevator at Grand Forks and perhaps the packing plant at Fargo will stand for years as a monument to the folly of state socialism and will be worth, as a preventative of future foolishness, both in the Northwest and elsewhere, much more than the amount of taxpayers' money sunk therein.

Since the two recent articles on this subject were printed in this paper, the following events have occurred which have strengthened sentiment in favor of immediate action toward removing the governor and some of the Townley tools in the administration:

The Scandinavian American Bank of Fargo has closed (second time).

The Legislature has started an investigation of the state industries.

A recall election movement has gained sudden momentum.

In its endeavor to stave off the recall, and raising more funds for defense, the Townleyites have resorted to desperate means of popularizing the Bank of North Dakota and of justifying its policies. They also have tried to borrow an oxygen tank to prolong life by offering the state bonds, given to the bank as capital, to the rich labor unions of the East. But it is to the credit of those in charge of the unions' funds that all such overtures have been promptly turned down. The Townley crowd also proposes to open the Bank of North Dakota to the public and hopes to gain the personal commercial and savings accounts of the Non-Partisan League farmers and business men. (The latter, if any.)

Another final wiggle of the snake's tail is an appeal by the Non-Partisan attorney general of the state, William Lemke, for personal contributions to a fund which he proposes to use in a legal battle against the League's so-called oppressors, the independents.

But, hear ye, here is the most significant thing. On March 4 they had a regular free-for-all in the final stages of the Legislature. Bloody noses, black eyes and sore heads resulted. And over as the effacement of the dignity of a law making body is to be deplored, it had to come and it always comes when men think seriously of the pocket as at stake. And some ingenious reporter up there in Bismarck started the song, "The Reds are on the Run," which, according to the mass of reports covering both sides of the story and used in making this narrative, is literally true.

A Poem About Dr. Ladd

The remainder of this article will deal largely with the details of the closing of the Scandinavian American Bank of Fargo, its history and the bearing this failure has on the whole situation. We shall also go into some detail regarding the investigation of the state industries, which is full of exposure of red fallacy. Therefore, any of our readers who wish to retire may do so and crank up their cars while the following poem headed "To the United States Senate on a Wild Oats Platform," and written by John Magill, of Verona, N. D. is being chanted (Dr. Ladd is now United States Senator from North Dakota. He is one of the chief potentates of the Townley outfit and his success in getting to the Senate is due largely to his espousal of the socialist cause in North Dakota):

Yes, indeed, it makes us sad
To see our late respected Ladd
Lay down his tubes and chemist's tools
To study Roberts' Order Rules.

If he would only with us stay
And write statistics day by day
We'd soon imagine wealth untold,
And think our streets all paved with gold.

We "millions" on our wheat have saved,
And on the dockage question raved
'Till it would seem that we must be
A prosperous community.

The Doctor to both men and mice
Is prone to give profuse advice
On how and when to sell their grain
And realize the highest gain.

Because of this we kept our wheat
So that all those who have to eat
Would thrice a tribute pay us daily
Which we might spend carefree and gaily.

Alas! It seems his good advice
Most "par bon" was for men and mice.
Since every last year's bushel ground
For us has lost a "cart-wheel" round.

But as we get 'bout thirty-three
Cents premium on each bushel we
Into the elevators haul
It natural seems that mostly all

Montana farmers, South Dakota,
Canada and Minnesota,
Living close would grasp our rate
By selling wheat within our state.

Yet they must be insane and blind
For doing nothing of the kind!
And broker "traitors" who rate their toll
By hauling wheat to outside soil!

But here's to Ladd, full credit's due him
For though so many hate to see him;
The N. P. League has done him good
While he upon its platform stood.

He has accomplished work unique
'Mong politicians to Senate tapas seek,
Precipitating ample votes
Upon a platform of Wild Oats.

The Scandinavian American Bank of Fargo has long been known as a Non-Partisan League institution, used for the purpose of financing the League and its affiliated organizations. It will be recalled that this bank was closed in September, 1919, amid sensational exposures. But at that time the Townley star was still in the ascendency, the supreme court was friendly to the red cause and Attorney General Langer, since deposed, and Secretary of State Hall, who were the majority members of the banking board, were reversed by the supreme court and the bank was reopened. This closing, however, is likely to be the last, for, as the investigation has brought out, the reserve of the institution are gone and neither the Bank of North Dakota nor Townley is in position to hand over additional funds. To give the reader an idea of how desperate the situation was at the time the bank was reopened in 1919, the state bank examiner, Lottbus, admitted under oath that this bank was reserve at the time of the supreme court ordered it reopened.

At the time of the audit by the independent accounting firm the Scandinavian American Bank had $443,000 loaned to it or deposited with it, by the Bank of North Dakota. Since the date of this report (December 3) there is nothing reliable to depend on as to the exact condition of the bank of North Dakota. But at that time some of the loans were as follows:

Digitized by Google

$650,000 to the North Dakota Building & Loan Association, $225,000 to the North Dakota Home Builders Association, $917,788.88 to the thirty-two banks that were closed, $7,816.72 to F. A. Pike, league attorney. (This item was afterward paid by the state auditor.) Of $2,-057,645.25 due from banks, $1,147,607.35 was past due, but the report does not disclose how this is figured.

The accountants' report of the affairs of the Home Builders Association summarized the situation as follows: Records incomplete and deficient; no adequate accounting system; no cost system used to show cost of individual projects; $311,119.62 charged to "construction expenditures," without detailed account; $57,-985.72 expended without obtaining vouchers in support of same; surety bond of $50,000 required of the manager expired July 15, 1920, but had not been renewed up to December 3; overdraft of $10,752.52 at Bank of North Dakota and a big supply of building materials bought a peak prices on hand.

And here are the high spots of the auditors' report on the Mill & Elevator Association: Flour valued at $129,001.52 sold to the Consumers United Stores Company, a Non-Partisan affair, with no records available from which to check the account; other sales of like nature, including total amounts credited up to $170,807.42; no balance sheet or profit and loss account, (This was the crowd that put their records, if any, in a suitcase and carried them out of town when the accountants presented themselves to make the audit.) Advance from the Bank of North Dakota, $211,795.40.

The Equity Packing Company, of West Fargo, had an operating deficit of $771,216.67 according to reports given out at its annual meeting, January 21. Luckily, it appears that the capital of this experiment has been practically subscribed. About $2,000,000 has been paid in and the principal asset is a packing plant appraised at $1,248,418.05. This is a modern plant plan the deficit about balances the capital. The plant handled 2,203 cars of stock during 1920. Actual stock killed was given as 15,-000 cattle, 6,500 calves, 49,000 hogs and 5,700 sheep, the remainder being shipped to St. Paul.

In its issue of February 12 this paper printed the official statement of the Bank of North Dakota as of January 26, which showed total assets of $15,926,725.24. As the writer has since come into possession of the independent accountants' report, the latter is given here, with a comparison with the former. While the dates of the two statements vary by 54 days, the items, particularly earnings in connection with accruals, make an interesting comparison.

BANK OF NORTH DAKOTA

ASSETS	Independent Auditors' Dec. 5, 1920	Official Jan. 26, 1921
LOANS—		
Notes and C. D's (banks)	$ 2,407,641.24	$ 2,407,418.93
Rediscounts	240,839.12	
Individuals	2,151.93	
Warehouse Receipts	185,722.99	94,005.14
State Institutions	302,782.24	302,330.80
	$ 3,141,809.69	$ 3,634,756.15
Redeposit of Public Funds	$ 1,040,819.19	$ 8,201,526.47
Overdrafts	42,827.25	
Deposits with Correspondents	520,396.55	60,474.23
Cash	66,767.61	81,276.21
Cash Items	24,539.06	
Items Out for Collection	1,810,295.04	350,819.15
Warrants Out for Collection	334,247.43	
Farm Loans	2,586,313.96	3,845,941.57
Farm Loans, Special Deposits	300,300.00	
Bonds of N. D.	1,341,450.00	1,962,754.55
U. S. Bonds	1,000.00	
Sinking Fund Securities	17,091.19	
INTEREST RECEIVABLE	360,392.38	282,752.35
SHIPPING FUND	12,845.24	
Furniture and Fixtures	44,203.71	52,001.28
	$15,830,119.53	$15,926,725.24

LIABILITIES		
Deposits, Individual	$ 20,781.24	$ 239,839.10
U. D's	2,000.00	
Due Banks (Reserve)	1,182,995.76	555,995.20
State Treas. Open Account	7,179,044.87	7,179,044.87
State Treasury S. F. Account	3,300,732.12	3,670,756.10
	$11,685,553.99	$12,633,796.27
Bills Payable	$ 1,000,000.00	$ 1,000,000.00
Cashier's Checks	25,562.20	
Certified Account	134,242.40	*2,560.61
Fees Paid in Advance	5,143.54	5,731.11
Sinking Fund (or contra)	17,091.19	
Reserved for Legis. App.	10,000.00	10,000.00
SURPLUS OR INTEREST	752,232.06	†59,196.13
Capital (Bonds)	2,000,000.00	2,000,000.01
Surplus	40,000.00	40,000.00
Undivided Profits	149,335.57	176,130.89
	$15,830,119.53	$15,926,725.24

*Reserve for Depreciation. †Collection Items.

NOTE—The official balance sheet does not foot correctly, but is given as reported to me.

INDEPENDENT AUDITORS' STATEMENT

INCOME AND EXPENSE, MAY 1, DEC. 10, DEC. 1, 1920

INTEREST EARNED—		
Loans and Discounts	$ 155,425.39	
Farm Loan Bonds	139,134.18	
Farm Loans	127,466.94	
Bonds	251,440.36	
Exchange		$ 673,466.87
Prior, on Bonds Sold		3,486.25
		$ 1,081,831.42
Interest Paid	$ 667,362.10	
Salaries	142,894.15	
Printing and Stationery Supplies	4,776.39	
Postage	2,446.63	
Fuel and Rent	11,751.13	
Depreciation	9,845.37	
Advertising and Sub's	5,535.05	
Traveling Expense	5,317.33	
Ins. and Surety Bonds	4,472.45	
Miscellaneous	4,662.39	
	901,160.65	
Carried to Surplus	$ 180,335.37	

Owing to the fact that the bank was started without any capital, it is difficult to figure out whether net book earnings of $180,335.57 for the fourteen months is a reasonable, profitable or unduly low. Average deposits of the institution have run somewhere between $15,000,000 and $20,000,000, and in Michigan it would not be unreasonable to expect a bank of, say, $18,-000,000 deposits to earn 15 per cent per annum on $1,000,000 capital, which would be $237,500 for nineteen months. One hundred and eighty thousand, three hundred and thirty-five dollars and fifty-seven cents for nineteen months would figure out a trifle less than $10,000 a month or at the rate of about 10 per cent on $1,000,000 capital. Assuming that the nominal capital, (represented by bonds which did not sell,) of $2,000,000 were paid in, the net earnings would be about 5 per cent. But as stated previously the lending power of the bank arose almost solely from public deposits. Moreover, it must be borne in mind that the $10,000 a month given in the foregoing merely represent the book value of the invested assets, the real value being a problematical figure.

In the detailed statements which follow, it will be noted that more than $900,000 was loaned or deposited with banks that have closed, and undoubtedly this sum will be partly lost. Then the loans to the state elevator and flour mill are of questionable value, and the Merchants Loan & Trust Company, Chicago, will have to be paid $1,000,000 that it loaned the Bank of North Dakota on $1,200,000 of bank series bonds as collateral. So that, all told, it is conservatively estimated that the taxpayers will have to foot a hill of more than $5,000,000 to wipe out the losses incidental to winding up the Bank of North Dakota; or, if it is reorganized into a rural credit bank, a similar sum will have to be raised to clean up the situation.

As a matter of interest, there is appended a partial list of banks, showing their capital and surplus in the first column, and in the second column the amount of money listed as "total liability") either loaned to or deposited with each by the Bank of North Dakota. Note particularly the First State Bank, Kioten, of which State Examiner Lofthus, was directing head when he was appointed state supervisor of banks. Also the Williams County State Bank, Williston. It is stated in nearly every instance where the deposits and loans were in excess of prudent limits that the banks so favored are controlled or managed by friends of Townley.

	Capital Surplus	Total Liabilities
Bank and Town—		
Slope County State, Amidon	$ 15,000	$ 15,589.20
Slope County, Amidon	25,000	31,262.50
First State, Ambrose	12,000.00	49,766.81
Northern State, Ambrose	15,000.00	49,766.81
Golden Valley State, Beach	25,000.00	52,219.28
Haskell State, Cleo Springs	15,000.00	34,779.84
Bismarck State, Bismarck	125,000	1,000,000.00
Bank of Burke, Bowbells	40,000.00	80,850.74
American State, Burlington	25,000.00	104,122.96
Farmers State, Cleo Springs	15,000.00	19,389.60
Security State, Courtenay	27,041.17	27,041.17
First State, Courtenay, Crater	18,873.77	28,580.11
Security State, Deering	27,171.19	64,557.46
Farmers State, Sunny Glen	27,667.22	49,305.64
Second American, Fargo	25,000.00	25,000.00
First State, Fessenden, Ransom	14,360.80	32,261.78
Equity State, Golden Valley	12,490.76	50,000.00
Dime State, Medora	30,651.56	52,217.81
First State, Hazen	25,128.75	50,000.00
Citizens State, Pingree	18,296.23	44,488.32
Farmers State, Scranton	15,000.00	15,000.00
Farmers State, Sanish	26,620.68	63,125.62
Farmers Bank, Mohall	15,000.00	16,747.50
Williams Co. State, Williston	58,996.30	253,127.84
Security State, Beth	19,731.31	64,557.46
Ransom Co. Farmers, Lisbon	58,331.69	104,549.36
American First, Watford City	29,433.36	50,000.00
Union Bank of Bantry, Bantry	14,870.13	49,950.96
Farmers Bank of Dupree	27,116.36	27,116.34
Bottineau Co. Bank, Bottineau	54,622.88	60,506.69
Farmers Bank, Fingal	20,199.42	20,199.42
American Exchange, Valley City	238,940.69	19,223.91
Michigan City Bank, Michigan	39,200.00	39,976.77
Peoples State, Grand Forks	86,290.00	87,290.97
Farmers Bank of Hay	12,000.00	13,373.50
Farmers Equity, Maxdan	15,489.50	58,846.67
Citizens State, Minot	125,000.00	125,000.00
Farmers and Mechanics, Bowman	19,000.00	24,422.89

List of closed banks and their liability to the Bank of North Dakota, as of Jan. 2, 1921:

Sec. State, New England	$ 29,000	$ 52,983.78
Tolley State	20,000	62,348.85

(Continued on Page 31)

MUCH IMPROVEMENT IN LANSING

Lansing's automotive plants are rapidly getting back toward normalcy. The Reo Motor Car Company is employing 4,500, or practically the full force, 35 per cent on full time and the remainder on less. The Olds Motor Works has increased its force in 60 days from 700 to 1,400, who are working full time, 10 hours a day. The Duplex Truck Company is operating full time but with limited production. Manager Charles Smith, of the Ideal Power Lawn Mower Company and Ideal Engine Company, reports these plants working on a 100 per cent basis. Hugh Lyons & Company report a force of 195 employes. The Motor Wheel Corporation, Michigan Screw Company and Auto Body Company report goodly increases in the number employed, with more expected to be added during March. The Atlas Drop Forge Company is on an 80 per cent basis; the Ryan-Bohn Foundry is making good progress with 65 employed, and the Gerson-Carey Company expects to be back to normal soon if the present gains continue.

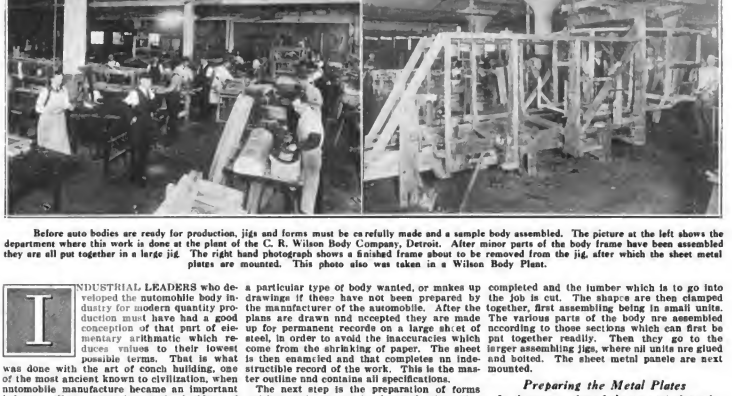
MOVING TO TRAVERSE CITY

The Worth Transportation & Products Company, Hammond, Ind., is loading its plant equipment preparatory to removing to Traverse City, Mich. The company, which is capitalized at $10,000,000, manufactures railway equipment. It formerly was known as the Railway Motor Car Company of America.

Digitized by Google

How Motor Bodies Are Made

A Description of the Processes Usually Employed; Fifty Plants Embraced in This Michigan Industry



Before auto bodies are ready for production, jigs and forms must be carefully made and a sample body assembled. The picture at the left shows the department where this work is done at the plant of the C. R. Wilson Body Company, Detroit. After minor parts of the body frame have been assembled they are all put together in a large jig. The right hand photograph shows a finished frame about to be removed from the jig, after which the sheet metal plates are mounted. This photo also was taken in a Wilson Body Plant.

INDUSTRIAL LEADERS who developed the automobile body industry for modern quantity production must have had a good conception of that part of elementary arithmatic which reduces values to their lowest possible terms. That is what was done with the art of conch building, one of the most ancient known to civilization, when automobile manufacture became an important industry. Every operation in the building of a fine conch body was separated from its fellows and analyzed as an individual operation; the requirements were made the basis of various departmental activities, and specialists were trained to perform each of the several operations, which in other times were learned only after many years of apprenticeship by a master craftsman.

The modern system has as much to commend it as ever had the ancient, although the two schools of production have little in common. What the modern automobile body loses in atmosphere which machinery cannot give, it makes up in sturdiness, practicality, economy and added utility.

Fifty Plants in Michigan

Michigan has about 50 plants devoted to the production of automotive bodies of all classes and types. These include the body for passenger automobiles, constructed of wood framework under sheet metal plates and panels stamped to shape and size; the metal body, the truck body of heavy steel construction; the frame truck body for general hauling purposes and the special body for all types of trucking operations, the driving cabs for trucks and the special passenger body. A great industry within an industry has thus been developed which has taken into itself much that manufacturing practice has developed.

Perhaps the best idea of the processes in auto body production can be obtained by following one of them right through a plant. The draughting room sees the first blue prints of a particular type of body wanted, or makes up drawings if these have not been prepared by the manufacturer of the automobile. After the plans are drawn and accepted they are made up for permanent records on a large sheet of steel, in order to avoid the inaccuracies which come from the shrinking of paper. The sheet is then enameled and that completes an indestructible record of the work. This is the master outline and contains all specifications.

The next step is the preparation of forms and layouts in preparation for production. This is slow and careful work, requiring the utmost skill and special machinery. Dies and jigs are made up for production and the experimental department then prepares a body for final acceptance, prior to quantity output. This preparatory work sometimes consumes many weeks, when exceptional results or departures from standard design are demanded.

The experimental departments of some of the large body plants contain sufficient interesting material for description to consume much space by themselves. It is here that new body lines are created, new ideas worked out and accepted, revised or rejected. Most of this kind of work is done by taking a rude framework of a body and filling it in with plaster or clay and shaping it to the effect desired. Sometimes it is a search for a new line to meet the seasonal demands of a manufacturer; then again it may be that someone has designed a better type of windshield or a window or a door, and in order to make the improved model show to best advantage it is necessary to make certain minor or perhaps radical changes to meet the requirement.

One automobile body plant visited was working on a windshield that was of an improved weatherproof type, which kept rain and cold out from the corners and edges of the glass. It meant a change in the finish of the entire front of the body. This change was engaging the ingenuity and ingeniousness of several skilled workers.

The forms and jigs which are made up preparatory to production on a body are carefully completed and the lumber which is to go into the job is cut. The shapes are then clamped together, first assembling being in small units. The various parts of the body are assembled according to those sections which can first be put together readily. Then they go to the larger assembling jigs, where all units are glued and bolted. The sheet metal panels are next mounted.

Preparing the Metal Plates

In the preparation of sheet metal plates for bodies large presses are used because of the size of the sections that must be stamped out. Bliss, Toledo and Cleveland presses form the stamping equipment for most of the body plants in Michigan. Dies are made for these presses according to requirements, usually in the shops where the stamping is done. This practice is followed generally throughout the large body plants such as C. R. Wilson Body Company, Briggs Manufacturing Company, Fisher Body Corporation and others. Sheets are fed to the workmen by overhead cranes and carried off by shop trucks or conveyors.

The stamped-out parts are next welded together by acetylene process and then mounted on the previously assembled frames. In the fabrication of these several units, everything is considered, to the placing of perforations where bolts or nails are to go, so that once the parts leave the mill there is a very rapid transition to the finished product.

Inspection is the backbone of body manufacture. It begins with the lumber which goes to the body plant's mill. It passes on the jigs and dies; it examines the plates as they are prepared for mounting; it looks to the assembly to see that there are no corners, breaks of wooden sections split by bolts, or faulty sections anywhere. It sees that the workmen have not overlooked anything, and that in all cases the stringent task to which the product is to be applied is met with sturdiness and honest construction. The inspection in the modern

(Continued on Page 18)

Digitized by Google

The Investor's Obligation To the Agricultural Industry

That Obligation Lies in Financing the Manufacture of Farm Equipment That Is An Asset, Not a Liability

AT PRESENT a great deal is being said about constructive agricultural policies that will be fair to the people as well as to the farmer. These are legislative problems, but what are needed as well are proper cooperative policies between the investing public and the farmer and to see that they are aggressively carried out.

How much real thought do the people, especially those in the cities, give to the farmer, his troubles or his profits and losses? At the same time most people certainly must realize that all of their food and clothing must come from the farm and through the farmer's efforts and ability to produce. At present he is making the effort but his ability to deliver is being sorely handicapped by the very people he is trying to feed and clothe. It might be said that he is doing it for a profit. So he is, tryling to at least, but every man is worthy of his hire.

Let us look at the farmer from another point of view, as a manufacturer (producer). If the city manufacturer wakes up to realize that he is not making the proper percentage of profits above his costs, to warrant his continuing to produce, he will naturally close down his establishment or curtail his output until his idea of profits is satisfied. This the farmer cannot do. His manufacturing process is more than half completed when he plants his crop, and he has expended at least 50 per cent of his manufacturing costs up to that point. He starts his process when he starts plowing, without the least assurance that there is a dollar of profit ahead of him, or a guarantee that his entire efforts will not result in loss. Then there is the long wait between seeding and harvest time, in which he hopes for the best in quantity and quality. How much of his crop he will secure on account of labor conditions is problematic, and what price he will obtain is a gamble, due to city speculative influence. Should he decide to curtail his output or fail to seed after a season's loss, the country would be facing a famine which would bring about a financial panic and then the city manufacturer would have little need to produce. The farmer can always raise enough food for his own immediate needs, but the city man cannot; therefore, as the city's welfare depends on the farmer's success, **there should be full and helpful co-operation between the city and the farm country.**

The Farm Labor Problem

Profits are due the farmer as well as the city manufacturer but at present the farmer is suffering for the co-operation which would co-ordinate the interests of both. Labor shortage makes crop costs too high and the farmer will continue to suffer until more liberal feelings are inducted into the relations of the city to the farm country. So long as the city places a premium on luxuries over the production of the staples of life, it will give little heed to the producer of those staples and investors will pay little attention to the real requirements of the farm. As to the farmer's ability to produce, the following quotation from the Manufacturer's Record is couched in plain language:

"Today the factories are robbing the farm. There is no equality of attraction in wages or hours. Men who labor and sweat much in the open fields can make far more money by laboring little and sweating less in manufacturing establishments. So they go to the factory. The drain is a steady one, so steady that already it threatens the nation with an absolute food shortage. As a people we are getting perilously near the rocks and we are going to run afoul of them unless we turn honest and give the toiler in the fields a fair show."

The above statements declare the essence of most of the difficulties met with on the farm today. As labor is the question at issue, and will be the issue more so each year, there apparently is but one means of mastering the difficulty, and that is to encourage as far as possible—and possible has no limit here—the manufacture of power-driven labor-saving equipment for the farm. Any farm well equipped with power-driven machinery will have no difficulty in getting a full complement of operatives, as such devices will have a tendency to keep enough of the young men on the farm, and keep them interested. For instance, there is pleasure, not drudgery, to the farm hand who can sit comfortably on a seat with his hands upon the steering wheel of a tractor and be able to plow 10 or 12 acres a day instead of two and a half to three acres with horses, after which he has to trudge along, on foot, near a dog in the mud. Some idea of such walking may be realized from the fact that to plow only one acre a fourteen-inch bottom plow has to travel seven miles, which affords the horse-plowman the joy of a seven-teen and a half mile promenade to plow two and a half acres in a day.

Many men who are now manufacturers, or interested in financial circles, were farmers or labored on their fathers' farms in their younger days, can recall the hardships of those days resulting from either poor help or no help at all. The principal motive power for handling tillage implements and harvesting machinery then was horseflesh, and today on the majority of farms it is horseflesh. The advantage is on the side of the man who has motorized his farm and to him fall the benefits of increased production at less cost. Larger production at lower cost means greater profits to the farmer, and tractorizing the farm stabilizes costs. Determinable costs relieve producers of fear and stimulate production. The manufacturer increases his production when he can lower his costs by installing greater production machinery at less labor. It is also on the farm. The manufacturer must create a demand for his product, wherein the demand is universal for farm products.

Just now it seems untimely to talk greater production to the farmer, owing to the great surplus crops that are not moving, but this is due, as everyone knows, to the fall-down in export resulting from delayed action in our capital. At the same time some Asiatic and European countries are dying for lack of the grain that is stored in this country's elevators. The reason, as stated above, for the glut in harvested crops is not only apparent but is a fact, and affects cotton as well as cereals. Therefore, in view of this fact, this is the time to talk and boost production, even intensive production, due to conditions abroad. Countries that have suffered starvation and famine will be making the greatest possible demands on this country and Canada for cereals. They will not be buying for immediate needs only but will be filling their storehouses to anticipate emergencies beyond what is possible for them to grow themselves; and it behooves this country to fortify itself against drought, as such a thing as crop failure has happened here and may happen again. Therefore, produce. Export will pay the price.

Inventive genius has given to the world the means of lower costs of living.

In 1831, Cyrus Hall McCormick invented the first reaper and tested it in a field of grain, the same year, near Steel's Tavern, Va. Before that time all grain was harvested with the cycle, scythe or cradle in the hands of a sweltering farmer.

The basic principle of McCormick's invention has been the base from which all later developments in harvesting machines emanated. This machine may be considered the source from which the great grain wealth of the world was developed, and from that beginning was instituted the greatest farm machinery manufacturing establishment in the world. If it had not been for this development in harvesting machinery, our Western states—grain belt—would be a wilderness today, and Canada would be more so.

The Tractor Comes

There is in use at present, on a mild scale, a device that is of inestimable value to the farmer, not in this country only but in all countries, not only for operating present farm lands but opening and breaking-in new lands in unpopulated districts, even to the jungle fastnesses of Africa. That device is the tractor.

It is about 30 years since the first steam tractor appeared in the West. They were ponderous affairs having driving wheels seven or eight feet high. In the immense grain belts it was very difficult to supply and feed the monsters with sufficient water and fuel, so much so that many schemes were applied to burn the waste straw, with more or less success. The coming of the automobile and the quick development of gas and oil motors, with their cheap and convenient fuel, started a revolutionary movement in tractor design, to the extent that the change to the combustion-motor equipped tractor is now complete.

A great deal has been and remains to be said about the tractor in its uses and abuses; its good points and—well, the excuses that have been commercialized. There are many different makes of tractors in the field, many good and others not so good. Unfortunately, when a demand is created for a certain device it attracts many manufacturers endowed with stronger commercial instincts than with good intentions to serve, and they get into the market with something that can be sold by advertising. Everyone has heard about "wooden nutmegs." Simply hitching four wheels to a frame to carry an engine and transmission might satisfy a dictionary definition of a tractor; and, if the contraption is painted up in attractive colors, might please the farmer while

THE author of this article is a Michigan engineer whose advice has been sought by many before making investments. He is now retired from practice and has spent some years in the development of tractors and agricultural machinery.

Digitized by Google

making the purchase, but when he starts plowing he has to call on the stuff that is under the paint, and then he calls for the service man and repairs. What is the result? Why, he condemns the whole tractor idea. Such a farmer has been placed in a position to be pitied, as he may be a small operator who has expended his entire savings on such a machine, to find that he has been "stung."

Some Tractor Mistakes

Any person who will give the tractor a thought will realize that it is subjected to harder usage and more careless handling than a railroad locomotive, and that it should be designed and built accordingly.

There has been a tendency—and it has been augmented by the purely commercial manufacturer, who figures his main profits on the sale of repair parts—to decrease the size and weight, and consequently the service capacity, of the tractor, and the market is flooded with what might be called "Farmer's Delight" machines. The idea, of course, is to get the small operator while the fever is high and the getting is good, but it means more to the purchaser than merely buying such a machine; it means, in a short time, the purchase of innumerable repair parts, and loss of time from the machine's being in the repair shop more than it is on the farm at actual work, which is costly and disappointing.

Let us look at the "Farmer's Delight" type of tractor, first, from the selling standpoint. It is light; it costs less (first cost) than a real tractor; just the thing for the ordinary farmer; can turn in a small circle; burns everything; is guaranteed for (some) months; then joy and profits for the "service man" and incidentally to the manufacturer who had the farmer's interest at heart, so much that he almost gave the machine to him. But—the poor farmer keeps on paying the freight.

Now for the efficiency of such a machine. Can it keep its equilibrium in side-hill plowing? Is it capable of actually pulling the number of plows and size of plows as rated in the multi-colored advertising matter? While plowing can it pull soil crushers or harrows? No. Well then it is compelled to make several trips over the ground to prepare and plant the seed bed. Then is such a machine a time and money-saver, or just a trouble-maker? Ask the farmer who owns one. A farmer naturally takes pride in becoming the owner of a tractor but in some cases the tractor manufacturer becomes the owner of the farmer, as the farmer, having his all tied up in the machine, keeps on buying repairs through his efforts to get his money back.

Would it not be a good idea for the tractor manufacturers—who are filled with so much "brotherly love" that they make a cheap machine and almost give it to the farmer—to keeps on buying repairs through his efforts publish a repair parts list, showing the price of each part, the total of all the prices to equal the price of a complete machine plus the freight, and make such list a part of the contract? Such a thing would not be done, because it would deprive the philanthropic manufacturer of several hundred per cent profit. The manufacturer who will turn out a properly designed and well constructed machine will be satisfied with his first profits, as his machines will sell on merit and repair parts will be considered maintenance factors, not profitable break-down features.

Properly Designed Tractors

The heavier, properly designed and constructed machine has the capacity and stamina to prepare the seed bed at one trip; saves labor and fuel expense; has plenty of reserve engine power; can deliver ample belt power to all the requirements of the farm, and the capacity is such as to finish its owner's work so promptly that he can turn to and do his neighbor's work at a handsome profit per acre and pay for his machine quickly and change

(*Continued on Page* 30)

STRAIGHT LINE METHODS

Organization

The essential machinery of business is competent organization. This means the selection of human beings endowed with intelligence, suited to their work, and equipped with a System functioning at all times along straight lines.

Under proper organization System is the simple, direct means to perfect functioning —economic and progressive.

Business today suffers from too much red tape. And System is blamed. The fault lies not in System but in its application.

System, to be wholly successful, must be applied with METHOD in the hands of a competent organization—trained human beings fitted to and interested in their work.

Long experience in the building of competent organizations and the application of System, based on facts and figures, is the definite service rendered by the

Straight Line Methods

of

ERNST & ERNST

AUDITS — SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK	CHICAGO	CLEVELAND	CINCINNATI	NEW ORLEANS
PHILADELPHIA	MINNEAPOLIS	BUFFALO	INDIANAPOLIS	DALLAS
BOSTON	ST. PAUL	PITTSBURGH	TOLEDO	FORT WORTH
PROVIDENCE	ST. LOUIS		ATLANTA	HOUSTON
WASHINGTON	KANSAS CITY		RICHMOND	DENVER

STRAIGHT LINE METHODS

Digitized by Google

Banking and Foreign Trade

A Review of the Experience of European Capital In Financing Commerce; the Lesson for America

By EDMUND D. FISHER

An address before the Commerce Club of the University of Michigan, Ann Arbor, March 1, 1921.

THE UNITED STATES, after nearly a century and a half of political independence, has finally become a creditor nation and apparently is secure in its present position of financial independence. This situation, however, is largely technical; has been brought about by the war necessities of other nations and the enormous but temporary increase of its export trade, much of which has had no basis of continuing value either to the seller or to the buyer. The problem of stabilizing international finance and trade relations is yet to be solved. Competition with other nations of more experience and with well established overseas agencies and connections will tend to reduce the present volume of export trade unless new plans that have been formulated are developed.

The extension of foreign trade along sound lines is necessary to the commercial and industrial stability and development of the United States. The division of labor, the diversification of climate, the varying aptitudes of peoples make commercial inter-dependence both necessary and desirable. No nation can safely assume a position that tends to isolate it from world commerce.

Investment of Capital Fundamental

The successful trading countries of Europe, however, such as England, France, Holland and Belgium, have learned through centuries of experience that the outposts of trade must be established through the investment of capital. The foundation of British commerce grew out of initial investments in numerous trading companies. The East India Company has given her the trade of an empire. The Muscovy Company settled Archangel and developed trade with Russia. Most of the larger enterprises of exploration, settlement and trade in the New World were supported by chartered companies. The Elizabethan era was characterized by numerous corporations for overseas finance and trade. Such were the Eastland Company (1578), the Hamburg Company (1564), the Spanish Company (1574), and the Turkey Company (1581), which later became the Levant Company, aiming to reach the spice merchants by the way of Bagdad and the Persian Gulf. The great East India Company was incorporated in 1600 and the China Company followed in 1604. The Virginia Company was organized in 1606. An appeal to go on the "Virginia Voyage" began—

> "You have heroic minds,
> Worthy your country's name
> That honor still pursues;
> Whilst loitering hinds
> Lurk here at home with shame
> Go, and subdue."

Courage to invest capital to develop foreign trade did not seem to be lacking, but apparently the spirit for personal adventure had to be stimulated.

The fields for commerce are, of course, well established. Exploration and settlement are no longer important factors to be considered. Owing to the losses in the World War, however, and the dislocation of trade relations, capital for the maintenance and development of our export trade is most necessary. Under the normal conditions of a balanced trade, imports will finance exports. In other words, there is merely an exchange of goods. Now that so many nations have a reduced exporting ability, we must consider the import of securities in payment for our goods. To put it in another way, we must grant long-time credits. Thus a problem is presented to the bankers and producers of the country that in some of its aspects is new in American finance.

European countries, as large exporters of capital, have had quite a definite experience in granting long-time credits. The foreign investments in 1914 of some of the principal nations were as follows:

Great Britain	$21,000,000,000
France	10,000,000,000
Germany	8,000,000,000
United States	800,000,000

It is thus clear that with but $800,000,000 of foreign investments in 1914, the United States has had but little experience with long-time credits, and it is also clear that to take a commanding place in the continuing commerce of the world, she must proceed with courage and do her fair share in granting such credits.

Such a policy, furthermore, will have very vital present and future advantages, for the United States has a productive ability far in excess of its domestic demands.

Loans of a similar character to those made by Europe, made through American banking concerns should, of course, be followed by the expenditure of the money for American products, thus establishing the basis for developing a continuing trade along normal lines of export and import.

Methods of Financing Abroad

European banking practice has developed two systems of financing long-time credits which may be characterized as the English and the German methods. In England, although some issues of securities are placed directly with the investor by the private bankers, as is the custom in all large financial centers, many of the foreign loans are placed through the medium of the "investment trusts." These cover investments issued by nations and municipalities as well as by public utility corporations and those doing business along approved industrial lines.

The well managed investment trust diversifies its investments with usually not more than 5 per cent of any one kind. Against its investments the trust corporation issues its own notes or debentures. The ultimate investor thus has a security of high quality with diversified risk and with the additional backing of the capital and surplus of the investment company. Typical companies are the investment Trust Corporation, Ltd., London; the Metropolitan Trust Company, Ltd., London, and the Second Edinburgh Investment Trust, Ltd., Scotland. The best managed of the investment corporations have averaged dividends of over 12 per cent for a long period of years.

The English banks mainly confine themselves to the short-time financing of foreign trade through the medium of acceptances and commercial bills. The ramifications of their business, of course, extend to all parts of the earth.

The great German banks, on the other hand, usually combine the functions of financing both short-time and long-time credits. They are both depository banks and investment houses. They underwrite issues, own and distribute the securities and through ownership or affiliation control banking and industrial corporations in various parts of the world. This plan, although having certain elements of danger if too large a volume of fixed credits is held, has been generally successful. It has given a quality of control which in co-operation with the government, before the war, developed a tremendous overseas trade. German-owned banks and other corporations in various countries gave the home banks a wealth of credit and economic information for the furtherance of German commerce.

The writer in 1914 (fortunately early in the year) presented a letter of introduction to the "Secretary of the Archives" of the Deutcher Bank. He was shown a veritable library with its steel stacks in which was collated in various forms material from all parts of the world on subjects as well as the usual credit information, covering particularly financial and economic

New Plans for Trade Extension

The United States, as has been stated, now has to compete in foreign trade with countries well organized for overseas commerce, with years of experience and with well established connections. Two important steps have been taken to make its efforts effective. The Webb law makes legally possible the association of concerns, which though competing for domestic business, may unite to compete as a unit for foreign trade. This plan not only reduces costs through smaller sales organizations, but makes it possible to compete on an equal footing with similar organizations in other countries (as the German cartel) as well as to standardize American goods.

More important, perhaps, has been the passage of the Edge bill, an amendment to the Federal Reserve Act, which provides for the incorporation of companies to finance overseas trade particularly through the extension of long-time credit and the local issue of debentures.

Under the leadership of John H. McHugh, vice-president of the Mechanics and Metals National Bank, New York, acting for a committee of the American Bankers' Association, the Foreign Trade Financing Corporation has been incorporated and is now in process of organization. It will have a capital of $100,000,000 and may issue debentures to the extent of $1,000,000,000. This corporation should be a very vital factor in maintaining and developing our export trade, so necessary to every interest in the country.

The farmer, the wage-earner, the merchant, the manufacturer and the banker will receive many benefits from this type of company, for there is an economic advantage in a maximum rather then a minimum production. Labor is more fully employed. Prices tend to be more stable both through the enlarged purchasing power of the people and the broader markets developed. The morale from full employment makes more contented citizens and more efficient workers. An increased export ability would develop under such conditions which would easily absorb the debentures as they were issued.

The nation as a whole would thus have a savings account, a reserve fund for the great future. Such a fund, the $21,000,000,000 of foreign investments (1914) saved England in her time of need, and the connections established with the borrowers have given and will continue to give her, in a measure, the control of a continuing commerce.

(*Continued on Page* 31)

Digitized by Google



LINK-BELT
Roller Chain

All Standard Sizes in Our Stock

LINK-BELT Roller Chain is the product of many years of engineering experience, careful manufacturing methods, close inspection of individual parts, and careful selection of proper materials. It is the choice of many experienced users.

THE CHAS. A. STRELINGER CO.
Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

A New Source of Funds for Highway Extension

To the Editor:

THERE are two articles in your issue of February 26 which have a very close relationship, and from which a lesson is obvious to the careful reader. The article, "The Legislature and the Trucks," calls attention to the injustice of penalizing the commercial trucks because of injury done to an inadequately constructed road in Monroe county, by heavily loaded trucks. This article emphasizes the desirability of properly constructed roads suitable for this improved system of transportation, rather than a special penalty on truck owners. The article, however, makes no suggestion as to the proper method of paying for the construction of roads adequate for heavy trucks.

A suggestion as to the proper source of funds to pay for such roads is contained in the article entitled "How Motor Trucks Add to Value of Farm Lands." The statement is made therein that in Hinds county, Mississippi, the building of roads adequate for motor trucks raised farm land values from $25 an acre to $100 and $125 an acre. The writer questions whether this four to five-fold increase in value is entirely due to good roads and the motor truck transportation which was made possible thereby. Probably about half of the increase in price per acre is due rather to the general decrease of 50 per cent in the value—that is, the purchasing price of the dollar, as shown in the index number of commodity prices; but even so, the balance would indicate that there was an actual increase of from $37.50 to $50 per acre directly traceable to the construction of the roads.

Undoubtedly also, the increase in land values due to the building of the good roads in Hinds county was not limited to contiguous farm lands. Doubtless there was even a more noticeable increase in the value of land at the business centers from which these good roads radiate. Would it not be common sense, as well as justice, therefore, to pay for the good roads out of a tax on the land values produced by the construction of such roads, rather than by a tax on the trucks?

The value of the trucks is not increased one cent by good roads. On the contrary, the value of the trucks, determined by their selling prices, tends to go down as the mileage of good roads increases. The greater the mileage of good roads, the greater is the demand for trucks; and a greater demand for trucks makes possible a decreased cost of manufacturing trucks, and consequently a lower price. Cheap transportation is greatly to be desired. It is obtainable by paying for the highway on which the trucks can be operated by a tax on the land values produced by the highway. On the contrary, a tax on the trucks is added to the cost of transportation, and all of the benefits of the improved system of transportation tend to be absorbed by the land owners who get something for nothing, at the expense of the consumers of commodities transported by the trucks.

Is there any fallacy in the foregoing statement? If so, where?

WARREN S. BLAUVELT,
President, Indiana Coke & Gas Co.,
Terre Haute, Ind.

FARM LABOR DEMAND GROWS

According to replies to an inquiry being received by the Michigan State Farm Bureau, the demand for farm labor this year will be even greater than last year despite the drop in prices of farm products. However, the wages paid will be somewhat lower, varying from $25 to $45 a month with board, to $75 without.

LABELING BILL PROTESTED

Representatives of Michigan manufacturers at a hearing before the House committee on state affairs at Lansing have protested against the bill of Rep. Walter A. Heinzie requiring labels on products of goods sold in this state. It was declared the act would discriminate against Michigan manufacturers in favor of mail order and outside merchandise.

17,905 PUT TO WORK

The monthly statement issued by the Employers' Association of Detroit, late last week, says that during February 17,905 men were added to the payrolls of 79 factories in the city. Of the 62,787 men now employed, 21,357 are working full time and the remainder, employed in 40 shops, are working an average of 36½ hours a week. The total working force in Detroit plants is approximately 95,000, the report says.

FEBRUARY SHIPMENTS

Reports to the National Automobile Chamber of Commerce indicate that during February 9,400 carloads and 6,700 driveaways left the factories. This means that deliveries for the month were about 50 per cent greater than for January and about one-third of those for February, 1920, when shipments totaled 25,505 carloads and 43,719 driveaways.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

Creating a Copper Market

Bill Introduced in Legislature Would Permit Producers to Fabricate the Metal They Mine

By L. D. TUCKER

THE BILL to permit mining companies to manufacture articles from their output, as framed by Rep. Miller and introduced into the Michigan Legislature, Monday, February 28, is looked upon by upper Michigan's industrial interests—particularly the copper mining men—as one of the most vital issues pertaining to that region's economic progress that has ever been placed before the law makers. The measure is designed "to afford relief from depression in the copper market such as now exists, and which has resulted in a sharp curtailment of operations in upper Michigan mines and a surplus of 150,000,000 pounds of copper."

"I know that, generally, sentiment is against permitting a corporation organized for one thing to engage in another business," says Mr. Miller, "but something has to be done, as the condition is becoming serious.

"Upper Michigan produces virgin copper. The mining cost is somewhat higher than with the ore smelting mines of the West, and when lack of demand forces prices below a certain point, the Lake Superior copper companies have to quit. If the companies went into the manufacturing business in poor times, they could continue mining for a somewhat longer period, as manufacture by themselves would absorb a certain amount of loss in mining."

It is a fact that 25 copper mines in Michigan are now closed down entirely, while those that are operating are running at about 20 per cent of normal. It is a condition never before paralleled in the copper country—a region which, since the discovery of copper in 1834 up to the signing of the Armistice, had produced one-sixth of the nation's output of copper ore of the highest grade obtainable.

The question naturally arising from such a proposal is: Is upper Michigan equipped advantageously to carry on the manufacture and sale of its raw product? Those who are now engaged in that industry; those of upper Michigan's lifelong residents who have closely followed the progress of copper mining and have made it a study, as well as expert engineers from outside the peninsula who have surveyed the situation and reported upon it, say that the region is amply endowed by nature with the facilities which would make the manufacture of copper equipments an ideal industry for upper Michigan.

As for railroad, waterway and highway transportation facilities, upper Michigan is more advantageously equipped, probably, that any other copper-producing region in the country. With its hundreds of miles of shore line on the Great Lakes, its adequate and thorough system of railways and its 1,500 or more miles of macadamized trunk highways, reaching out to the main trunk lines of Wisconsin, Illinois, Minnesota and other middle-western sections, there is no shortage of channels through which to ship the finished product.

Upper Michigan, though a region of which comparatively little has been told, and learned, is rapidly coming into prominence for its unusual industrial features and its increasing rate of economic progress.

The Upper Peninsula has more wage earners than the combined states of Wyoming, Nevada, South Dakota, North Dakota, Idaho, Arizona and Delaware. Nearly one-third of all the iron ore and approximately one-sixth of all the copper produced in the United States are mined in upper Michigan. The lumber products of the Upper Peninsula are equal to the lumber products of Wisconsin, Pennsylvania, California, Minnesota, Illinois or Mississippi. The Upper Peninsula has a thousand miles of coast line, and water power at Sault Ste. Marie second only to the great falls of Niagara. There is not a city in Arizona, Nevada, New Mexico or Wyoming as large as Escanaba. There is not a city in Vermont, Wyoming, New Mexico, Nevada, Mississippi, Arizona, North Dakota or South Dakota as large as Calumet. The Upper Peninsula has more public schools than Rhode Island, Delaware, Wyoming, Nevada, New Mexico, Arizona or Utah, and spends more for these public schools than is spent in New Hampshire, Vermont, Rhode Island, Delaware, Wyoming, New Mexico, Arizona or Nevada. In these public schools there are more pupils enrolled than in Delaware, Wyoming, New Mexico, Arizona or Nevada.

The Upper Peninsula pays a larger corporation tax to the federal government than is paid by Arizona, Arkansas, Florida, Idaho, Mississippi, Montana, New Hampshire, North Dakota, South Carolina, Vermont or Wyoming. The per capita wealth in the Upper Peninsula is greater than the per capita wealth in Arkansas, Colorado, Nebraska, New Hampshire, Vermont and all the southern states. There are more than 75 banks in the Upper Peninsula and the savings deposits of these are greater than all the savings deposits in Delaware, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Mississippi, Louisiana, Kentucky, Tennessee, Indiana, Kansas, Montana, Maryland, Colorado, Washington or Oregon. The average deposit of each depositor in the Upper Peninsula is greater than the average in eighteen other states.

Here, then, are just a few facts in support of the contention of upper Michigan's industrial interests that the region is amply equipped to add copper manufacturing to its list of achievements. Upper Michigan's advantageous natural endowment as pertains to virgin timber already has established the region as ideal for the location of woodenware factories, chemical plants, iron furnaces and other features utilizing the wood, or wood products. These industries are rapidly increasing each year.

It is naturally with a great amount of interest that upper Michigan's pioneer citizens and established industries look to the outcome of Rep. Miller's measure. It is a matter of importance more important to the region than can now be fully realized, and the rapid progress of the lakes-to-ocean movement, which would open the Great Lakes country and upper Michigan's copper areas to the seaports of the world, only serve to magnify the project. It is looked upon, further, as determining the life and growth or decline and disuse, of upper Michigan's natural resource in copper.

In the past, upper Michigan has sent its copper to Connecticut, Pennsylvania and other copper manufacturing districts throughout the country. The raw product has come back in the form of wire, copper tubing and other equipment, plus the hundred and one assessments and taxes heaped upon it during the process of shipment, manufacture and re-shipment. In other words, upper Michigan pays double and treble for the article manufactured from the raw product which the region itself produces. It is not a fair nor reasonable order of things, and it is not entirely necessary nor mandatory that this condition need exist in the future. Hence Representative Miller's measure.

Digitized by Google

Reo Motor Car Co. Wins The Barber Patent Suit

The Reo Motor Car Company, Lansing, has just won an important patent case, a decision having been rendered in its favor which, it is said, will have a far reaching effect not only for the company, but for the industry as a whole. The case, which has been in the courts nearly six years, was the one of Barber vs. the Otis Motor Sales Company, Utica, N. Y. Reo distributor, and the decision was rendered by the United States Circuit Court of Appeals. The litigation was over the priority rights to a valve seated in a cage, which later was screwed into the cylinder head and was removable by swinging the push rod aside. Horace T. Thomas, vice-president and chief engineer of Reo, says about the decision:

"The usual process in such cases is to apply for a patent on some device or part of a motor car, then let it stand unissued for an indefinite period while the applicant amends his claims from time to time, taking advantage of the discoveries and progress made by others.

"The most difficult obstacle to surmount in this Barber suit was the fact that a prominent automobile manufacturer against which Barber had brought suit prior to his attack on Reo, settled for $4,000 and thereby gave a tacit recognition to the validity of Barber's claims. That in their earlier decisions the lower courts must have been influenced by this, we felt sure.

"In legal terms the case may be summed up as follows for the benefit of those who are interested in its technical phase: In 1915 William Barber, alleging an infringement on his patent for valve gear by the Reo mechanism, brought suit against the Otis Motor Sales Company, Reo distributor at Utica, N. Y., and won the case under such circumstances that he claimed the decree of the federal court of that district was also binding upon the home corporation at Lansing. That decree was affirmed by the United States Circuit Court of Appeals which, except in rare instances, is the court of last resort in patent cases. Not content with this double victory, Barber then started suit against the Reo Motor Car Company of New York, evidently thinking it the parent concern, whereas it is a separate and only a sales organization. In this case he sought an injunction against the exhibition of Reo cars at the New York Automobile Show in 1917, the suit being filed just prior to the opening of the Show. At about the same time a similar suit was instituted in the federal courts of Michigan against the Reo Motor Car Company, Lansing—the manufacturer.

"In these steps Barber made his mistake, for the New York city suit was decided against him and the Michigan suit was deferred, pending the outcome of the litigation in the East. Although the claims made by Barber in all these suits were the same, the defense in the New York case was along an entirely different line from that in the Utica case. In view of the apparent conflict between two federal courts in New York state, the court of appeals, upon request of the defendants, sent the Utica case back for a new trial.

"The new trial took place in January, 1918, and some two years later, in May, 1920, the federal court at Utica again sustained the Barber patent. The defendant again appealed, and in view of the new evidence furnished by the Reo Motor Car Company, none of which had been before any higher court on the former appeal, the Circuit Court of Appeals has just decided not only that Reo mechanism does not infringe the Barber patent but that patent itself is invalid.

"There being no appeal possible from that decree, the litigation is probably now at an end, for the only case still in court is the Michigan suit against the Reo Motor Car Company, Lansing, which doubtless will be dismissed."



When purchasing cutters, bear in mind that —

BROWN&SHARPE

Carbon & High Speed Steel

CUTTERS

Give highest returns per dollar invested.

B&S cutters are the result of fifty years' experience in the manufacture and use of milling cutters. The shops around you will insist that B&S cutters give longest service and reach the maximum of Cutter Economy. They know from experience.

BROWN & SHARPE MFG. CO.
Providence, R. I.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

SEND US YOUR ORDERS
for gray iron castings, finished or in the rough. Motor blocks our specialty. We are equipped to give you prompt delivery. Address:
Boyne City Chamber of Commerce
BOYNE CITY, MICHIGAN

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

FORD REACHES 2,000 MARK

This paper has been advised officially that on March 2 the Ford Motor Company produced 2,070 cars. Assurance was given that the 2,000-a-day mark was then not exceptional but was about the general average, and it was further said that the company expected to build and ship 60,000 cars in March.

"You may say that the sale of Ford cars is increasing in a satisfactory way and that the best evidence that our business is picking up is to be found in the many orders for trainload shipments from dealers in different parts of the country," said the official. "We do not want to appear too optimistic but we feel confident that automobile sales will continue steadily to grow. I believe there will be a shortage of Ford cars this year."

HAYES ALBION PLANT RESUMES

The Hayes Wheel Company's plant in Albion, which had been idle since November, reopened last week and expects to be on a 50 per cent basis by the end of the month. Normally, 500 men are employed. The reopening was made with about one-third that number.

LEXINGTON ON 75% BASIS

The Lexington Motor Car Company, Connersville, Ind., has issued a statement in which it is announced that the factory is operating on a 75 per cent production basis.

STANDARD TRUCK SALES CHANGE

Sales and service of the Standard Motor Truck Company, Detroit, hereafter will be handled direct from the factory at 315 Bellevue avenue, it is announced by W. A. Marfey, sales promotion manager.

GOODYEAR REFINANCING STATUS

The following announcement was made by the Goodyear Tire & Rubber Company with reference to the postponement of its meeting scheduled for March 4, to March 15 at which the stockholders are to pass upon the company's $85,000,000 refinancing program:

"Officers of the Goodyear company have been advised by the merchandise creditors' committee that owners of more than 75 per cent of the merchandise indebtedness dealt with by the 'plan of readjustment' have assented to the plan. While the company is gratified at the progress made by the merchandise creditors' committee, in view of the large amounts involved, the plan cannot be carried out so long as creditors of any substantial amount of the company's debt have not assented.

"Accordingly, the company does not feel justified in completing the changes in its corporate structure contemplated by the plan until substantially all creditors have filed their assents with the committee, and the meeting of stockholders called for Friday, March 4, will be adjourned until March 15. It is hoped that the remaining creditors will have signed assents and the plan can be declared operative."

MAXWELL TREASURER RESIGNS

Walter M. Anthony, who has been treasurer and comptroller of the Maxwell Motor Company since 1913, has resigned.

THREE MICHIGAN SHOWS

Flint's 1921 automobile show was as successful as other events of the kind held in other cities of the state thus far this year. Record-breaking attendance and dealers selling cars, and especially lining up a good many live prospects are reported. Cars shown included Packard, Cadillac, Buick, Chevrolet, Essex, Hudson, Dort, Nash, LaFayette Dalon Track, Overland, Willys-Knight, Ford, Dodge, Studebaker Paige, Liberty and Fordson tractor. In addition there was a decidedly interesting and representative display of accessories and parts. One exhibit, that of the Champion, was in the nature of a history of the spark plug. Another display was that of the Imperial Wheel Company, also giving a good idea of the progress made in the construction of artillery wheels. The Flint Motor Axle Company, Marvel Carburetor Company and a score of other local concerns had their wares on display. The show was promoted by the Flint Automobile Dealers' Association.

Battle Creek will have a show at the former Red Circle, in West Jackson street, March 28 to April 2. There will also be a show, March 17 to 19, at Silver Beach pavilion, St. Joseph, promoted by the Twin City Auto Dealers' Association, which embraces the distributors of St. Joseph and Benton Harbor.

DU PONT IN FLINT AND PONTIAC

Flint was visited by Pierre S. du Pont, president of the General Motors Corporation, last week. So was Pontiac. In both cases practically nobody but a few of the higher officials of the local units of the Corporation had been advised of the "chief's" visit. In Flint Mr. du Pont had luncheon as guest of the Board of Commerce, to which body he was introduced by C. S. Mott. Mr. du Pont addressed the members, saying in part:

"I have been told that the best way to size up a city is from the appearance of its men and its hotels. I have been in Flint only 15 minutes but have had an opportunity to see both and am convinced that Flint ranks 100 per cent in both respects.

"General Motors has undergone no great change. The men who are General Motors, the executives who operate our factories, are still with us and we hope will continue with us. Men like Mr. Bassett—he is president of the Buick Motor Company—are the men who run General Motors, and with their help we are going ahead with the same efficiency.

"Flint may have no fear for the future. Flint has made General Motors as much as General Motors has made Flint. I hope that relation will continue. May I ask you at our first meeting that we continue to work together for the success of Flint and General Motors?"

In Pontiac after visiting the local GMC units Mr. du Pont said to a number of interviewers practically the same thing he had said in Flint.

FOUR DURANT PLANTS FOR STATE?

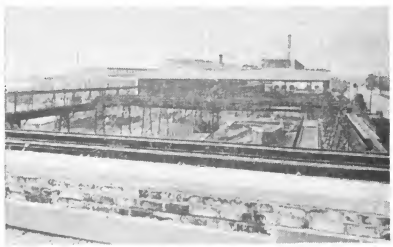
While in Cleveland recently Carroll Downes, vice-president of the new Durant Motors, Inc., said, it is reported, that W. C. Durant expects to have four plants in Michigan, namely, in Flint, Jackson, Saginaw and Lansing, and that his first car, which will sell for less than $1,000, will be out some time in April.

OLDFIELD TIRE ELECTION

J. M. Dine, who has been identified with the rubber industry 14 years, first with Goodyear and later with Firestone, has been appointed vice-president and general manager of the Oldfield Tire Company, Akron, of which Barney Oldfield is president. B. M. Robinson has been elected secretary; H. L. Allsop, treasurer, and M. E. Moffett, assistant treasurer.

Digitized by Google

BUILDINGS FOR SALE



The following described buildings, located at Wyandotte, Michigan, were constructed in 1918 for war production and are therefore no longer needed:

Main building of structural steel construction, 335'x380'. Three bays are equipped with 7½-ton Electric Traveling Cranes.
Two-story Steel, Concrete and Brick building, 160'x60'.
Steel and Brick Power house building, 43'x100'.
Steel Warehouse, 28'x100'.
Two--story Brick, fire-proof, office building, 40'x51'.

And in addition:

600-ft. Steel Crane Runway outside of buildings.
Nearly three-quarters of a mile of railroad track.

Will consider leasing the land, consisting of approximately 700 feet on Biddle Avenue, with an average depth of 688 feet to the Detroit River, with option to buy on easy terms.

This is an unusual opportunity to acquire splendid property for manufacturing or other purposes.

For full particulars address

DETROIT SHIPBUILDING COMPANY

Foot of Orleans Street **Detroit, Michigan**

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

MAIN 1491

SPRUNK
ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Detroit—Judges Arthur C. Denison, Cincinnati; Clarence W. Sessions, Grand Rapids, Rapids, and D. C. Westenhaver, Cleveland, sitting in the United States District Court at Detroit, late last week granted the injunction sought by the Michigan Central and 12 other Michigan roads restraining the state of Michigan from enforcing the provisions of the Smith fare law, under which 2½ cents a mile would be charged, as against the 3.6 cent rate authorized by the Interstate Commerce Commission. The court held that the authority of the I. C. C. in rate and fare matters superseded that of the individual states until such time as a change should be ordered by Congress.

Port Huron—The force at the Grand Trunk shops was increased by 375, March 1, and there are now 500 on the payroll. A general shutdown was ordered February 12, but some 120 men were kept to do certain important work.

Detroit—Henry Ford has been elected president of the Detroit, Toledo & Ironton Railroad to succeed James A. Gordon, who remains a member of the board of directors. Other important changes in personnel are announced. C. J. Kavanaugh, general superintendent, and C. P. Burgman, superintendent of motive power, retire. Kenneth Cowper, of Springfield, O., has been appointed superintendent of the northern division, and William H. Kinney, also of Springfield, superintendent of the southern division. E. B. Dudley, general auditor; C. H. Hochstetter, assistant general freight agent, and C. A. Young, treasurer, have been retained. Other changes are to be announced later, it is reported.

Washington—In the matter of the Kalamazoo Tank & Silo Company, Kalamazoo, Mich., against the Director General of Railroads, as agent, the Chicago & North-Western Railway Company, et al., the Interstate Commerce Commission has decided that the storage charges on hollow building tile held on carrier's right-of-way at Boone, Ia., were unreasonable and has awarded reparation and prescribed the measure of reasonable maximum charges. The case, which was No. 11000e on the Commission's docket, was submitted on April 23, and decided December 29, 1920. The findings have just been published.

Detroit—Representatives of the common labor employed by the Michigan Central Railroad conferred in Detroit this week with representatives of the company regarding contemplated revision of wages downward. It was announced by the labor men previous to the meeting that they would oppose any reduction. A statement issued by Henry Shearer, general superintendent, said that the road had made an investigation of the wages paid its common labor and had found that they were higher than in other industries. The law provides that before a case of this kind can be taken to the Railway Labor Board, the roads and their employes must make every effort to reach an agreement.

Detroit—The Interstate Traffic Association, an organization whose purpose is to trace and expedite the movement of cars and carlot shipments through the Detroit, Toledo and Windsor terminals for firms who employ car tracers, has elected J. E. Foland president and J. Edward Berry secretary-treasurer. The association's offices are at 503 Lincoln building.

Lansing—John T. Ross, traffic manager of the Lansing Chamber of Commerce, has advised Lansing concerns to ship to southern points by water, where possible, in order to avoid the higher rail rates approved by the Interstate Commerce Commission.

Detroit—O. C. Conlee has been appointed general agent in Detroit for the Detroit, Monroe & Toledo Shore Line Railroad, succeeding O. K. Ingham, who has been assigned to other duties. The appointment dates from March 1.

Battle Creek—More than 500 men are said to have been called back to work at the motive power shops of the Grand Trunk Railway. The working schedule is 48 hours a week. It is reported that there are now $3,000,000 worth of new freight cars in the yards; also 12 locomotives which have been completely overhauled.

Detroit—Another illustration of what the "scrambling" of railroad equipment implies has come to light in the office of the superintendent of car service of the Pere Marquette Railway. Nearly two years ago, more than 2,000 cars were purchased, and of these, 660 cars—33 per cent—have not yet reached the home lines. Other roads have been keeping them in service because of the fact that they involve practically no maintenance and repair service.

Washington—Authority to obligate itself to the extent of $2,500,000 for the purchase of equipment to cost $3,402,141 has been asked of the Interstate Commerce Commission by the Minneapolis, St. Paul & Sault Ste. Marie Railway Company.

A CORRECTION

The list of new officers of the Mayes Brothers Tool Manufacturing Company, Port Austin, as published in this paper February 26, contained inaccuracies. The annual election resulted in the selection of the following: President, Frank Kinch; vice-president, George S. Farrar; secretary-treasurer, H. F. Finan; general manager, John Mayes; directors, Lawrence Yaroch, Sr., S. J. Wallace, Frank Kinch, M. H. Mayes, John Mayes, H. Finan and G. Farrar.

CHAIN BELTS NEW PLANT

Work on four buildings of the new West Milwaukee plant designed by Frank D. Chase, Inc., engineers, Chicago, for the Chain Belt Company of Milwaukee, has been completed. One building is used for the manufacture of Rex mixers and pavers, provision being made to convert this into a malleable iron foundry at a later date. The core-making building is of concrete and steel construction, with the first floor used for pattern and baked core storage, the second for metal pattern shop, and the third for core making. The Pond truss type roof used dispenses of the hot gases and smoke and provides perfect lighting. The addition to the foundry building has an "A" frame roof construction, the new section being readily recognized by the improved lighting. To care for the increased power, the powerhouse was also extended. By having a well co-ordinated plan of development prepared in advance, all of these additions have been made as a part of a constructive program, which means operating efficiency at all stages of growth.

Hughes
FACTORY EQUIPMENT
STRONG, DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE - ALLEGAN, MICH.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

L-XX

HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

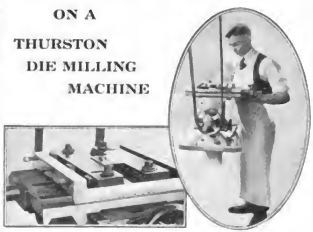
Detroit, Mich.

Mill your

BLANKING & TRIMMING DIES

ON A

THURSTON DIE MILLING MACHINE



Let us give you details.

THE MOTCH & MERRYWEATHER MACHINERY CO.

MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 6615 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Ohio & Michigan Coal Co.
Miners and Shippers of Coal
LONE STAR
Mined at Blair, W. Va., C. & O. R. R.
BEST FOR { Gas and By-Product Glass Plants Excellent for Steam
BLACK HAWK SPLINT
Mined at Big Creek, W. V., C.&O.R.R.
FOR { Malleable Iron Plants General Steam Purposes
Low Ash *High Heat Units*
Detroit, Michigan Main 4064

Collections of Every Kind and Size
TACTFUL PERSONAL COLLECTION SERVICE for Manufacturers and Dealers Business and Professional Men
Write — For Interview — Phone
B. APPLEBY Dist. Mgr.
1019 Dime Bank Bldg., Detroit Main 3361
EFFECTIVE
"Results or No Pay"

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6411 Main 6662 680 Port St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Chicago—The Seventh Federal Reserve Bank has issued a report on building and housing activities in its territory, which includes Illinois, Indiana, Iowa, Wisconsin and lower Michigan. Regarding building permits issued in January as compared with the corresponding month in 1920, the following statistics are given for 10 Michigan cities: Detroit, 813 permits, cost $3,944,943 as compared with 686 permits cost $5,658,830; Grand Rapids, 112 permits, cost $267,347, as compared with 72 permits, cost $528,455; Flint, 81 permits, cost $45,929, as compared with 156 permits, cost $852,965; Saginaw, 49 permits, cost $25,694, as compared with 44 permits, cost $52,415; Lansing, 43 permits, cost $83,749, as compared with 23 permits, cost $49,035; Bay City, 30 permits, cost $17,000, as compared with eight permits, cost $37,400; Battle Creek, 26 permits, cost $24,775, as compared with 17 permits, cost $18,248; Kalamazoo, 16 permits, cost $77,475, as compared with 12 permits, cost $26,181; Pontiac, 45 permits, cost $34,933. Total number of permits issued this year was thus 1,235 and cost involved $4,602,887, as compared with 1,030 permits issued last year (Pontiac figures were not available) the cost involved being $7,262,492.

Several examples were mentioned in the report to show that cost of construction is decreasing. One case cited was the result of an investigation of the Illinois Society of Architects. It referred to an 18-apartment building. Under date of May 24, 1920, the estimated cost of the structure was fixed at $225,548; under date of January 10, 1921, the cost was set down as $192,209. The largest reductions made were those in carpentry, plastering, painting and masonry. Another example was the case of a manufacturing plant, the cost of which was estimated at $605,348 under date of July 19, 1920, and which was revised to $551,282 on January 19, 1921. In this instance the percentages of the total show that $349,015, or 63.29 per cent was for materials and $202,265, or 36.61 per cent, was for labor.

Grand Rapids—Twenty-nine permits were issued during the week ended March 4 but the cost involved was only $24,200, as compared with $42,525 for 26 recorded the previous week. Most of the permits were for dwellings. For the week which ended February 26, 20 permits were taken out, the outlay aggregating $42,525. This compares with 24 permits for the previous week and in money is about $33,000 less. Of the 30 permits, five were for new construction. The largest item was the permit to the Brown-Graff Company for a warehouse to cost $20,000. The second largest was for a garage to cost $7,000.

Rockford—Eighteen bids were received on the construction of a school building for which $76,000 was voted by the citizens. Inasmuch as not one of the bids was for less than $100,000, all were rejected.

Lansing—Lansing contractors and builders look for a busy season and are preparing for it. E. H. Ward & Company report that they have many orders for furnaces. The Cooper-Ehinger Construction Company has started work on four homes. The Lansing Company says all indications point to considerable road building throughout the state. There is an especially strong demand for cement mixers and road scrapers and levelers manufactured by the company.

Detroit—The reports from the Detroit Builders & Traders' Exchange for the two weeks ended March 3 fail to show that any important new jobs have been awarded by contractors. There have been awards on sub-contracts, on alterations and other minor jobs, but very little that has a direct relation to manufacturing. As far as projects for the future are concerned, the list from the architects shows that much is in preparation. Among the projects reported are the following: A two-story bank and office building, a store and office building, a store and assembly hall, a contemplated state penitentiary, a 50-apartment building, a nine-story building, a theater building, a contemplated double-deck stadium for the Detroit Baseball Club, a 60-apartment building, a one-story 10-store and garage building, a four-story store and flat building, and a number of other jobs.

The week ended March 5 was one of the best thus far this year in the number of permits issued. There were 332 permits, as compared with 127 for the previous week, 234 for the week of February 19, and 231 for the corresponding week a year ago. The expenditure involved last week was $986,670, as against $557,625 for the week of February 26; $694,990 for the week of February 19, and $703,060 for the corresponding week in 1920.

Three Rivers—The Eddy Paper Company, it was announced late last week, will build a mill for manufacture of paper fruit boxes to replace the present board boxes.

How Motor Bodies Are Made

(*Continued from Page 7*)

auto body factory, like that in plants where articles of similar class are made, is done under a system capable of indefinite expansion or contraction to meet passing conditions.

Once the body has been assembled, the next operation considers "Saving the Surface." The finished body is covered with preparations which prepare it for the finishing paint shop.

The first coats to be applied serve to preserve the metal parts against rust and the wood against warping and weather changes. This is entirely protective. The later coats are built up to prepare for the high finish that gives the body its beauty.

Practically all the painting is now done by spraying. The drying is done in ovens. Many of the plants have worked out their own ovens designs and called in builders to complete them. They are designed to give a circulation of air at a temperature approximating 125 degrees. Steam heat is widely used. Spraying has proved valuable because of its speed. It is possible to manufacture bodies by progressive production processes, moving them along on conveyors and painting and drying them on schedule time by means of these improvements over the old-fashioned system of paint pot and brush. Only seven panels still demand hand work before the last coat is to be applied. Here and in the trimming the spray loses out.

Perhaps the greatest economy, according to manufacturers, which the modern system of painting and drying has effected has come in the saving of floor space. The oven can dry any coat of paint in less than one day, and under conditions absolutely controllable, where under other methods the body would have to

(*Continued on Page 34*)

Digitized by Google

Detroit Week Celebrated By the Board of Commerce

This has been "Detroit Week" with the Board of Commerce, a series of noon meetings having been held at which the city's present problems and future growth, particularly as related to the assistance given by the Board, were discussed.

The introductory address, at the meeting on Monday, was delivered by Charles H. Campbell, president of the board. In the absence of the Mayor, the spokesman for the city was Acting Mayor John C. Lodge, who spoke on "Detroit's Next Million." The guest of the day was Julius Kahn, chairman of the House committee on military affairs, who chose for his subject "American Problems of the Present Day." March 8, the second day, the topic was "Detroit's Freight and Passenger Transportation Requirements," the principal speakers being A. T. Waterfall, vice-president and assistant general manager of Dodge Brothers, and Col. Sidney Waldon, chairman of the board's committee on aeronautics.

"Is Your Next Door Neighbor a Good American?" was the subject on Wednesday, the speakers being Frank Cody, superintendent of Detroit public schools, and Fred M. Butzel, vice-chairman of the Board of Commerce Americanization committee. Thursday, March 10, David A. Brown, president of the General Necessities Corporation, spoke on the subject "Keeping the World Sold on Detroit," and Dr. James Inches, police commissioner, talked about "The Practical Side of Safeguarding Detroit."

John A. Brown, president of the Detroit Retail Merchants Bureau, was the speaker Friday, his subject being "Selling a Million People What They Want;" Julian A. Krolik, of the wholesale house of A. Krolik & Company, spoke on "Enlarging Detroit's Wholesale Market."

Harry A. Wheeler, president of the Union Trust Company, Chicago, and former president of the Chamber of Commerce of the United States, is guest of honor at the "Get-together Dinner" tonight, at which the other speaker will be John A. Russell, vice-president of the Board of Commerce, and editor of this paper. Mr. Russell's topic is, "Detroit's Commercial Possibilities and the Board of Commerce."

ROBINSON'S MONTREAL OFFICE

Dwight P. Robinson & Company, Inc., engineers and constructors, New York, have opened branch offices in Montreal, in the Dominion Express building. Alexander C. Barker, vice-president, is in charge. The company is a consolidation of Westinghouse, Church, Kerr & Co., Inc., and Dwight P. Robinson & Company, Inc., and has done extensive construction and engineering work in Canada for the Canadian Pacific Railway, Canadian Salt Company, Canadian Crocker-Wheeler Company, Dominion government, Aetna Explosives Company, Grand Trunk Railway and others.

FARMINGTON BANK PLANS HOME

Directors of the Farmington State Savings Bank, Farmington, Michigan, have organized the Farmington Improvement Company with a capital of $100,000 and have arranged to buy the Owen Hotel property on Grand River avenue. A fine modern bank building of brick and cut stone construction will be erected. The building will also provide six stores, five shops of offices and five living apartments. Directors are: Fred M. Warner, Clinton McGee, Harley D. Warner, C. G. Collins, Howard M. Warner and Edgar S. Pierce. February 21 the Farmington State Savings Bank reported total assets of $822,171.09 and total deposits of $604,447.84.

Frank Sage, who is interested in the Hastings Lumber & Coal Company, Hastings, and who formerly was with the United States Rubber Company, has become manager of the Hastings Wool Boot Company.



A Malleable Iron Pressure Ring (12½" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x44"—21" Swing to ⅝"x4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

***Detroit Office*—Ford Building**
***Chicago Office*—618-622 Washington Boulevard**
***Milwaukee Office*—209 Sycamore Building**

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, MARCH 12, 1921

The Proposed State Income Tax

THE very pronounced declaration made against the proposal for a state income tax to a committee of the legislature this week indicates how strongly the business folk of the state feel on the subject. Burdened since federal war necessities called for the product of an income tax, our manufacturing and commercial population has no heart for the addition of a second tax of this character for state purposes. This proposal is the distinct and concrete attack of the agricultural districts of the state upon the prosperity of the industrial cities and villages. It originates with the Grange and the Michigan State Farm Bureau, two organizations which are distinctly agricultural and equally distinctly organized against justice to the cities and villages. Having come to the point where there must either be economy—and the farmer legislator is the last man to insist upon economy—or more revenue for the state, the agricultural interests have quite class-consciously united in an attempt to put it over on the industrial counties. It does not seem to enter the minds of the tillers of the soil that the very best fiscal course that they can adopt for the state is one which is not harmful to their principal markets, the cities of the state. It does not seem to satisfy them that under the present defective method of equalizing the burdens of state taxation the rural counties are paying taxes on from one-third to one-half the value of their properties, reckoned on a cash basis. It does not seem to be admitted that the leading industrial and mineralized counties of the state are paying a share of the state tax that is all out of proportion to their population, their wealth or the values of the properties contained within their boundaries. All that enters the strabismic eye of the agricultural tax economist is that the cities still have something left, and that from them that have shall be taken away, to reverse the scriptural description.

An income tax in Michigan is an undesirable tax, because taxes on incomes having been appropriated by the federal government as a source of revenue, should be permitted to remain to it as its separate source of such revenue. This is good tax economics.

An income tax in Michigan is likely to be an unjust tax, because the more closely the inquest for such revenue approaches the farmer the more likely it is to become inexact and incapable of proper incidence. The business enterprise keeps books on its operations largely for cost-keeping purposes; largely, too, because these enterprises are the property of many persons, associated as partnerships or corporations. The farm operation is at most a family operation on which books are rarely kept, and the income of which may be made the subject matter of the widest and wildest guessing. Any one familiar with the character of the returns made on the federal income tax will have little trouble recognizing how vastly disproportionate the returns would be, dollar for dollar of actual income earned, between the industrial and the agricultural unit of income. Where the incomes of individuals are concerned the city employe on a salary would not be one-two-three with the farmer as to living expenses. The city man's living expenses are actual, calculable and registerable. The farmer's living expenses may be set at almost any value he puts upon them, because they are vague, indefinite and unregisterable.

The state of Michigan does not need an income tax. What it does need, in the order in which we are about to set them down, in order to bring about a better relation between state income and necessary expenditure, is something like the following:

First—A system of rigid economy which will cut out fads and faddists, make state institutions something less than fashionable boarding houses, and without reaching either toward niggardliness or meanness, make the fare and accommodations of prisons less inviting and the housing and keep of defectives and dependents a little lower in the scale than that of competent and honest people who earn their living and maintain their homes.

Second—The incorporation in the tax levy of about a billion dollars in the value of farm lands which are today under-assessed, and which, priced at public sale at from $150 to $200 per acre, are assessed for tax purposes at from $35 to $60 per acre.

Third—The wiping out of the exemption from taxation of nearly $300,000,000 of municipal securities held in this state, which are not only not contributors to the tax levy, but are hindrances to the investment of capital in industry, commerce and both urban and agricultural real estate.

Fourth—If the adjoining states of Wisconsin and Minnesota put, as they are threatening, a tonnage tax upon the products of their mines, then a tonnage tax should be placed upon the product of Michigan's mines. In the event that Minnesota taxes iron ore, the Minnesota tax will determine the market and the Michigan mine owner will be collecting the tax for himself, whether he has to pay it to the state or not.

Michigan needs no income tax. She needs no corporation tax, either. If she starts out with a repeal of unnecessary and damaging exemptions and makes the agricultural land-owner pay taxes on even percentages of true values with the city land-owner, we shall have plenty of leeway for additional state revenue for many years to come.

Democracy, Oligarchy and Tyranny

PEOPLE have but to read history to note that communities and nations which reduce the units of representation in their legislative bodies eventually lose control of their representation and drift into the control of their office-holders. That tendency has been rampant in Michigan in late years, and it is about time that the public took notice of it. First off, some theorists proclaimed the inefficiency of the aldermanic representatives of cities in their local councils. In Detroit, Grand Rapids, Kalamazoo and other cities of size in this state the men who came from

Digitized by Google

the common people and the lowly districts were declared to be incapable of representation, and moves for commission forms of government and small councils were backed up by respectable but professional reformers. Every one of these movements was preached by men who were making a living out of their preachments. Every Michigan city which has reduced the number of its local legislators is governed worse today than it was under the old system. There is less responsibility. There is greater concentration and abuse of power. There is heavier expense of government.

As the situation progresses the tendency is to reduce the powers of the electorate. Only today the city clerk and acting mayor of Detroit are denouncing the expense of holding primary elections at which the people may determine who are to be their officials. This is a step in the direction of oligarchy, the government of the people by the chosen few. The next logical step, if it were possible in America, would be a dictatorship.

In the state a similar movement is in its inception looking to the abolition of the democratic and republican system of supervisor governments, thoroughly representative, and the concentration of power in the hands of a limited number of legislative and executive officials. This, too, must lead, as it has led in the cities, to lessened responsibility and eventually dearer government. Professional theorists, who get sap-headed, pseudo-reformers to support them, the aforesaid sap-heads having no actual knowledge of the theories of government or the basis of the American system, are preaching the desirability of turning from democracy to oligarchy. If the state listens to them and accepts the change, the day of petty tyranny is not far off.

Six Men on a One-Man Job

UNDER the present classification rules of the railroad shop crafts—rules which the roads are seeking in proceedings before the Railroad Labor Board to have terminated—such labor waste as is illustrated in the following case is of constant occurrence:

In order to change the nozzle tip in the front end of a locomotive it is necessary—

1. To call a boilermaker and his helper to open the door, because that is classified as boilermakers' work;

2. To call a pipeman and his helper to remove the blower pipe, because that is classified as pipemen's work; and

3. To call a machinist and his helper to remove the tip, because that is classified as machinists' work.

The same three forces must be employed in reverse order to put in the new tip.

Before federal control a machinist's helper or any handy man around the place put in nozzle tips alone.

Similarly, railroads are required to employ members of three crafts—machinists, sheet metal workers, electricians and their helpers—to make a repair on a locomotive headlight, which job formerly was handled, and can be handled today, by one or two men.

And then the alleged economists wonder why, in the face of larger gross revenues, the railroads continue to pile up deficits!

Merchandising is like operating a wheelbarrow. A man must get behind and push. Advertising is the lubricant that makes the pushing easier, no matter how heavy the load is.

The Bureau of Mines, at Washington, has discovered a method of making chloroform from waste gas. The Bureau could put the invention to good use by running some of the speeches at Lansing through a condenser. And then, to make the process of the utmost benefit, it might turn the product back on some of the speech makers.

Success is not so much in rising early as in keeping awake after getting up.

Experience is a dead loss if it can't be sold for more than it cost.

Customers never wait for anybody to get over a blue funk.

Your income tax is due next Tuesday.

Short Measure Stuff

NEWS

"Wilson Vetoes Tariff Bill."
"Allies Take Three German Cities;"
"Bandits Rob a Dozen Banks."
"Prices High for Springtime Pretties."

"Handsome Actress Gets Divorce."
"Bonus Loss Makes Legion Rage;"
"Murderer Sent Up for Life."
All these hohnob on the page.

"Colby Starts to Practice Law."
"Warships Move to Block the Cable;"
"Amy Lowell Writes Eight Poems."
"Yellow Peril Proves a Fable."

There it is, our daily menu.
You have but to pick and choose.
Where it comes from doesn't matter,
If it happened it is news.

* * *

We thought the fad of "I AM" advertisements had pretty well passed away and that we would not be pestered with them any more. But it still seems that every once in a while another comes to life and gushes and spouts "maudlinisms" all over the place. This reached us a few days ago from a great printing trade paper. We quote in part, which ought to be enough for anybody:

"I AM THE PRINTER.

"I am he whose facile hands transform the thoughts of men into solid substance. I stand keen-eyed and eager-hearted, beside my mighty, rumbling presses that I may blazon to all the world the loves and hates . . . of humankind. The fruits of my toil give comfort to the aged and honest pleasure to little children . . . Through my faithful hands must pass to be inscribed upon time's deathless scroll the valiant deeds of the warrior—the ringing phrases of the statesman—the matchless cadence of the poet's song, etc."

We took the above to the best printer we ever met, and he's some printer. Admits it. We quote as literally as the postal authorities will permit.

"Most of the thoughts are solid substance before we ever see them," he began. "Whereinell does he get that 'keen-eyed' and 'eager' stuff? That guy can work for me at double the anion scale if he'll make good on that for one hour a day, thasaal, one hour a day, get me." Comfort to the aged and pleasure to the kids, eh! Well, take it from me, what he means is the ocean of piffle that gets into little story books that keep the cost of white paper up. This is rich. Deathless records of statesmen's ringing phrases. I know what he means. The Congressional Record and the journals of the state legislature. Ho, hum. Get out of here. This blankety press ain't feeding worth a whoop. Come around after hours. I'm busy now."

* * *

The famous Loreiei rock on the Rhine has been purchased by a syndicate. Which phonograph record manufacturer will be the first to sign up the famous occupant for a few selections from her famous repertoire?

* * *

Mr. Wilson had the laugh on Mr. Harding at least once during the last few days. Being indisposed, he didn't have to help with the moving.

* * *

It's fun to study catalogues,
And pick out seeds for spring.
But when the garden must be dug
That's quite another thing.

* * *

A Cornell professor predicts that all the coal in the world will be used up by 2921 and the people will have to move to the tropics. Now watch the real estate promoters and subdivision boys get busy with the Amazon valley, the Sahara desert and the Fiji islands!

—A. F.

Digitized by Google

FINANCIAL

By PHIL S. HANNA

IT BECOMES the task of Andrew W. Mellon, Pittsburgh banker and Secretary of the Treasury, to solve a financial conundrum which, from the standpoint of importance to the business of the country, has not been equaled since the days following the Civil War. Secretary Chase, under Lincoln, evolved the greenback plan which served the problem of financing the Civil War debts and the needs of the Government and business at that time.

Today Mellon must evolve some scheme of financing the Government without continuing the unhealthy arrangement by which the Government bids against business for the credit supply of the country. U. S. Certificates of indebtedness bear from 5 to 6 per cent interest and are so very attractive to large investors that the last issue was nearly twice over-subscribed. But we may have confidence in Mr. Mellon, for he has been a careful and successful financier all his business life and is likely to conjure up a prescription for the country's financial ills which will effect the cure and at the same time make us enjoy the medicine.

* * *

Is remission of the foreign war debts a good thing? The answer reminds one of the story about the bartender who asked his employer if Pat was good for a drink, the ensuing conversation being:

"Has he had it?"

"He has."

"He is."

In a measure this applies to most of the conuries to which we have made advances. It wouldn't have been human to ask if they were good for the loans they received. They have received the money, spent most of it here and the only way under heaven they can pay it back, if ever they are able, is to send us goods. And if the only remaining unencumbered reserver of wealth in the world does not go to their aid to improve conditions so goods can be manufactured, they can't send goods enough even to meet the interest. Some day Bahson will tell us exactly how many billions went up in smoke during the war and it may sink into our consciousness that most of our financial contribution to that holocaust stayed right with us in the form of handsome dividends, silk shirts and joy rides, while the poor devils over there—plus our own soldiere—stood the gaff.

From a human standpoint and indefinite extension is little enough for us to give under the circumstances, but leaving the human consideration out of the reckoning, if my best customers owe me more than they can pay, time has to be given. In forcing collection I lose both the money lent and the custom. And so long as the elusive good times which we all crave depend to such a large extent on maintaining foreign outlets for our goods and crops, we had better look first into the health of our customers rather than worry ourselves about debts which are not now collectible.

The last ten days have produced not a little "hurry up" order business for the steel companies. A representative of the U. S. Steel Corporation reports that his company has received an agreeable quantity of such requests from Michigan. In the main the orders are to balance up stocks and inventories, but the reappearance of rush business shows which way the wind is blowing.

* * *

But hold on to your hat! Prices of many things may go lower still, as business continues to recover. And margins of profit will narrow simultaneously with increasing volume. Rather than a cause for pessimism it may be interpreted as a good reason for optimism, for it means merely that the flesh is reducing more nearly to the dimensions which the skeleton of business was designed to carry. Thirteen of the larger Detroit banks owned on February 21 collectiveiy $58,600,000 of U. S. Certificates and Liberty bonds, nearly enough to pay off the aggregate borrowings of the same institutiions at the Federal Reserve Bank. Perhaps Mr. Mellon will devise a way to transfer this remnant of the war load to the investor, where it belonas. And so much of it as is taken by investors who are not depositors in the banks will be available for business.

THE PLEASURE IS ALL OURS

On Tuesday morning of this week the Detroit Stock Exchange official quotation sheet came out all dressed np in the form originated by the Michigan Manufacturer and Financial Record. The sheet now gives full information daily as to range of prices, dividends and capitalization of the companies whose stocks are listed on the Exchange. This change will be welcomed by the members of the Exchange and is indicative of the superior service which Secretary Nathan and his corps are rendering the brokers and stockholding public.

MICHIGAN MUTUAL LIABILITY

The annual financial statement of the Michigan Mutual Liability Company, Detroit, as of December 31, 1920, is being distrihuted and exhihits some interesting and favorable comparisons with the halance sheet of December 31, 1919. The guaranty reserve fund and surplus, which is now $1,154,667, was $697,296 a year ago, or an increase of $457,371. Total resources are now $6,888,889, as compared with $4,792,827 a year ago, a gain of $724,062. Of total assets nearly one-half, or $1,114,530.25, is represented by highly liquid securities and cash in hank, the former aggregating $551,641.87 and the latter $562,888.38.

HUGHES FORMS BANKING FIRM

S. Harvey Hughes, together with Frank A. Gordon and William L. Brasie, has formed a corporation under the name of Hughes, Gordon, Brasie & Company, to transact a general investment business in high-grade bonds in Detroit. Mr. Hughes has been in the bond business for eighteen years, beginning in New York under Frank A. Vanderip and having had charge of the Detroit office of the National City Company for the last six years, until Decemher 15, when he resigned to form this company. Frank A. Gordon started in the bond business in Michigan in 1909, having prior thereto been connected with W. G. Souders & Company and Devitt, Tremble & Company. He has had sixteen years experience in investment dealing, more recently having been in business under the name of Frank A. Gordon & Company. William L. Brasie recently severed his connection with the First National Company, Detroit, to associate himself in this undertaking. He has had six years' experience, having been connected with the National City Company and S. W. Straus & Company as a salesman.

These gentlemen are all well known to the investing public of Detroit. Mr. Hughes is president of the new company; Mr. Gordon, vice-president and treasurer, and Mr. Brasie, vice-president and secretary. Offices are located at 1438 Dime Bank building.

Klingensmith Heads New Motor Car Corporation

Several well-known Detroiters formerly connected with some of the largest automobile manufacturing concerns in the country are interested in the Gray Motor Corporation, which has just been formed and which will bring out a new car, a four-cylinder, to sell at $1,500 or thereabouts everywhere in the United States. The president of the company is Frank L. Klingensmith, who formerly was vice-president and treasurer of the Ford Motor Company. Frank F. Beall, formerly vice-president of the Packard Motor Car Company, is vice-president; George H. Kirchner, president of the First State Bank, of Detroit, is treasurer, and J. B. Moran, secretary and assistant treasurer. William A. Blackburn, formerly factory manager of the Cadillac Motor Car Company, who is also interested financially in the new concern, is factory manager. The corporation has an authorized capitalization of $4,000,000, and is in reality the successor of the Gray Motor Company, which has been in existence for some time. It was to this latter concern that Mr. Beall came after he left the Packard company, and it was here that he developed the new engine which now will become the power plant of the new car.

SOMETHING NEW IN EXCHANGE

An incident was related in these columns last week of a judgment given against the Highland Park State Bank in favor of Peter Moroz, who gave the bank $500 in 1917 to send to his wife in Rnssia, but owing to non-delivery of the money to the beneficlary, sought to force the bank to reconvert ruhles into dollars at the same rate of exchange that existed in 1917 when he bought the ruhles.

Advices now have been received from New York that arrangements are under way whereby a New York bank will act as agent for the Polish government in forwarding dollar remittances to Poland. This will enable one who desires to send money to Poland to buy drafts drawn in dollars, which the Polish banks will be required to convert into marks at a rate established daily by the Polish government. The money received by the New York bank will be held in a special fund until definite advice of payment to the beneficiary has been received, at which time it will be turned over to the Polish government. The advices also state that the Polish Minister of Finance has agreed to ntilize a fair proportion of the funds growing out of these transactions in the purchase of American goods or for liquidation of Polish accounts in America.

Under this arrangement, Moroz could have redeemed his $500 with but little loss, hut of course the rate for drafts payable in marks in Poland is likely to be much more attractive from the standpoint of the beneficiary than a draft payable in dollars until the market for Polish marks returns somewhat nearer par and lends to equalize the difference between the discount and marks and premium on dollars. The Guaranty Trust Company and the National Bank of Commerce in New York are working out plans to handle this business. Next week we expect to publish an article on this subject by Fred W. Allen, manager of foreign exchange, American State Bank, Detroit.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Columbia Nat. Fire	15	18
Detroit Mortgage, com	4	4¼
Detroit Mortgage, pfd.	6	6¼
Detroit Copper & Brass	12	35
Detroit National Fire	24	26
Detroit Life	55	60
Federal Bakeries Co	36	40
Federal Discount Co	6½	7¼
Fisher Body	83	86
Gladys Belle Oil, com	34	36
Gladys Belle Oil, pfd	53	56
Great Lakes Engineering, new	11	14
Great Lakes Engineering, old	53	65
Hoover Steel Ball	16	16
Hayes Wheel Co	13	16
Interstate Fire	13	22
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com	7	7½
Little Wonder Stove	1¾	1¾
Monroe Binder Board	35	40
McCord Manufacturing, com	6¼	8½
McCord Manufacturing, pfd.	45	55
Michigan Copper & Brass	16	17
Noble Oil, com	43	50
Petoskey Portland Cement	10	12
Peninsular Fire Ins	20	20
River Raisin Paper	13	15
Trippensee Mfg. Co	7½	8½
Union Mtge. 80% com	9	11
Union Mtge. 90% com	8½	..

Range During 1920, Approximate

Hoover Steel Ball	34¼	18
Columbia Motors	5	8½
Noble Oil, com	43	50
Mich. Copper & Brass	36	19¼
Detroit Mtge., pfd.	6¼	8½

Motor Stocks	Bid	Asked
Briscoe Motors	16	17
Columbia Motors	4¾	5
Chalmers	1	2
Chevrolet	176	200
Cole	240	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	3	5
Denby Truck	1	2
Elgin Motors	5½	6¼
Harroun	⅞	1⅛
Haynes	192	200
Hupp	13¼	13½
Jackson, com.	⅝	1⅛
Jackson, pfd.		2½
Keystone Tire	15¼	15½
Lafayette Motors	30	60
Liberty Motors	6	7
Liberty Motors, pfd.	50	70
Lee Tire	21	21½
Locomobile	2	3
Mercer	4½	5½
Nash	230	236
Pierce-Arrow Truck	25⅝	25⅝
Republic Truck	21½	22
Saxon Motors	4¾	5
Scripps Booth	26	30
Stevens Duryea units	30	90
Stromberg Carburetor	36½	37
Wilson Truck	6¾	8¾

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,667,994	$121,493,304
January 12	90,172,447	130,667,009
January 19	101,356,982	131,541,087
January 26	79,915,607	97,641,653
February 3	87,994,926	91,772,622
February 9	76,606,477	101,049,806
February 16	70,021,932	101,393,770
February 23	67,711,021	93,824,757
March 2	88,225,592	137,098,861
March 9	75,762,252	$108,011,659

Month of		
January	$89,420,236	467,321,870
February	362,341,668	430,266,836
March		570,442,229
April		540,376,963
May		494,286,659
June		586,706,267
July		527,624,146
August		522,269,066
September		561,592,940
October		515,425,760
November		466,922,440
December		462,961,215
Yearly totals, 1920		$6,103,322,902
Yearly totals, 1919		$4,504,886,155

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. H. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

Digitized by Google

We Specialize in

Edmunds & Jones Com. & Pfd.

S. S. Kresge Com. & Pfd.

BONDS { *Foreign Government* / *Public Utilities* / *Industrial* / *Railroad* / *Municipal*

Direct Private Wires to

New York, Chicago, Cleveland, Lansing, Grand Rapids, Rochester, Youngstown

TRADING DEPT.

MERRILL LYNCH & CO.

Offices in	*Members*
New York	New York
Chicago	Chicago
Denver	Cleveland
Los Angeles	Detroit
Milwaukee	Stock Exchanges

1056 Penobscot Bldg., Detroit

Do You Care

Who owns your property after you? Not much, perhaps, but enough to know that it does not by any neglect of yours, get diverted from the ones who should have it, or whom you would like to HAVE have it.

How are you going to know?

The only way to make certain is to put your ideas right into a Will and seal it up.

This Trust Company makes the best Executor and Trustee obtainable, and does not object to being named.

ASK FOR OUR NEW BOOK, ENTITLED "WHAT YOU SHOULD KNOW"

Oldest Trust Company in Michigan

THE MICHIGAN TRUST COMPANY

Grand Rapids, Michigan

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Mar. 4, 1921	Feb. 25, 1921	Mar. 5, 1920
Total reserves	$2,375,763,000	$2,358,999,000	$2,054,630,000
Bills discounted—Sec'd by Gov't war obligations.	981,840,000	1,003,975,000	1,520,494,000
All other	1,359,663,000	1,392,279,000	888,194,000
Bills bought in open market	164,004,000	170,503,000	513,354,000
Total bills on hand	2,505,509,000	2,566,757,000	2,922,542,000
U. S. Government bonds	25,848,000	25,849,000	26,775,000
U. S. Victory notes	18,000	18,000	68,000
U. S. Certificates of indebtedness	257,692,000	261,510,000	366,567,000
Total earning assets	2,789,069,000	2,854,135,000	3,215,952,000
Total resources	5,341,765,000	5,361,101,000	5,168,603,000
LIABILITIES			
Capital paid in	100,865,000	100,790,000	90,866,000
Surplus	202,026,000	202,026,000	120,120,000
Government deposits	56,941,000	62,984,000	83,879,000
Due to members—Reserve account	1,700,291,000	1,722,919,000	1,858,184,000
Deferred availability items	483,520,000	469,811,0	634,655,000
Other deposits, including foreign gov't credits	24,066,000	23,305,000	91,335,000
Total gross deposits	2,269,913,000	2,278,019,000	2,858,342,000
F. R. notes in actual circulation	3,042,611,000	3,051,706,000	3,020,010,000
F. R. Bank notes in circulation—net liability	135,109,000	139,325,000	229,167,000
All other liabilities	41,226,000	38,325,000	49,097,000
Total liabilities	5,341,765,000	5,361,101,000	5,168,603,000
Ratio of total reserves to net deposits and F. R. note liabilities combined	30.8%	43.9%	42.6%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	59.3%	53.1%	47.1%

AMERICAN LIGHT & TRACTION CO.

Earnings Statement

For 12 months ended Dec. 31	1920	1919	1913	1917	1916
Earnings on stocks of subsidiary companies owned by this company	$ 2,462,565	$ 3,355,055	$ 3,232,840	$ 4,346,215	$ 5,296,233
Miscellaneous earnings	1 096,712	1 096,190	592,426	1,047,399	561,794
Gross earnings	$ 3,560,277	$ 4,381,545	$ 4,326,327	$ 5,392,614	$ 5,359,937
Expenses	323,746	218,682	211,565	369,223	211,911
Net earnings twelve months ended Dec. 31st	$ 3,236,531	$ 4,162,863	$ 4,014,801	$ 5,023,331	$ 5,648,026
Interest on 8% notes	185,037	0	0	0	0
Balance for twelve months ended Dec. 31st	$ 3,051,493	$ 4,162,863	$ 4,014,301	$ 5,023,381	$ 5,648,026
Surplus and reserve Dec. 31st previous year	10,324,745	11,889,329	13,089,479	12,051,598	10,361,329
Total surplus earnings	$13 376,239	$16,012,192	$17,104,281	$17,074,979	$16,509,365
Less dividends for twelve months ended Dec. 31st:					
Cash dividends on preferred stock	$ 854,172	$ 854,172	$ 854,172	$ 854,172	$ 854,172
Cash dividends on common stock	1,642,342	2,416,627	2,190,290	1,986,967	1,801,797
Stock dividends on common stock	1,343,188	2,416,627	2,190,290	1,986,967	1,801,797
Total dividends	$ 4,339,903	$ 5,687,447	$ 5,234,953	$ 4,828,107	$ 4,457,767
Surplus balance Dec. 31st	$ 9,036,335	$10,324,745	$11,869,329	$12,246,872	$12,051,598

DETROIT EDISON COMPANY

(Including all constituent companies)

Consolidated Comparative Earnings and Income Statement

	Month of Jan., 1921	Percentage of increase	Month of Jan., 1920
Operating Revenue:			
Commercial electric revenue	$1,585,837.98	10.6	$1,432,875.41
Municipal electric revenue	37,311.62	5.6	35,340.47
Sales to street railways	82,584.40	8.5	91,491.73
Sales to other public service corporations	25,127.65	28.3	19,583.12
Miscellaneous revenue	333.81	54.7	214.68
Non-Operating Revenue:			
Steam sales	383,947.34	60.0	399,327.50
Gas sales	18,681.37	3.8	17,967.05
Other non-operating revenue	18,101.91	37.8	29,142.91
Total gross revenue	$2,135,961.10	15.1	$1,854,981.88
Expenses:			
Operating and non-operating (except renewal, replacement and contingent)	$1,461,956.32	11.9	$1,303,095.39
Renewal, replacement and contingent (reserve appropriation)	100,000.00	33.3	75,000.00
Total operating and non-operating expenses	$1,561,956.32	13.0	$1,381,095.39
Net income	573,995.73	21.1	473,838.59
Deductions from Income:			
Interest on funded and unfunded debt	$ 256,382.69	51.0	$ 139,755.92
Net	$ 317,613.09	4.4	$ 304,130.67

STANDARD OIL OF INDIANA

The 1920 report of the Standard Oil Company of Indiana shows that net profits of $40,973,484 on total actual investment of $203,869,123. During the year cash dividends totaling $9,116,678 were paid. Outstanding capital stock on December 31 was $88,038,312, as compared with $30,000,000 on January 1, 1920. The company has $36,069,220 invested in other corporations.

COPPER DIVIDENDS

The Utah Copper Company has cut its regular quarterly dividend, due at this time, from $1.50 to $1. The Ray Consolidated has passed its dividend

Digitized by Google

Who's Who in Michigan Finance

A. J. Maynard, Vice-President, Grand Rapids National City Bank and City Trust and Savings Bank

A. J. Maynard, vice-president and cashier of the Traverse City State Bank, has been elected vice-president and director of the Grand Rapids National City Bank and the City Trust and Savings Bank of Grand Rapids.



A. J. MAYNARD

The story of the rise of August J Maynard is an inspiration. It affirms anew the doctrine so often demonstrated, but often lost sight of by the impatient bank employe, that there is everlastingly room at the top for the man who will work hard and live right. Mr. Maynard's prescription for getting ahead, as related by a friend who has known him many years, is worth knowing. It gives one an insight into the character of the man as well as accounting in large measure for the enviable position he holds in the affections and respect of him many acquaintances.

He believes in making one's job a hobby instead of permitting the hobby to overtop the job; yet he has found time to keep healthy and sociable. But he believes in liking the job so well that making good at the job makes friends at the same time. Another characteristic of August J. Maynard is his unshakable loyalty to those friends.

There was once a young man who got into trouble of a serious nature and needed a friend at court. Unsolicited, although the man had gone out of his life entirely, Mr. Maynard took the train and spent hours and money to get his friend another chance, which was obtained. And then he spent more of his time laboring with his friend to overcome the latter's temporary obsession. The friend afterward became respected and honored, but few ever knew of the unselfish pains which Maynard went to, to save him.

Mr. Maynard was born in Detroit and went to northern Michigan in 1893. He worked in a lumber and shingle mill at Interlochen. He also worked in a shoe store and a clothing store, and on December 1, 1901, he started as messenger in the Traverse City State Bank and soon advanced to teller. Two or three years afterward he came back to Detroit to accept a position with the old Peoples Savings Bank, but in 1906, upon the death of Julius Hannah, he was recalled to Traverse City to become assistant cashier. When Samuel Garland died in 1911 he was made cashier and about two years ago was given the additional title of vice-president.

His friends testify that he is not easily hurried into a decision but that he thinks for himself, and when once decided is not readily moved. He is the quiet type of banker who inspires confidence, and is one of the most genuine personalities in the business. He will add much to the already high prestige of the two banks with which he becomes actively connected April 1.

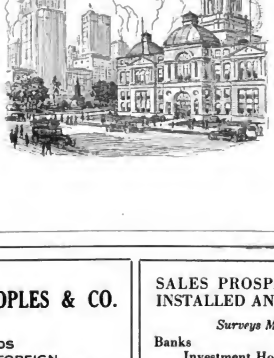
WOULD SHORTEN FORECLOSURE LIMIT

The Detroit Real Estate Board has adopted a set of resolutions favoring a shorter time limit for mortgage forclosures, empowering of counties to establish tract index systems, and enabling act permitting cities to adopt zoning laws, passage of joint resolution providing for excess condemnation, and expressing its approval of the bill now in the Legislature to put outside securities under the general ad valorem property tax. Under the present laws it requires 15 months to foreclose a mortgage and obtain the money or the property. It is expected that the board will draft a bill with the aim of making mortgage money easier and possibly open the way for an amendment to the state banking law to permit a great per centage of funds for use on mortgage loans.



HARRIS, SMALL & LAWSON
150 CONGRESS ST., W.
DETROIT

MUNICIPAL BONDS



W. J. PEOPLES & CO.
STOCKS
BONDS
FOREIGN
EXCHANGE
First Floor Penobscot Bldg.
Phones Cherry 8640
We solicit your inquiries

SALES PROSPECT LISTS INSTALLED AND REVISED
Surveys Made
Banks
Investment Houses
Trade Associations
IRENE WILLIAMS
104 South Michigan Avenue
CHICAGO

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MARCH 8th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend: Cash	Stk.	When Payable	Last Dividend: When Paid	Cash	Stock	Dividends Total This Year: Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com.	103½	104½	100	114 - 89	204 - 55	6%	4%	Quarterly	Feb. 1, 1921	1½	1%	1½	1%	$23,271,900
			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,236,200
Auto Body Co.	8		10	8¾ - 4¾	12⅝ - 6⅝				Jan. 20, 1917		25%			$1,074,000
Do., pfd.	6		10	6 - 4	10¼ - 10¾	6%		Semi-Ann	Jan. 1, 1921	3%		3%		$527,000
Bower Roller Bearing Co.	15	19	10	17¼ - 17	29¾ - 16	Varies		As Decl'd	July 1, 1920	10				$600,000
Charcoal Iron Co. of America, com.	2½	3½	10	2¾ - 2	5⅝ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd.	2½	3½	10	3½ - 3¾	5⅝ - 3¾				July 1, 1919	3%				$5,217,350
Citizs Service Co., com.	238	242	100		355 -290½	*6%		Monthly	Mar. 1, 1921	1½%		1½%	3½%	$42,877,699
Do., pfd.	67½	68	100		70 - 65	6%		Monthly	Mar. 1, 1921	1½%		1½%	3½%	$76,635,499
Cochrane Lead & Zinc Co.	14	14	10	16 - 12¾	25 - 6	Varies		As Decl'd	Nov. 15, 1917	20%				$500,000
Columbia Sugar		12½	10	14½ - 10½	20¾ - 11½	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co.		10	10	14¾ - 9¼	18¾ - 9¼	8%		Quarterly	Jan. 1, 1921	2%				$500,000
Com. Pw. Ry. & Light Co., com.		13½	100	16 - 13¾	45⅜ - 10½	6%		Quarterly	Nov. 1, 1917	1½				$18,585,900
Do., pfd.	34	36	100	35 - 34	45 - 26	10%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,953,000
Continental Motor Co., com.	6¾	6¾	10	7¾ - 5¾	14⅝ - 6¾				Dec. 20, 1920	1½				$7,285,329
Do., pfd., XD		75	100		100½ - 90	7%		Quarterly	Dec. 15, 1921	1¾%		1¾%		$2,151,700
Detroit & Cleveland Navigation Co.		73½	50	75¼ - 71	100 - 67	8%		Quarterly	Feb. 1, 1921	2½%		2½%		$6,038,900
Detroit Creamery	21¾	24	10	25½ - 22¾	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2				$1,800,000
Detroit Edison Co., XD	96¾	97	100	98 - 92½	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,888,300
Detroit Iron & Malleable Works		97¾	100	98 - 93	98 - 93	8%		Monthly	Mar. 1, 1921	1½%		1½%		
Detroit United		97¾	100			8%		Monthly	Mar. 1, 1921	1½%		1½%		$15,000,000
Edmunds & Jones, com.	14	14½	None	14½ - 9¾	24 - 9¾	$4.00		Quarterly	Jan. 1, 1921	50c		50c		$ 60,000 shs.
Do., pfd.	75	85	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$843,300
General Motors			10	16 - 13½	42 - 12⅝	25c		Quarterly	Feb. 1, 1921	25c		25c		20,563,358 shs.
Federal Truck	19½		10	22½ - 18	32 - 18¾	12%		Monthly	Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	286	290	100	295 -217	460 -210	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.	11	13½	10	13⅝ - 11	17 - 5½	Varies		As Decl'd	Oct. 15, 1921		5%			$1,912,750
Do., pfd.	60	67	1.00	80 - 51	1.48 - 61	16%		Quarterly	Jan. 15, 1921	4%		4%		$2,000,000
Goddeau Sugar, com.	20	23	None		30¾ - 30¾									70,000 shs.
Do., pfd.	68	72	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$3,500,000
Hanna Furnace, com.	92	97	10	26 - 25										$1,883,000
Do., pfd.	XD 96¾	99	100					Quarterly	Dec. 1, 1920	2½				$750,000
Hall Lamp Co.	12½	13½	10	15 - 13¼	32½ - 16	Varies		As Decl'd	Dec. 1, 1920	50c				$750,000
Hayes Mfg. Co., com.	2½	3½	10	3¼ - 2¾	8¾ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1½				$1,500,000
Holland-St. Louis Sugar Co.			10	10 - 7	12 - 7	Varies		Semi-Ann	July 1, 1920	10c				$2,500,000
Iron Silver Mining Co.	40	50	10		47 - 42	20c		Semi-Ann	July 1, 1920	10c				$2,500,000
S. S. Kresge, com.	135	142	100	96¾ - 96¾	181 -100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	103	107	100			7%		Quarterly	Jan. 2, 1921	1¾%		1¾%		$2,000,000
Lindemann Steel, com.	12	15	10		24½ - 15½			Quarterly	Jan. 2, 1921	1¼		1¼		$1,068,000
Lincoln Motors, Class A	19	19¾	10	21½ - 17½	50¾ - 15	$5.00		Quarterly	July 31, 1920	$1.25				$8,000,000
Magician Crude Rubber Co.	6		10	6¾ - 6¼	13⅜ - 9¾				Dec. 1, 1916	2%				$750,000
Michigan Drop Forge, com.		40	None		90 - 90¾	$3.00		Monthly	Mar. 1, 1921	25c		75c		$ 1,500 shs.
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$250,000
Michigan Stamping Co., com.	17½		10	18 - 17½	30 - 16¼	6%		Monthly	Jan. 1, 1921	1½%		1½%		$1,300,000
Michigan Sugar Co., com.	7¾	8	10	9 - 8½	13¾ - 7½	4%		Quarterly	Dec. 1, 1920	1%				$7,471,100
Do., pfd.	8	8¾	10	8¾ - 8	9¾ - 8¼	6%		Quarterly	Dec. 15, 1920	1½%		3%		$2,000,000
Miles-Detroit Theater Co.		15½	10		21 - 15½	*10%		Quarterly	Jan. 10, 1921	4		4%		$350,000
Motor Products	42	44	None	43 - 37½	55 - 37½				Nov. 20, 1920	2%		$1.25		$ 100,000 shs.
Motor Wheel		11½	10	11⅜ - 8½	13⅜ - 8½	*8%		Quarterly	Nov. 20, 1920	2%				$4,500,940
Murray Mfg.	8½	9	10		13 - 8½	*8%		Quarterly	Feb. 15, 1921	1½		2%		$733,450
National Grocer Co.	8%	8¾	100	9¼ - 8¼	136 -136	*3%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.	58	70	100		100 - 100	*3%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,000,000
Chas. F. Noble Oil & Gas Co., pfd.	103	105	100	1.26-1 00	2.00-1.06	*18%		Quarterly	Jan. 1, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com.	11	11¼	10	11¾ - 9¾	24¾ - 9¾			Quarterly	Oct. 31, 1920	50c				$11,000,100
Do., pfd.	XD 70	72	100	79 - 69½	96¾ - 67	7%		Quarterly	Dec. 15, 1920	1¾%				$18,233,500
Paige-Detroit Motor Car Co.	20	20½	10	20½ - 12	45½ - 12			Quarterly	Dec. 10, 1920	1				$2,500,000
Parke, Davis & Co.	89	90½	25	95¾ - 89	117½ - 95	*16%		Quarterly	Jan. 3, 1921	8		8		$11,841,984
Penberthy Injector, pfd.			100			7%		Quarterly	Jan. 1, 1921	1¾		1¾		$ 1,940,000 shs.
Peninsular Paper, com.	22½	22½	10	23½ - 17½	29½ - 18¾	10%		Quarterly	Jan. 1, 1921	2½		2½		$6,537,250
Scotten-Dillon Co.,	18		10		33 - 29	8%		Quarterly	Jan. 2, 1921	2%	50%	2%	50%	$1,500,000
Timken Axle, com., XD	30½	31	10	34¾ - 26½	53½ - 26	15%		Quarterly	Jan. 1, 1921	3¾		3¾		$5,000,000
Do., pfd.			100		93½ - 84	7%			Mar. 1, 1921	1¾%		1¾%		$5,000,000
Union Trust Co., com., XD	27¾	28¾	10	29¾ - 27¾	29¾ - 29¼	16%		Quarterly	Jan. 1, 1921	4%		4%		$1,450,250
Do., pfd.	9½		10		9¾ - 9¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,632,260
U. S. Radiator, com.	15	17½	100		31½ - 20	8%								$4,000,000
Do., pfd.	75	85	100		95¾ - 80	7%			Jan. 25, 1921	87%		7%		$2,800,000
Waxing Hat Co., com.			None											
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$1,000,000
Western Knitting Mills			None	11 - 8¾	30¾ - 8½	$2.00		Quarterly	Dec. 25, 1920	50c				$ 140,000 shs.
White Star Line		42	50		50½ - 50½	7%		Aug. & Nov.	Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.	2½	4	10	3 - 2	8¾ - 2¾				Dec. 18, 1917	1%				$1,000,000

*Old 900-870: new 63¾-27 $7.25 in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip # Book value, $239,600, Ed. & J. # Book value, $3,219,327, Godchaux. Book value, $2,277,594.00 Western Knitting Mills # Book value $5,084,450. Motor Products. ¶Nil ‡Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Mar. 8, 1921
Canada	1.0000	.821	.8400	.8762
London	$ 4.8665	3.6275	2.8500	3.8737
Switzerland	.1930	.1529	.1602	.1673
Paris	.1930	.0529	.0716	.0722
Belgium	.1930	.0625	.0712	.0734
Holland	.4020	.3162	.3375	.3405
Italy	.1930	.02460	.0266	.0366
Greece	.1930	.0763	.0755	.0758
Spain	.1930	.1328	.1393	.1390
Vienna	.20260	.0023	.0024	.00255
Berlin	.2381	.01345	.0158	.0155
Denmark	.2679	.1253	.1940	.1899
Norway	.2682	.1585	.1860	.1915
Sweden	.2680	.2016	.2190	.2235

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Mar. 8, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 3, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	91.00	93.50	90.00	91.06	99.90	99.78	99.56	99.92
U. S. Liberty 1st 4s	84.90	85.50	85.30	85.80	93.00	94.00	93.00	94.12
U. S. Liberty 2nd 4s	86.66	86.30	84.10	85.00	91.58	92.84	92.04	94.10
U. S. Liberty 1st 4½s	87.96	86.35	85.50	89.19	93.46	95.14	99.90	....
U. S. Liberty 2nd 4½s	86.84	86.30	84.34	85.00	93.20	94.00	99.70	....
U. S. Liberty 3rd 4½s	90.20	90.04	87.90	88.92	91.99	94.10	94.44	....
U. S. Liberty 4th 4¼s	87.06	86.46	84.36	85.96	99.75	100.10	....	....
Victory Bonds, 4¾s	97.48	99.48	94.90	98.50	94.00	99.08	99.99	99.32

Digitized by Google

Michigan Bank Stocks

Name	Last Published Statement			Dividends	
	Book Val.	Capital	Deposits	Annual Rate	How Paid
American State	147	$1,000,000	$18,584,766	10%	J-A-J-O 1st
Detroit Savings	351	1,500,000	23,132,632	12%	3 Jan-Jul 1st 3 Fe Jan
Dime Savings	266	1,500,000	32,794,136	14%	Monthly
First and Old Detroit National	195	3,000,000	37,365,542	†12%	1 Jan-Jul
Central Savings Bank	140	1,000,000	16,838,911		J-A-J-O 1st
First State	161	1,000,000	11,902,285	10%	J-A-J-O 1st
Highland Park State	196	1,000,000	12,790,118	20%	J-A-J-O 1st
Merchants National	196	2,000,000	10,003,284	8%	J-A-J-O 1st
National Bank of Commerce	239	1,500,000	22,843,715	10%	J-A-J-O 1st
Peninsular State	167	2,500,000	29,446,543	12%	J-A-J-O 1st
People's State	286	6,000,000	63,126,636	12%	J-A-J-O 1st
United Savings	129	500,000	6,968,905	12%	Monthly
Wayne County Home	258	1,000,000	71,393,857	16%	Monthly
American Loan and Trust	131	300,000	35,410,842	6%	J-A-J-O 1st
Bankers Trust	117	500,000	12,231,185	8%	J-A-J-O 1st
Guaranty Trust	172	300,000	32,421,827	8%	J-A-J-O 1st
Detroit Trust	256	2,000,000	41,319,634	14%	J-A-J-O 1st
Security Trust	338	500,000	16,114,984	12%	J-A-J-O 1st
Union Trust, Bay City	192	1,000,000	29,784,662	8%	J-A-J-O 1st
Commonwealth-Federal	123	750,000	9,006,167		
Bank of Detroit	159	1,000,000	16,622,360	10%	J-A-J-A 1st
Continental Bank	120	700,000	705,388		
Michigan State	110	250,000	2,190,826	6%	
American State, Dearborn	125	100,000	321,163	6%	Jan-Jul
American State, Highland Park	132	200,000	1,098,452	8%	J-A-J-O 1st
Peninsular State, Highland Park	218	100,000	1,162,994	12%	J-A-J-O 1st
Rouge State Bank	120	50,000	344,749		
Industrial Morris Plan	119	500,000	1926 7mo	6%	J-A-J-O 1st
Hamtramck State	435	25,000	2,634,596		
Peoples' National, Hamtramck	161	100,000	957,830		
River Rouge Savings	280	50,000	1,204,009		
City National Bank, Battle Creek	144	250,000	4,073,376		
Merchants Savings, Battle Creek	134	250,000	2,727,045	10%	Jan-Jul
First National, Bay City	265	200,000	3,360,022	10%	J-A-J-O 1st
Bay County Savings, Bay City	282	100,000	4,676,372	10%	J-A-J-O 1st
Bay City Bank, Bay City		1,250,000	3,240,694		
Peoples Commercial and Savings, Bay City		11,107,551	8,238,750		
Genesee County Savings, Flint	200	500,000	6,992,155		Jan.-July
First National, Flint	232	200,000	3,517,770		
Grand Rapids Savings, Grand Rapids	204	400,000	10,325,117	12%	J-A-J-O 1st
Fourth National, Grand Rapids	197	300,000	4,349,567	12%	J-A-J-O 1st
Commercial Savings, Grand Rapids	134	300,000	3,257,366	8%	J-A-J-O 1st
City Trust and Savings, Grand Rapids	138	200,000	2,566,959		
Peoples Savings Bank, Grand Rapids	152	200,000	2,661,628		
Post State, Grand Rapids	266	500,000	11,562,817		
Grand Rapids National City, Grand Rapids	139	1,000,000	7,940,353	5%	Semi-Ann.
Grand Rapids Trust Co, Grand Rapids	155	300,000	4,898,300		
Michigan Trust Co., Grand Rapids	139	1,000,000	33,031,078		
Morris Plan Industrial, Grand Rapids	156	50,000	1,427,500		
Central State, Jackson		100,000	700,820		
Jackson State Savings, Jackson	151	300,000	1,840,304		
Peoples National, Jackson	185	150,000	4,573,805	17%	J-A-J-O 1st
Jackson City Bank, Jackson	260	300,000	2,941,775	16%	J-A-J-O 1st
National Union, Jackson	183	400,000	4,150,024	12%	J-A-J-O 1st
Kalamazoo City Savings, Kalamazoo	161	600,000	6,690,072	10%	J-A-J-O 1st
Kalamazoo National, Kalamazoo	143	500,000	8,008,185	8%	J-A-J-O 1st
Capital National, Lansing	160	500,000	4,115,430	12%	J-A-J-O 1st
City National, Lansing	239	250,000	5,774,809	15%	Jan-Jul. 1st
American State Savings, Lansing	163	500,000	9,885,644	10%	
First National, Marquette	234	150,000	3,334,492		
Hackley National, Muskegon	189	400,000	4,307,054		
Pontiac Commercial and Savings, Pontiac	140	750,000	9,629,522	12%	J-A-J-O 1st
Oakland County Savings, Pontiac		250,000	2,177,221		
American Savings Bank, Pontiac	150	600,000	11,900,000		
National Bank, Pontiac		200,000	1,376,378		
Federal Com. and Sav., Port Huron		300,000	2,879,965		
First National Exchange, Port Huron	237	150,000	4,655,304		
U. S. Savings, Port Huron	161	100,000	1,208,970	8%	
American State, Saginaw	185	200,000	3,787,202	10%	Jan.-Jul.
Bank of Saginaw, Saginaw	156	1,000,000	17,410,985	10%	J-A-J-O 1st
Second National, Saginaw	282	500,000	9,587,443		
Central State, Sault Ste. Marie	124	100,000	1,051,977		
Traverse City State, Traverse City	156	200,000	3,016,462		

*Under one ownership—stock combined.
‡Nominal quotations.
†Investment Certificates
‡Total Assets
Note: Corrections as of Feb. 21 have been made where obtainable.

Ann Arbor Stocks. March 8

	Bid	Ask
Ann Arbor Wire Fabric	6	
Economy Baler Co., com	9	10½
King Trailer Co., pfd		
Hoover Steel Ball, com	14½	15½
Mich. Milling Co., com		7½
Motor Products Corp., com	42	
Prod. Foundries, com	2½	3
C. A. Sauer	3	8

Quotes by Langley, Hildner & Co.

UNITED LIGHT DIVIDEND

Directors of the United Light and Railways Company have declared the regular quarterly dividend of 1½ per cent, payable April 1, 1921, to first preferred stockholders of record at close of business March 15, 1921. Books will close at close of business March 15 and open March 16.

Lansing Stocks. March 8

	Bid	Asked
Auto Body Co	4½	3
Auto Body, pfd		7
Ben Hur Motor Co	22½	22½
Duplex Truck Co	6	6½
Bates & Edmonds Motor Co		13
Motor Wheel Corp	16½	11
First Bond & Mortgage Co	25	35
Michigan Mortgage Co	2½	9½
Michigan Screw Co. (ex. stock div.)	18	23
Lansing Co	28	47
Atlas Drop Forge Co	26	30
Federal Forge Co	15½	19½
Novo Engine	23	26

Quotes by G. M. Murchey & Co.

Detroit Listed Bonds

Name	Feb. 21, 1921	Bid	Ask	Last Sale
Cons. Pow. Co.—5s, 1932		89	91	91
Detroit & Flint—5s, 1921		99	97½	97
Det., Ft. W. & B. L.—5s, 1922		10½	82	73
D., M. & T. Short Line—5s, 1932		81	86	
Det. & Northw.—4½s, 1921		96	99	93
Detroit & Pontiac Ry.—5s, 1932		85	93	93
Detroit & Pontiac—4½s, 1926			34	
Det. & Ft. Huron R.—5s, 1950		63	68	
Detroit Railway—5s, 1924			82	
Det. Ypsi. & A. A.—6s, 1924			100	
D., Y. & A. A. Jackson—5s, 1923			31½	
Det. United Ry.—4½s, 1932		66	63	
Detroit Edison—5s, 1933		94½	95	
D. Ed. Co.—1st & ref. 5s, 1940		81	83	80
Kent Mich. Electric—5s, 1931		78	81	
Detroit Edison Deb. 7s, 1923		96½	93	
Detroit Edison Deb. 7s, 1924		96	95½	
Detroit Edison deb. 7s, 1929		95	95½	94½
Detroit Edison deb. 8s, 1931		100½	101	101
D. C. Gas Co., Q. M.—5s, 1913-23			93	
D. C. Gas Co., P. L.—5s, 1923			93	94½
Detroit & Sub. Gas Co.—5s, 1928		73	84	
Mich. State Tel. Co.—5s, 1924		37½		
Tol., Fremt & Norw.—6s, 1920				
Wyan. & Det. River—5s, 1918				
Ry.-Power & Corp.—6s, 1930				
Detroit Rock Salt 6s, 1932		31		

Cleveland Stocks

March 8, close:	Bid	Asked
American Multigraph		13½
Dow Chemical		200
Firestone Tire & Rubber	70	72
Do, preferred		73
Fisher Body	15	20
Do, preferred	63	68
Goodyear Tire & Rubber	14	14½
Do, preferred	30	31
Grant Motor	3¼	3⅝
Interlake Steamship	110	
Jordan Motor		310
Jordan Motor		125
Miller Rubber	80	90
Motor Wheel		6
National Acme	21	21½
Paragon Refining	20	21
Peerless Motor	26	31
Portage Rubber	21	33
Do, preferred		88
Prod. & Refin. Corp	4¼	
Do, preferred	7	7½
Standard Parts	1⅞	3
Do, preferred		8
Stearns Motor	32	33
Victor Rubber	15¾	33
White Motor	38	39
Youngstown Sheet & Tube	67¼	
Do, preferred	104½	

Quotes by Otis & Co.

Kalamazoo Stocks. March 5

Paper Companies	Bid	Ask
Bardeen	17½	
Bryant	13½	19½
Eagle	4	6
Eddy, preferred		10
Hawthorne	12	13½
Kalamazoo (new)	13	32
Parchment (stock)		13½
Parchment (rights)		4
King	19½	20¼
Lee (units)	125	130
Mac Sim Bar	13½	14¼
Michian	13	19
Monarch	14¼	15¼
Nat.	17½	18¼
Northern Mich. Pulp	100	125
Standard	30	31
Sutherland	9¾	10¼
Waterville	19½	20¼
Western Board		26
Banks		
First National	235	
Home Savings	170	
Kal. City Sav	190	200
Kal. National	130	132
Miscellaneous		
Utah-Idaho Sugar	5½	2½
Kal. Sanitary Mfg		10¼
Limousine Body	10	13

Quotes by Olmsted & Mulhall.

UNITED ALLOY STEEL

The United Alloy Steel Company has passed the quarterly dividend of $1 due at this time. This is the first time the dividend is being passed since December, 1916, when the stock was placed on a $4 annual basis.

Six years' experience in automobile and metal working industry, seeks new affiliation with a manufacturer who has an opportunity for a young man of intelligence and initiative. No objection to any community where conditions are right. Best of references. Member National Association of Purchasing Agents. Salary not important if prospects are good. Permanent connection desired. Address J. C. J., Michigan Manufacturer and Financial Record.

Digitized by Google

Banks and Bankers

TO ERECT $300,000 BUILDING

The United Savings Bank, Detroit, will begin construction about April 1 of a six-story, $300,000 office building on the site of the present Dean building, 1137 Griswold street. The lower floor of the structure will be used by the bank and the upper floors will be leased as offices. Wrecking of the Dean building will begin at once. The United Savings bank has been located at 1248 Griswold street since its organization, 19 years ago. Frank B. Leland is president.

NATIONAL LUMBERMEN'S BUILDING

Plans for the building to be erected in Muskegon for the National Lumbermen's Bank have been completed. It will be a four-story structure and will be located in Western avenue, east of Jefferson street. It is expected that it will be one of the most up-to-date banking offices in that part of the state.

CAPITAL NATIONAL'S INCREASE

The latest statement of the Capital National Bank, Lansing, shows that deposits have increased more than $62,000.

HAVILAND SUCCEEDS MAYNARD

Directors of the Traverse City State Bank, Traverse City, have elected A. J. Haviland cashier to succeed A. J. Maynard, who goes to Grand Rapids April 1. Mr. Haviland was added to the board of directors. He has been with the bank since 1897, having begun as a clerk and worked up through every position in the bank. For several years past has held the position of assistant cashier.

RAMBOUILLET COUNTRY CLUB

A group of younger bankers and brokers, including Wm. A. Neer, Messrs. Gardner and Dresser, John R. Bodell and R. T. Chenoweth are taking applications for membership in the Rambouillet Country Club. A tract of desirable golf land comprising 150 acres eight miles west of Pontiac on the Orchard Lake road, has been optioned. The first 200 memberships will cost $200 each and the second 200, $300 each. The distinguishing feature of this organization is the plan to avoid needless expense on the club house. The savings thus effected are expected to keep the dues down to a moderate level. Golf will be the main attraction, the improvements being limited to providing locker, shower and modest club facilities.

Grand Rapids Stocks

March 7 quotations, as furnished by Howe, Snow, Corrigan & Berlin:

American Public Utilities, Common	7 - 12
American Public Utilities, Preferred	17 - 21
Commonwealth Power Railway & Light, Common	12¾ - 14
Commonwealth Power Railway & Light, Preferred	82¾ - 84¼
Citizens Telephone Company	4½ - 4¾
United Light & Railways, Common	23 - 24
United Light & Railways, Preferred	57 - 59
Cities Service Bankers' Shares	21 - 22
Cities Service, Common	235 - 242
Cities Service, Preferred	67¾ - 68
Cities Service, Debenture "C"	84 - 85
Cities Service, Debenture "D"	93 - 96
Cities Service, Debenture "E"	91 - 97

MICHIGAN'S GROWING TAXES

A report of the state tax commission shows that the total assessed valuation of real property in Michigan has increased 176 per cent from 1910 to 1920, the total state tax has gained 267 per cent and the rate per $1,000 has advanced 33 per cent. The total assessed valuation of both classes of property was $1,739,652,458 in 1910, while in 1920 it had increased to $4,800,000,000. The state tax in 1910 was $4,730,417.42, while in 1920 it was $17,378,328.35. The rate per $1,000 of valuation in 1910 was $2.72 and $3.62 in 1920. The rate for 1919 was $3.87 and the state tax amounted to $17,432,512.40. The total taxes levied from all sources in 1910 amounted to $35,710,509.65 and in 1919 the tax was $110,776,106.10.

CITIES SERVICE BANKERS SHARES

Cities Service Company's twenty-fifth monthly distribution on its bankers shares, payable April 1 to holders of record March 15, will be 35c a share. The distribution March 1 was made to more than 18,000 holders of record, there now being more than 53,000 holders of Cities Service Company common stock, preferred stock and bankers shares, comparing with 17,763 January 1, 1919, and 31,767 on January 1, 1920.

MOTOR WHEEL CORPORATION

At the annual meeting of the stockholders of the Motor Wheel Corporation, Lansing, last week, a 2 per cent cash dividend was declared, payable March 21 to stock of record March 10. The annual report as of December 31, covering a 10 months' period, showed that quick assets overbalance current liabilities in a ratio of 18 to 1. Harry F. Harper, president and general manager, announced that production must be increased. The new 3-hour day schedule was resumed the first of this week.

The directors re-elect are: H. F. Harper, William H. Newbrough, W. C. Brock, J. B. Siegfried, O. A. Jenkson, Edgar W. Nichols, Drury L. Porter and Clarence C. Carlton.

The current liabilities of the company were shown as $266,068.98, with current assets of $4,479,381.74. In accordance with the by-laws, 3 per cent of the cumulative preferred stock was retired. The letter of President Harper showed net operating profits for 10 months of $433,856.20. Cash dividends paid during this period amounted to $374,722.24, leaving $61,952.01 added to the surplus account, making a total of $2,339,389.80. A good volume of business is seen for the coming year.

The following statement compares the condition of March 1, 1920, with December 31, 1920:

ASSETS	Dec. 31, 1920	Mar. 31, 1920
Land, buildings, machinery and equipment, less depreciation	$4,809,580.99	$ 4,723,732.82
Investments	213,573.88	185,693.88
Inventories	2,891,822.48	2,187,467.57
Accounts and notes receivable	868,385.66	861,212.19
U. S. government obligations	54,184.85	56,564.00
Due from sale of preferred stock		2,500,000.00
Accrued interest receivable	2,429.87	
Cash and acceptances	662,628.88	457,840.52
Deferred charges	47,466.68	29,000.29
	$9,629,942.29	$11,001,511.27

LIABILITIES		
Notes payable	$	$ 584,500.00
Accounts payable	79,785.96	645,313.75
Accrued taxes, insurance, etc.	74,209.18	21,921.88
Reserve for contingencies	120,321.61	
Provision for Federal taxes	112,035.74	471,187.85
Preferred stock, par $100.00	2,401,200.00	2,500,00.00
Common stock, par $10.00	4,500,000.00	3,000,000.00
Surplus	2,339,389.80	3,777,487.79
	$9,629,942.29	$11,001,511.27

CHANGES IN SURPLUS ACCOUNT

Capital surplus provided at inception of company	$3,777,487.79
Add—	
Net profits for the period	877,424.55
Discount of preferred stock retired	2,318.05
	$4,657,630.39
Less—	
Stock dividend 50 per cent	$1,500,000.00
Reduction of inventory	394,476.24
For Federal taxes	49,092.11
Preferred dividends	119,722.24
Common dividends	255,000.00
	2,318,290.59
Capital-surplus Dec. 31, 1920	$2,339,389.80

Public Utility Notes

Lansing—The Michigan Public Utilities Commission has drafted a bill for submission to the Legislature asking that its authority be extended to include jurisdiction over the establishment of crossings of municipal with privately owned steam or electric lines. At present the only check the Commission now has on these crossings is on privately owned lines and can only be brought to bear by refusing to permit railroads to enter agreements with the city for crossings, when in the opinion of the Commission the proper precautions for safeguarding the public are not contemplated by the agreement.

Detroit—The street railway commission will open bids March 15 on 40,000 steel ties for municipal railway construction. On March 18, at 10:30 in the morning, the commission will open bids on 11,200 tons of steel rails.

Lansing—The Muskegon Light & Traction Company has filed application with the Michigan Public Utilities Commission for permission to cut its street car service in half. At present the company is maintaining a five-minute service but asks a ten-minute schedule. Competition of jitney bus lines is given as the reason. The company asserts that it lost $140,000 last year. The matter was brought to a head by the application of employes for an increase in wages.

Ypsilanti—The city has asked the Michigan Public Utilities Commission to send engineers and assistants here to make a survey of the municipal gas plant for the purpose of drafting recommendations looking to an improvement in the efficiency of the plant. The Commission has accepted the invitation.

Muskegon Heights—The Muskegon Heights Gas Company is building a two-story addition, 60 by 40 feet. The boilers are now being set in place and the steel erected. It is expected that the work will be completed within 60 days.

Lansing—Only a few of the 109 telephone companies in the state so far have complied with the order of the Michigan Public Utilities Commission to file with the Commission a complete report of all materials purchased, where obtained and under what conditions. Most of the companies reported that such data could not be compiled in 30 days. The object of the Commission is to ascertain whether a "telephone trust" exists in the state.

Current Investment Offerings

HALSEY, STUART & CO., CHICAGO.

Name	Rate	Maturity	Price	Yield
Public Service Co. of No. Ill., Chicago	7.50	3-1-26	95.00	8.10
San Paulo, Republic of (U. S. of Brazil)	8.00	1-1-41	97.50	8.17
Southwestern Bell Telephone Co. Notes	7.00	4-1-25	96.50	8.00
Penn. Power & Light Co. 1st and Ref.	7.00	2-1-51	92.00	7.70
Dupont Highway Dist.	5.50	3-1-41	102.45 to 57	5.30
State of South Dakota, R. C.	5.50	1-15-41	100.00	5.50
Humble Oil & Refining Co. Notes	7.00	3-15-23	99.00	about 7.55

BOLGER, MOSSER & WILLAMAN, DETROIT

Houston Co., Tex., Road District No. 1	5.50	1922-1936		6.50
Okeechobee Co., Fla.				
Shelby Co., Tex., Road District No. 5	5.00	1922-1949	6.50-7.00	
Upshur Co., Tex., Road	5.50	1941-1955		6.00
Mitchell-Bean Com.				
First Mortgage	8.00	1922-1927		8.75
Wisconsin Chair Co.	7.00	1922-1931		8.00

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6.00	1924-1930	7.00
The Hemb-Robinson Co.	6.00	1926-1927	6.00
Adolph Meyers	6.00	1926-1929	6.00
Morris Zack	6.00	1924	6.00
Coplin H. Colwell	6.00	1924	6.00

Digitized by Google

Michigan Bond Items

The city of Grand Rapids will submit to the voters at the election April 4 a proposal to bond the city for $100,000 for water main extensions. The bonds are to bear 5 per cent interest and are to mature in 20 years.

The citizens of Marysville have just voted favorably on a proposal to bond the school district for $70,000 for the erection of a school building and the remodeling of another.

Grand Rapids will receive bids for the purpose of disposing of the balance of $384,000 of 6 per cent tuberculosis hospital bonds. A total issue of $400,000 has been authorized but thus far only $16,000 worth have been sold. "If the bonds are not sold following the advertising for bonds," says the Grand Rapids News, "the public will be asked to support the project and buy the bonds as a patriotic duty to the city. The first $200,000 of the issue expires September 25."

It has been announced by the city clerk of Cheboygan that the total bonded indebtedness of the city is $179,000, maturing over a period of 23 years as follows: 1921, $6,000; 1922, $8,000; 1923, $11,000; 1924, $40,000; 1925, 1926, 1927, $5,000 each; 1928, $13,000; 1929, $13,000; 1930 and 1931, $5,000 each; 1933, $7,000; 1934, $5,000; 1939, $16,000; 1944, $35,000.

By a majority of 9 votes the taxpayers of Birmingham decided for the issuance of $135,000 of school bonds. The issue was immediately sold to Watling, Lerchen & Company, Detroit, at a premium of $45, the bonds to bear 5½ per cent interest.

Opening of bids on two bond issues of the city of Pontiac resulted in Hornblower & Weeks getting the issue of $126,000 of water improvement and extension bonds, for which the bankers had bid par, accrued interest and $419.40 premium, the bonds drawing 5½ per cent interest. The National Bank of Pontiac was awarded the issue of $60,000 of park bonds, these drawing 4½ per cent interest and the city agreeing to pay the bank a commission of $4,152. Another bid for these bonds was on the basis of bonds paying 6 per cent interest and the bank's paying a premium of $1,187. Other bids received were the following: Watling, Lerchen & Company, premium of $2,521, on the $126,000 series at 6 per cent and $2,400 on the same issue at 5½ per cent; for the $60,000 issue a premium of $1,092 for 6 per cent and $11 for 5½ per cent bonds; R. M. Grant & Company, for $186,000 of bonds comprising both issues, par, accrued interest and a premium of $3,403 on 6 per cent bonds; National City Company, premium of $2,700 for the $126,000 issue of 6 per cent bonds; National City Company, premium of $3,532 on the $186,000 of bonds at 6 per cent interest; Keane, Higbie & Company, $3,348 as premium for both issues at 6 per cent; Hornblower & Weeks, $55,822 for premium of $1,162 if at 6 per cent, the $60,000 park bonds of 4½ per cent, or a

Bond issues totaling $800,000 for the construction of pavement, sewers and bridges will be submitted to the Lansing voters at the April election.

The regular quarterly dividend of the Continental Motors Corporation, Detroit, has been passed in order to conserve cash resources. The business of the company is increasing daily, according to officials. It has been decided as a consequence of this improvement to call back more men. While 50 per cent of normal operations at either the Detroit or the Muskegon plant has not as yet been reached, it is expected that such will be the case before long.

THE OLDEST HOUSE IN MICHIGAN

Opportunity

You are able today to invest your money at Nine Per Cent in Government Bonds over a long period of years. This means that when money again becomes cheap, with interest rates at perhaps three or four per cent on Government Securities, you will be receiving double or triple the income with equal security. Is it not worth while investigating such an opportunity? We shall be glad to send you a selected list of high-grade bonds.

H. W. NOBLE & COMPANY

Bond Department

318 Dime Bank Building Detroit, Michigan

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL P. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation
President Industrial Savings Bank

CLARENCE O. HETCHLER, Secy.-Treas.
President Ford Sales Co., Flint.

GRANT J. BROWN, Treas.,
Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Trayne-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce, President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES R. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

Why do Corporations appoint Transfer Agents and Registrars?

For their own protection and for the protection of their stockholders, as an additional precaution against careless or fraudulent over-issue or duplication, or any act of omission or commission affecting the validity of the transfer of a certificate of stock; in short, for protection against fraud, for conserving the corporate property, to see that legal requirements are complied with and to facilitate transfers both at the home office and at distant markets. We will take pleasure in explaining in detail the efficient manner in which the SECURITY TRUST COMPANY furnishes this service.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Don't Use a Telescope

Reduce your prospective investment to the minimum—don't magnify it. Look at it in the worst light. Will it hold up? Will it be as valuable in ten years as to-day? Is it secured threefold? Is the collateral behind it sufficient? Will its earning power be constant? Can you sell it if you need to? Can you borrow against it? Is it secure from the see-sawing stock market? Is its dividend rate adequate? If it passes this test—buy it—for it will be one of our First Mortgage Bonds.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

Investors Obligation To Agricultural Industry

(*Continued from Page 9*)

his liability into an asset. A machine that has to lie idle waiting for repairs, or from the inactivity or short-sightedness of its owner, is eating its head off by interest on the investment.

Local bankers should encourage the purchase of right machines, and also encourage the activity of the farmers with their machines, as activity means a betterment of production, enhances the values of properties and incidentally brings more and better business to the banks. The banker can benefit his community immeasurably when extending credit to the tractor dealers, by doing so only to those who handle machines that will be a benefit and not a detriment to the farmer's best intereats, as the farmer's interests are his also.

Assuming that the tractor has done its full duty in preparing and planting the seed bed, the work and worry does not stop there. The crops have to be harvested. Little attention has been given to develop harvesting machinery to keep pace with tractorized tillage development or the production of labor-saving harvesting equipment to balance the power of the tractor. Anyone conversant with farm work knows something of the losses in crops at harvest time due to shortage in labor and inadequate cutting equipment. This is particularly so in connection with hay and grain crops. There is little use in opening up additional land because the tractor makes it possible, if part of the crop is to be lost on account of lack of proper harvesting machinery.

Pictures are often displayed in agricultural journals showing tractors pulling several mowers or binders, each of which is commanded by a man as pilot, besides the man on the tractor. This arrangement is no saver in labor requirements. Such machines should be so designed that the man on the tractor operates his machine and the harvesting equipment as well. The idea of the tractor's pulling several harvesters after it is interesting to the harvester maker but is costly to the farmer and gives him the worry of getting the additional men to steer the harvesters. A good tractor has great power but that power should not be wasted in pulling a lot of additional iron around a field when a simpler and more effective equipment will do more work with less help and lower fuel consumption.

Tractorization has come to the farm to stay, and to the farm must also come improved tillage and harvesting machinery that will be adaptable to the new tractive power.

Agriculture and World Welfare

Agriculture is the most important work in the world. The degree of its advancement in a country is the measure of the prosperity of that country. The return from the land is the barometer that not only indicates but makes the real wealth of a country, fosters interchange between countries and is the foundation upon which manufactures are built. Then why not promote it to the fullest extent? Put the farmer on a manufacturing basis by giving him high production, thoroughbred machinery that will give him a maximum in production on a minimum labor cost. It is possible, with properly designed equipment, for the farmer to produce with one man what now requires ten men to accomplish.

Advancement of civilization and national progress depends on the productivity of the farm and greater development of equipment to promote such production increases manufacturing within the cities.

By what means may the capitalist or investor promote the increase in farm production? He is not asked to purchase lands, or take stock in the farmer, direct, but where new developments have been made in high production machinery for the farm, and new corporations are organized to manufacture such machinery, his investment in such institutions will be a long step toward increasing farm production.

That will be helpful co-operation between the city and the farm country.

ENGINE & THRESHER CO. ELECTION

The Port Huron Engine & Thresher Company, Port Huron, announces the election of A. E. West as president and of D. C. Kinch as general manager. Mr. Kinch formerly was with the company at Port Huron but was later made manager of the branch in Peoria, Ill. The company has not resumed operations, but it is expected that activities will begin soon.

Digitized by Google

Banking And Foreign Trade

(Continued from Page 10)

The type of corporation authorized under the Edge Act has proved to be profitable in English experience, paying dividends of about 12 per cent, as has been previously stated. The efficiency of American management, together with the restrictions which may be imposed by the Federal Reserve Board, calculated to safeguard both the stockholder and the debenture holder, should make these new corporations both profitable to the investor and helpful to commercial development.

Such plans as these to promote our export trade of course require the co-operation and support of the banks of the country. The American banker perhaps has not quite the vision of ultimate advantage to be gained from foreign trade as has his European neighbor. He is often too well satisfied with the visible results of domestic enterprise. It must be remembered, however, that present conditions, which are by no means satisfactory, grew out of world conditions; that the United States must always be affected by world adversity or world prosperity. It is thus the duty of the banker to do all he can to promote the return of world prosperity by supporting such organizations as the Foreign Trade Financing Corporation, for in so doing both he and the community he serves will prosper.

Cutting the Serpent Into Pieces

(Continued from Page 6)

Farmers State, Havelock	12,000	19,681 52
State Bank of Henry	26,700	14,574 72
Beach State Bank	56,000	79,243 82
Farmers State, Greene	15,000	27,339.19
First State, Killdeer	27,500	12,143.62
Security State, Columbus	27,500	66,779.55
Farmers State, Bellfield	15,000	4,687 12
Mohall State, Mohall	62,200	28,416.59
Donnybrook State	33,400	93,574 31
Gilsburn State	19,500	5,553 76
First State, Adrian	23,500	12,226 68
Farmers State, Rhame	18,000	42,399 47
Prina-Mehta, Sherwood	24,800	26,701 47
Fauss-Mehta, Cogswell	35,000	4,403 92
Fortuna State	20,000	47,111 66
Citizens State, Antler	30,000	2,747 17
Mohall Security	32,500	17,423.55
Nortonville State	15,000	12,127 32
Citizens State, Edgeley	47,000	31,971 76
Lorraine State	15,000	15,066.53
Totals	$581,100	$676,022.81
Banks closed since Dec. 2, 1925, up to Feb. 1, 1927:		
First Natl., Tawas	$ 30,000	$ 19,380 15
First Natl., Medina	25,000	16,191 67
State Bank of Milton	25,000	4,858.10
People State, Milton	67,500	51,841 72
First Farmers, Milton	65,000	66,966.52
Security State, Alfalfa	15,000	2,961 60
Security State, Port Byron	11,500	29,127.81
Prina-Mehta, Robinson	20,000	4,458 77
First Natl., Streeter	20,000	15,847 04
Bank of New Rockford	75,000	23,065.14
Totals	$393,100	$369,529.27

MONROE PAPER PRODUCTS

The annual report of the Monroe Paper Products Company, Monroe, sent to the stockholders last week, featured the statement that brokers already had solicited the company for contracts for the sale of the entire output for two years. No contract, though, had been entered into. No difficulties in disposing of the product were expected and it was said that by the annual meeting probably the company would be able to show good earnings. The new mill probably will be running by next July. The directors had contemplated for some time the matter of erecting a box factory in connection with the mill, to enable the company to reap increased profit from the product manufactured. The cost to date of the new mill has been $168,000 and it was estimated that it would take $10,000 more, while the minimum estimate made at the time of construction was $175,000 and the maximum $200,000.

Election of officers resulted as follows: William R. Harris, president; Thomas I. Ilgenfritz, vice-president; J. T. Upjohn, Kalamazoo, and William G. Gutmann, Ed G. J. Lauer and George M. Martin make up the board of directors. A. Blum, treasurer. These officers and Dr. vice-president; Roy M. Sperry, secretary; George



A Service of Facts

Through contact with every phase of big business, and as a result of the exhaustive and constant study of economic conditions which is essential to the safe conduct of a great bank, the National Bank of Commerce in New York is able to render to its friends a peculiarly valuable service.

Broadly speaking, we are in a position to supply authoritative information, drawn from original sources, on practically every important matter related to commerce and industry, whether national or international.

Our friends, in this sensitive period of adjustment, are invited to employ this service to the fullest extent.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits Over Fifty-five Million Dollars

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Nothing Is Left Incomplete

in the facilities and service extended by the Dime Savings Bank to its correspondents and depositors. Over a period of 36 years this bank has developed its service to a point where it affords every facility essential to handling banking business of any volume or of the most exacting nature in the Michigan field.

Capital and Surplus $3,750,000

TRADING DEPARTMENT

Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.

JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation, 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
MEMBER FEDERAL RESERVE SYSTEM
45-47 Fort St. West. Penobscot Building. 14 Branches

Digitized by Google

ESTABLISHED 1906

Bookkeeping
Appraisals
and
Cost Systems

Audits

Income
Tax
Reports

THE
WALTER S. GURD CO.
Public Accountants
708-9 Hammond Bldg. Detroit, Mich.
Main 6556

High Grade MICHIGAN Corporation With a Skilled Corps of Trained Experts Under the Direction of Walter S. Gurd, F.C.A.

C. C. COAL COKE REY.
1904 MAJESTIC BLDG. DETROIT, MICH.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL
TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Direct Wires to New York Stock Exchange and New York Curb
Special Report on any Security on Request
Phone Cherry 6305

Investment Service
Investors will find it to their advantage to consult
Our Statistical Departments
before making commitments. This service costs you nothing.
Write, Phone or Call

WEBB, LEE & CO.
Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit
Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

O'SHEA & CUMMINS
Formerly with U. S. Internal Revenue Office
INCOME TAX REPORTS
Main 6188
408 Burns Building
524 Griswold Street

FREE FACTORY SITES
At Harbor Springs, Michigan.
On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

New Corporations

FOR WEEK ENDED MARCH 5, 1921

Stratts Construction Co., Detroit; road building, hauling sand, gravel and cinders, general carlage; Jonas B. Houck, 1851 Richton Ave.; Frank R. Joseph, James C. Johnson, Detroit.... 14,000

Sun Realty Co., Ltd. (F.), Windsor, Canada; James W. Bishop, 411 Free Press Bldg., Detroit, Michigan agent 25,000

Lanix Marble Corp., Buffalo, N. Y. (F.), John McNeil Burns, 1310 Penobscot Bldg., Detroit, Michigan agent 150,000

St. Jacobs Oil (F.), Jersey City, N. J.; Andrew Brodersen, 5159 Lorraine Ave., Detroit 320,000

Wyeth Chemical Co. (F.), Jersey City, N. J.; Andrew Brodersen, Detroit.... 25,000

East End Garage Co., Bad Axe; general garage business; to buy and sell automobiles; repair; Francis Harrison, James F. Peterson, George H. Stevens, Bad Axe 1,000

Frank H. Mellon Theatrical Enterprises, Detroit; buying, owning, selling, leasing and operating theaters, controlling picture rights; Harry Guthard, 2929 Field Ave., Detroit; Frank H. Mellon, Highland Park; Eugene F. Berry, Detroit 50,000

Morgan Packing Co., Traverse City; manufacturing and merchandising of fruit jellies, jelly bases, mmrmalades, etc.; Don S. Howard C. and Gladys R. Morgan, Traverse City.... 5,000

North Rives & Leslie Threshing Co., Leslie; to thresh, husk corn, fill silos and any other work pertaining to farming; Prentice Fisher, Rives; John Steffin and T. J. Brownlee, Leslie 3,000

Century Saw & Tool Works, Detroit; manufacturing, repairing, selling and dealing generally in saws, saw machinery and machine knives; Marcus J. Gren, 2181 Leslie Ave.; Harry M. Chapman, William Thomas Liddiard, Detroit 5,000

Plymouth Buick Sales Co., Plymouth; to manufacture, repair and deal in, at wholesale and retail, motor and other vehicles and accessories; Carl G. Shoaf, 1870 Kimberly Ct., Detroit; William M. Shaw, Farmington; Roy G. Shaw, Plymouth 30,000

N. A. Hoban Co., Flint; to buy, sell, exchange and deal in, at wholesale and retail, butter, eggs, cheese, flour and canned goods; John J. Haley, Chesaning; Christian Martin, Chesaning; Jerome E. Waggoner, Mason; Nicholas A. Hoban, Flint 20,000

Michigan Agency Co., Detroit; transaction of a general insurance and securities agency business; William K. Delabaunte, 1670 Taylor Ave.; Ernest R. Wonderly, Ralph B. Lacey, Detroit 50,000

Quincy Mutual Oil Co., Quincy and Adrian; real estate; Amos Kelly, W. H. Sherson, R. C. Rothfuss, Adrian.. 10,000

Big 8 Realty Co., Detroit; to deal in real estate, leases, mortgages; Ernest M. Donald, 4379 Oregon Ave.; George E. Davis, Hotel Statler; Edward D. Stimpson, Detroit 75,000

Liberty Stamping & Manufacturing Co., operations in Greenfield township, Wayne county, office in Detroit; to manufacture die, sheet metal stamping; Curtis H. Longdorf, William P. Neville, 152 Lenox Ave.; Walter S. Scott, Detroit 20,000

Roseville Heights Co., Detroit; real estate; John P. Keys, 1814 Cadillac Ave.; Frank I. Kennedy, Paul R. Gray, Detroit 3,000

Hotel Kavanaugh of Jackson; erecting and owning buildings to be occupied for hotel purposes, halls, etc.; James M. Kavanaugh, John F. Flanigan, Nathan S. Potter, Jackson 150,000

General Safety Corp., Detroit; to supply for scheduling compensation, services of skilled safety and fire prevention; Frederick H. Bailey, 1421 Twenty-fourth St.; Edward L. Boyes, Frederick C. Hollister, Detroit..... 5,000

Ovid Creamery Co., Ovid; manufacture and distribution of milk products; John J. McDonald, J. O. Curwood, Owosso; W. A. McDonald, Lansing.. 50,000

Sperber Mfg. Co., Detroit; dealing in wood products; Morris Sperber, 931 Alger Ave.; Harry E. Aulebrook, Hugh Shepherd, Detroit 5,000

Uitlerna Theater Co. of Royal Oak; to operate and lease theaters in village of Royal Oak; John H. Baldwin, J. A. Merritt, George R. Hartrick, Royal Oak 125,000

Willey Sign Co., Detroit; to manufacture and sell all kinds of commercial

Digitized by Google

display and advertising signs and do general business therein; Claude Stanton Willey, 2732 Columbus Ave.; Henry M. Lynch, A. Rae DeBall, Detroit 75,000

Shackleton-Graham Corporation, Grand Rapids; to buy, sell and generally deal in bonds, mortgages, notes, etc.; C. Stuart Shackelton, Nathaniel H. Graham, Grand Rapids; John Graham, Tecumseh 10,000

Manchester Auto Sales Co., Manchester; to buy, sell, deal and generally trade in automobiles and accessories; garage business; Elmer F. Klumpf, Manchester; Frederick Heydlauf, Fredericka, and John Kalmbach, Chelsea 1,600

CHANGE OF NAME

Menke-Frie-Needs & Co. (name changed to Menke, Needs & Co.), Detroit 2,000

INCREASES

Northern Ming Co., Iron River, from $60,000 to 125,000

Detroit Free Press, Detroit, from $800,000 to 2,400,000

Allegan State Savings Bank, Allegan, from $20,000 to 35,000

Constantine Co-Operative Creamery Company of Constantine, Michigan, Constantine, from $5,250 to 12,000

Newton & Leroy Telephone Co., Newton Center, from $2,500 to 10,000

Acme Cut Stone Co., Detroit, from $15,500 to 150,000

Flint Spring Water Ice Co. (office moved from Grand Rapids to Flint), from $100,000 to 300,000

Rosenthal Company, Flint, from $50,000 to 100,000

Flat Rock Motors Sales Co., Flat Rock, from $5,000 to 15,000

Williams-Davis-Brooks & Hinchman Sons, Detroit, from $600,000 to 1,000,000

John J. Rutgers Co., Holland, from $40,000 to 50,000

Adam Drach Company, Ludington, from $20,000 to 75,000

Foster-Fowler Co., Lansing, from $100,000 to 150,000

Wolverine Auto Painting & Trimming Co., Detroit, from $60,000 to 600,000

Cartwright Die & Tool Co., Detroit, from $12,000 to 50,000

Federal Cement Tile Co. (F), Chicago, Ill., Detroit, from $150,000 to 600,000

Rosenthal-Winkelman Co., Pt. Huron, from $50,000 to 75,000

Swan Laundry Co., Hamtrack, from $4,000 to 10,000

Gillett Motor Products Co., Howard City, from $150,000 to 300,000

Muskegon Heights Elevator & Clutch Mfg. Co., Muskegon Heights, from $5,000 to 50,000

Creamery Package Mfr. Co. (F), Chicago and Bay City, from $4,000,000 to $275,000 and 200,000 shares com. stock, n. p. v.

Oakland Oil & Gas Co., Pontiac, from 25,000 to 50,000

National Brass Company, Grand Rapids, from $225,000 to 450,000

Pure Food Specialties Co. (F) (G.), Toledo, O.-Detroit, from $10,000 to 100,000

Vassar Foundry Co., Vassar, from $100,000 to 200,000

Downs Fruit Co. (name changed to The Plowalty-Downs Company), Lansing, from $10,000 to 40,000

Basch Co., Detroit, from $20,000 to 60,000

New Poland Baking Co., Detroit, from $6,000 to 20,000

Hamilton Clothing Co., Traverse City, from $20,000 to 25,000

DECREASE

Standard Securities Co., Lansing, from $30,000 to 10,000

NOTICES OF CHANGES OF ATTITUDE

Escanaba Wood Fibre Company, Escanaba 120,000

Eckhardt & Becker Brewing Co., Detroit 150,000

Ide Tea Company, Grand Rapids 7,000

Cedar River Land Co., Lansing 15,000

Commonwealth Cartage Co., Detroit 5,000

Menzies Bldg Co., Detroit 50,000

Hood Company, Grand Rapids 20,000

Thomas Z. Humphries Co., Detroit 10,000

West Michigan Garage Co., Traverse City 6,000

P. J. Zimmerman Co., Detroit 5,000

Michigan Hotels Co., Detroit 2,500

Tucker-Willert-Coffin Co., Royal Oak 5,000

Muskegon-Hide & Rendering Co., Muskegon 15,000

Houk Drug Co., Detroit 15,000

Columbia Motor Truck Sales Co., Detroit 10,000

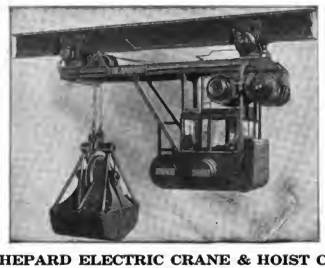
Michigan Engine Co., Allegan 10,000

Pfaudler Realty Co., Detroit 100,000

Atlas Die & Tool Co., Detroit 30,000

(Continued on Page 36)

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163
CAD. 6164

The Luxeberry Painter Says:



"In the varnish field, pick Berry's. That's a safe rule to follow, whether it be for the home or for any of the scores of industrial uses to which Berry Brothers products are adapted."

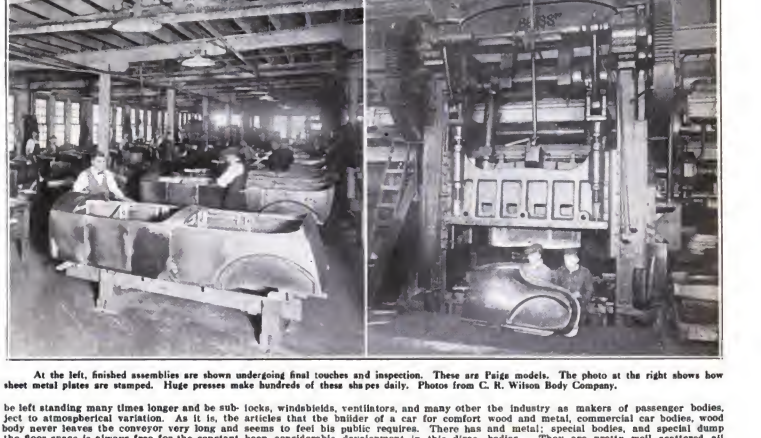
BERRY BROTHERS
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan Walkerville, Ontario

Smith-Hinchman and Grylls
Architects and Engineers
"Incorporated 1903" Detroit, Mich.

Digitized by Google

How Motor Bodies Are Made

(Continued from Page 18)



At the left, finished assemblies are shown undergoing final touches and inspection. These are Paige models. The photo at the right shows how sheet metal plates are stamped. Huge presses make hundreds of these shapes daily. Photos from C. R. Wilson Body Company.

be left standing many times longer and be subject to atmospherical variation. As it is, the body never leaves the conveyor very long and the floor space is always free for the constant flow of work. The same feature is true of the chassis painting. Perhaps the automobile manufacturers will be remembered for this contribution to industry generally, as it has been quite generally admitted that the need for conservation of space in painting of large assemblies gave greatest stimulus to the development of this method of painting and drying.

To a great degree, the processes herein described, with slight modifications and variations, are standard for all wood and sheet metal body construction. Of course the special body building industry has many ramifications but, for the most part, the system outlined is found most generally in use. There is some variation in lumbers used. Ash goes into a large number of high-class jobs and white maple serves for others. Cheaper cars use much ordinary maple. The demand of the Government for ash in airplane construction attracted attention to this sturdy member of the forest family and it is in great demand by builders of quality automobiles.

The manufacture of heavy type steel bodies is an industry of large equipment. The little punch press that makes holes for sheet metal plates on light bodies gives way to the multiple air drill and the tapping of the hammer is replaced by the riveter. These bodies must stand for severe punishment and great strength is built into them.

Just as the body building industry lies within the great automobile field, behind that too is one which it creates. That is in the manufacture of body hardware and fittings. There are plants all over the United States which devote themselves to producing hinges, knobs, locks, windshields, ventilators, and many other articles that the builder of a car for comfort seems to feel his public requires. There has been considerable development in this direction and the automobile hardware field has produced some notable contributions to the progress made in design and toward perfection.

6,000 a Day in This State

It would be extremely difficult to approximate the output capacity of Michigan's body plants. The larger units which manufacture on quantity production methods and schedules are capable of indefinite expansion. Even during the recent period of heavy output, the utmost capacity of these plants was not demanded owning to shortage of labor. Altogether, it should not seem excessive to approximate the possible capacity output of all types of bodies at 6,000 a day for Michigan. This estimate is based on statements by several production men in units of different kinds, although no reliable computation has ever been made.

Michigan has about 50 manufacturers of bodies. They are classified in the records of the industry as makers of passenger bodies, wood and metal, commercial car bodies, wood and metal; special bodies, and special dump bodies. They are pretty well scattered all over the state, although southeastern Michigan has the most important ones. The C. R. Wilson Body Company; Fisher Body Corporation, a unit of General Motors, and Briggs Manufacturing Company rank with the most important ones. Others in Detroit are: Erdman Guider Company, Griswold Motor & Body Company, Hayes Manufacturing Company, Model Body Corporation, Reiss Body Company, J. C. Widman Company, Continental Trailer Corporation, Mansfield Steel Corporation, Andrew C. Sisman Company, Automobile Body Company, Bennett, Sustrich Company, R. Joynt & Sons, Procter-Keefe Company, Trippensee Manufacturing Company, Transportation Equipment Company, Wood Hydraulic Hoist & Body Company, Columbia Body Company, Kelsey Wheel Company, Seiden Manufacturing Company and American Motor Body Company.

Lansing: Anto Body Company, Lansing Body Company, Lyons & Company, Michigan Bridge & Pipe Company.

Owosso: Field Body Corporation, Detroit Weatherproof Body Company; Jonesville: Universal Body Company; Jackson: Briscoe Motor Corporation; Lowell: Lowell Auto Body Company; Lapeer: Neposaing Manufacturing Corporation, John H. Whetstone & Company. Kalamazoo: Limousine Top Company; Grand Rapids: Michigan Hearse & Motor Company; Bay City: Bay City Auto Body Company; Muskegon: FitzJohn-Erwin Manufacturing Company; Mount Clemens: Mount Clemens Truck Body Company; White Pigeon: Standard Body Company; Pontiac: O. J. Benedette, Pontiac Body Company; Flint: W. F. Stewart Company.

LANSING BUYERS NAME OFFICERS

The Lansing Buyers' Club was organized at a meeting at the Chamber of Commerce last week, and will be affiliated with the National Association of Purchasing Agents and the Western Michigan Association of Purchasing Agents. The membership represents the leading concerns in the city. The officers elected are: President, C. C. Richardson, Motor Wheel Corporation; vice-president, L. D. Maxson, Olds Motor Works; secretary and treasurer, E. W. Goodnow, Atlas Drop Forge Company.

Digitized by Google

INDICATOR CONTROL CHANGES

Announcement has been made in Grand Rapids that the Patterson-Warner Company, Chicago, has purchased a substantial part of the stock of the Auto Indicator Company, Grand Rapids, which concern soon will be increasing its production as a consequence. Instead of five members of the board of directors, the company now has seven, one of the new members being E. C. Patterson, head of the Chicago concern, and the other, C. B. Hamilton, of the Brearly-Hamilton Company, Grand Rapids. The Patterson-Warner company recently increased its capital stock to $1,500,000 The Grand Rapids concern has thus far made and sold approximately 35,000 indicators.

STUDEBAKER SELLS WAGON DEPT.

The wagon department of the Studebaker Corporation has been purchased by the Kentucky Wagon Manufacturing Company, Louisville, Ky., which thus becomes probably the largest wagonmaker in the country. The Kentucky company has a capital stock of $1,500,000 and $1,000,000 of surplus. Its output will be increased to 60,000 wagons a year. Studebaker announced recently that it was about to discontinue the manufacture of horse-drawn wheels. The Kentucky Wagon Manufacturing Company also makes the Dixie Flyer motor car.

WOODRUFF JOINS BRISCOE

C. A. Woodruff, formerly purchasing agent for the Chalmers Motor Company and later general manager of Saxon, has been appointed purchasing agent of the Briscoe Motor Corporation, Jackson, according to announcement of the president, H. F. Wardell.

ANOTHER OVERLAND RESIGNATION

The fourth resignation from among the higher officials of the Willys-Overland Company, Toledo, was announced last week, when it was stated that J. H. Gerkens, assistant treasurer, was acting in the capacity of treasurer owing to the retirement of Treasurer Frank K. Dolbeer, who had been with the Willys organization many years. Previous resignations of executives of the Overland company were those of Vice-Presidents Clarence A. Earl, LeRoy Kramer and E. B. Jackson.

DODGE HEADS CLEVELAND BRANCH

The Baker-Fisk-Hugill Company, Dort distributors, Detroit, announces the appointment of Frederic N. Dodge as manager of the Cleveland branch. Before joining Baker-Fisk-Hugill Mr. Dodge was assistant advertising manager of the Dort Motor Car Company.

AJAX RUBBER LOSES $177,920

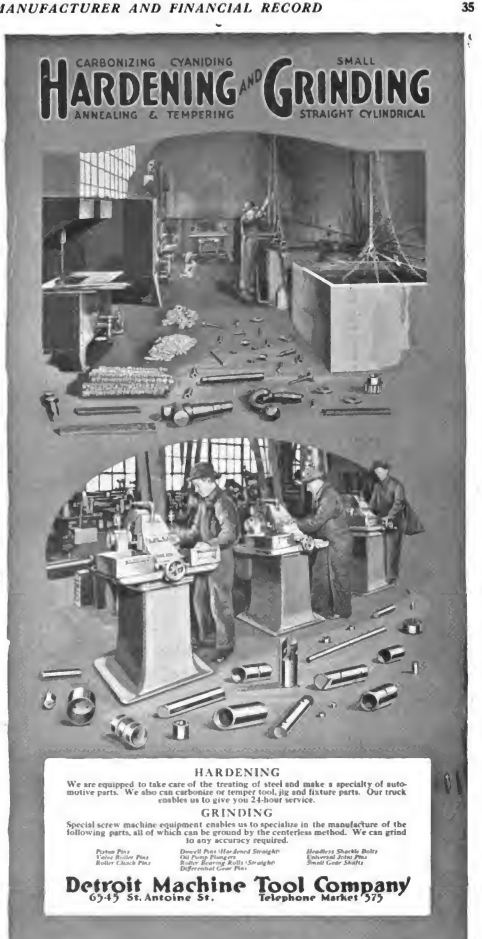
The 1920 business of the Ajax Rubber Company ended with a loss of $177,920, as compared with a profit of $2,201,267 in 1919 and $2,379,187 in 1918. After taking care of dividends and adding previous surplus, the profit and loss surplus was $1,615,481, as compared with $2,128,848 in 1919.

WHITE MOTOR PROFITS $2,410,014

Everything considered, 1920 was a satisfactory year for the White Motor Company, Cleveland, which makes the White trucks. Total sales were $51,998,122, as compared with $41,667,696 in 1919, and net profits $2,410,014, as against $2,869,875 in 1919. The decrease in profits was due principally to charging off $1,193,927 on inventories to bring them to present market prices; to deduction of $51,206 lost on sale of government bonds, and allowing $300,000 for federal taxes.

W. H. HOLMES LEAVES PACKARD

W. H. Holmes has resigned as advertising manager of the Packard Motor Car Company and will return to the agency field on April 1. He has been at the head of the Packard advertising department two years.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins
Valve Roller Pins
Roller Chain Pins
Dowell Pins (Hardened Straight)
Oil Pump Plungers
Roller Bearing Rolls (Straight)
Differential Gear Pins
Headless Shackle Bolts
Universal Joint Pins
Small Gear Shafts

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 575

Digitized by Google

Machinery and Power Equipment

Our Aim is to Render Service

COMPLETE EQUIPMENT

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Repair Shops, Heat Treating Plants, Wood - working Plants, Iron and Metal Foundries.

Auto Body Plants, whether custom or large production will find the following machines, selected at random from our stock of 1,000 new and used machines on our floor, very desirable for their work:

1—No. 112 Crescent Universal Wood Worker, complete, used.
2—36" Crescent Band Saws, belt drive, new.
10—Swing Saws, new and used, Crescent, Porter and Moak make.
1—American Jig Saw, used.
1—Two-Spindle Boss Shaper, complete, used.
1—Two-Spindle Porter Shaper, complete, used.
1—24" Crescent Planer, var. feed, new.
1—26" Crescent Planer, var. feed, complete, used.
1—36" 3-drum Berlin Sander, complete, A-1.
10 more different types, all size of desirable wood-working machines, well known makes, new and used.
A complete stock of new Temco portable electric driven tools, ideally suited for intermittent service.
A complete stock of new D. & R. Teal Co.'s well known line of el. portable tools, best adapted for heavy duty constant service.
Our stock of new D. C. and A. C. Watson Motors, all sizes, speeds, etc., is as complete as desired.

We carry a well assorted stock of new and used transmission, belting, etc.
We have over 35 new Michigan O. B. 1. Punch Presses in stock for immediate delivery.

WE SELL THE FOLLOWING WELL KNOWN MAKES OF SUITABLE MACHINES:

Peerless Line of Foot and Power Steel Squaring Shears.
Pettingell Machine Co.—especially bumping hammers, mitre saws and tenoners.
Quickwork Co.'s line of Rotary Shears and Bumping Hammers.
Yoder's complete line—mostly hammers and fender machinery.
Agnew complete line of spot welders—a size of machine for every job. In short—we can supply everything required for body plants.
We have a copy of our latest list ready for you.
Our only aim is buying, selling, trading or exchanging only high equipment.
We must satisfy you.

Riverside Machinery Depot

251 ST. AUBIN AVE., DETROIT, MICH. TELEPHONE EDGEWOOD 1582, 1583, 1584

(*Continued from Page 33*)

Auto Tire Repair Co., Ann Arbor..... 5,000
Appel-Bondelier Co., Muskegon..... 6,000
Kavanaugh Hotel Company of Jackson, Mich., Jackson..... 100,000
C. A. Wiley Realty Company, Detroit. 5,000
Superior Foundry Co., Holland..... 50,000
Hyratic Gear Co., Detroit..... 10,000
Superior Box & Casket Co., Hancock... 60,000
Mohawk Realty Co., Detroit..... 1,000
Alt-Batteche Mfg. Co., Grand Rapids... 10,000
Hornkohl's Bakery, Manistee..... 20,000
American Steel Furniture Co., Grand Rapids 1,000

NOTICES OF DISSOLUTION

Possellius Bros. Furniture Mfg. Co., Detroit 50,000
Indian Refining Co. of New York (N. Y.), New York City-Jackson..... 300,000
Means, Wade & Co., Ltd., Detroit..... 100,000
Wayne County Loan & Realty Co., Detroit 500,000
Peninsular Hardware Co., Highland Park 5,000

NOTICES OF WITHDRAWAL

Whitside Co. (F) (Wis.), Milwaukee, Wis.-Grand Rapids..... 60,000
Johnson Motor Co. (F) (Del.), Wilmington, Del.-Detroit.
Fitzer Co. (F), Duluth, Minn.-Wakefield 500,000

ADDITIONAL FOR WEEK ENDED FEB. 26

DeBolt Coal Co., Grand Rapids, to deal in coal and fuel of all sorts, wholesale and retail; Walter Miles, F. Stuart Foote, Charles S. Davies, Grand Rapids ..... $ 50,000
Colburn Motor Parts Co., Detroit, to manufacture, buy and sell automobiles; Anthony L. Schneider, S. L. Andrew, F. M. Keeton, Detroit..... 25,000
State Construction Co., Detroit, road building, hauling sand, excavating, dredging, etc.; J. B. Baurk, 155 Richton ave., F. R. Joseph, James Johnson, Detroit..... 14,000
Furniture City Wood Finishing Co., Grand Rapids, to operate laboratories, factories, etc.; F. Stuart Foote, Lewis S. Reynolds, Charles A. Peters, Grand Rapids..... 12,000
Guy W. Ellis Real Estate Co., Detroit; real estate; Guy W. and F. R. Ellis, Equity bldg.; L. S. Trowbridge, Detroit 10,000
Sands Lumber Co., Detroit; to operate sawmills and lumber yards, etc.; Leon A. Walker, Wilmot A. Babbitt, Guy A. Fish, South Bend... 25,000
Langley, Holdner & Co., Ann Arbor; to deal in and with stocks, bonds, notes, etc.; John Simons Langley, Grand Rapids; Earnest G. Hildner, Harry O. Potter, Ann Arbor 15,000
Ferry's Seed Service, Inc. (F), Wilmington, Del., Kirby B. Wilbur, secretary, Brush st. and Monroe ave., Detroit; 25 shares, no par value.
Syra Cord Tire Sales Co. (F), Boston, Mass.; Charles M. Owen, Grand Rapids; 30 shares, no par value.
Universal Stores Corp. (F), Chicago; J. J. Fisher, Cassopolis, Mich..... 200,000
Dix-Rouge Land Co., Detroit; to purchase, hold and deal in land described as Zoraer's Oakwood Subdivision; Ward H. Barnett, 150 Bagley ave., Bessie MacKellar, Malcolm Yerkes, Detroit 25,000
Planet Mfg. Co., Detroit; manufacture and sale of Hydro-Mix; Spencer S. Thomas, 907 E. Grand Blvd.; Stanley R. DuBois, Charles A. Ross, Detroit.
Progressive Tanning Co., Detroit; general tanning and extract business and manufacture and sale of products thereof; Jacob M. Feldstein, Jacob Levy, Charles A. Reidell, Detroit.
Underwriters Agency, Inc., Detroit; writing general insurance; John C. Hirsack, 2741 Second ave., William J. Crozier, Edwin E. Revenaugh, Detroit
Persian Creamery, Inc., Detroit; selling and repairing floor coverings; Raymond H. Jewett, 176 Campbell ave., Edward J. Hamilton, Emma Hamilton, Detroit 35,000
Grace Chandler Studio Co., Flint; general photographic business; Grace Chandler DePue, James H. DePue, 301 Detroit st., Clarence A. Cameron, Detroit 10,000
Theisen-Clemens Co., Sawyer and St. Joseph; to buy and sell at wholesale or retail and jobbing, petroleum products; John J. and Anthony J. Theisen, Roy F. Clemens, St. Joseph..... 25,000
R. O. Eastman, Inc., operations in Garfield Bank bldg., Cleveland, O., office at Battle Creek; to conduct and render general sales and advertising service to corporations; R. O. Eastman, Harland J. Wright, Lenna W. Wallace, Cleveland, O..... 1,000

MILLER RUBBER REPORT

Although sales of the Miller Rubber Company, Akron, for 1920 totaled $32,891,670, as compared with $26,495,482 in 1919, an increase of $6,396,188, the year ended with a deficit of $617,878, due especially to the shrinkage in inventory. In a statement to the stockholders President Pfeiffer said that the shrinkage aggregated $8,193,086 and payments made on settlement of contracts, to $215,951. Net profit prior to the charging-off of the items referred amounted to $2,791,158, practically all earned in the first six months of 1920. Based on the conservative valuation of the inventory, the company had current assets in excess of $14,000,000 on January 1, 1921, of which approximately $2,000,000 was cash. Its current liabilities aggregated $8,676,900.

COAL PRODUCTION SMALLER

There was a further decrease in output of bituminous coal during the week ended February 26, according to the report of the Department of the Interior. The total was 7,334,000 tons, as compared with 7,493,000 for the previous week and 7,859,000 for the week of February 12. Anthracite production also dropped rather considerably as compared with previous weeks. The output was 1,525,000 tons, or 185,000 less than the previous week. Carload shipments also decreased. The drop is attributed to the observation of Washington's birthday.

WELCH ON U. S. TIRE BOARD

C. J. Welch, assistant general sales manager of the United States Tire Company, has been elected to the directorate.

Digitized by Google

APR 28 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



GENERAL LIBRARY
MAR 22 1921
UNIV. OF MICH.

Fifteen Cents a Copy

Five Dollars a Year

Enter Davis; Exit Gompers

What Detroit Plants Are Buying

Welfare Work by a Third Party

Milling Machines--When and How

DETROIT, SATURDAY, MARCH 19, 1921

Volume 27

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

Number 12



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Resources Over $125,000,000

AMPLE RESOURCES, LONG EXPERIENCE AND A THOROUGH KNOWLEDGE OF BUSINESS PROBLEMS ENABLE THIS BANK TO SERVE ITS CLIENTS UNUSUALLY WELL.

THE FOREIGN DEPARTMENT IS WELL EQUIPPED TO CO-OPERATE WITH EXPORTERS AND IMPORTERS.

OFFICERS

JAMES T. KEENA, Chairman of the Board
JOHN W. STALEY, President
F. A. SCHULTE, Vice-President
JOHN R. BODDE, Vice-President
H. P. BORGMAN, Vice-President
R. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES H. AYERS, Vice-President
AUSTIN E. WING, Assistant to President
A. H. MOODY, Cashier
J. N. SWEENY, Assistant Cashier
D. E. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
G. W. BEASLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO D. HEAPHY, Assistant Cashier
C. J. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor
RODERICK P. FRASER, Manager Foreign Department.

DIRECTORS

RUSSELL A. ALGER
GEORGE H. BARBOUR
W. T. BARBOUR
JOHN R. BODDE
H. P. BORGMAN
H. M. CAMPBELL
C. A. DU CHARME
FRANK J. HECKER
FRED W. HODGES
J. C. HUTCHINS
JAMES T. KEENA
H. B. LEDYARD
ROBERT S. MASON
FRED T. MORAN
FRED T. MURPHY
M. J. MURPHY
W. HOWIE MUIR
TRUMAN H. NEWBERRY
WALTER S. RUSSEL
HUGO SCHERER
F. A. SCHULTE
ANGUS SMITH
R. W. SMYLIE
JOHN W. STALEY
HOMER WARREN

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Enter Davis; Exit Gompers

The New Secretary of Labor Has a Mind of His Own, Says Detroit Attorney Who Knows Him Intimately

By F. W. HERSEY

FOR the better part of eight years Samuel Gompers, president of the American Federation of Labor, has had a snaffle bit on the national administration—the United States Department of Labor in particular. With Mr. Gompers at the helm of organized labor, on the outside, and his son, Gompers Junior, as chief clerk of the labor department, on the inside, the cards have been continually stacked for unionism and against unorganized labor, its employers and the unclassified public between the milestones.

But now the Wilson administration has folded its tents and silently stolen away, and as quietly the Harding administration has taken up its duties in the Capitol. President Harding's cabinet selections have been made and, if not entirely approved, they have not been entirely disapproved by the public. It is too early for expressions of favor or disfavor. The test of quality and policy is yet to come and very likely the first challenge will be buried at the United States Labor Department. In fact the challenge already has been foreshadowed. And the man who will carry it is Samuel Gompers, leader of organized labor.

Why Was Davis Picked?

The man destined to try conclusions with labor and its leader is James J. Davis, Secretary of Labor in the Harding cabinet. During the eight years that Mr. Gompers was first cousin to the Wilson administration Mr. Davis, as director general of the Moose organization, has been busy laying out and developing Moosehart, that great colony of Moose widows and orphans near Chicago. Mr. Davis was a great Moose; otherwise he was not in the public eye.

Mr. Harding's selection of Mr. Davis as his labor lieutenant undoubtedly has created no end of surprise, not only because he was such an inconspicuous figure in national political life, but more because his connection with organized labor was so indefinitely drawn. Consequently the questions in the minds of politicians, employers and workers are: Who is this man Davis? Why was he selected? What will be his general policies, and toward which side of what has come to be recognized as a great controversy will he lean?

It so happens that Detroit has a citizen who knows probably as much about James J. Davis as any other person outside of the Secretary's immediate family. That man is Antonio P. Entenza, lawyer, Loyal Order of Moose leader and in certain circles referred to as a radical in political thought, a reputation which Mr. Entenza does not seek to deny. Mr. Entenza so admires "Jim" Davis, as he calls him, for the qualities that make men "pals" that he can talk about him for hours. On the other hand, Jim Davis reciprocates in kind and to such an extent that no sooner had he accepted the portfolio of Secretary of Labor than he offered Mr. Entenza the post of chief counsel of the labor department.

It is not within the power of human nature to be perfect; therefore the best test of the sincerity of anything Mr. Entenza may say of Mr. Davis is to find and analyze the faults Mr. Entenza finds in Mr. Davis and which might or might not lead to differences. These faults, as Mr. Entenza sees them, are two in number: Extreme conservation in labor thought and an objection to the use of profanity. Mr. Davis never swears.

"I never could understand that," Mr. Entenza said. "Jim does not smoke, drink or swear. I can excuse and admire his abstinence from the use of liquor or tobacco. The fact is that Jim is the kind of a scout who would buy the liquor for his friends to drink if it made them happier. But I never could understand the self-control that prevented him from cussing when things did not go right." The other fault is conservatism, of which more will be said later.

Mr. Entenza turned down the offer of a post in the labor department for two reasons, he says. First, he did not feel he could leave his law practice for a position paying only $5,000 a year. Secondly, he might have been willing to sacrifice the income had he been entirely in sympathy with the Davis conservatism—had he been willing to set aside his political theories for less pronounced views more in keeping with the Davis principles, and he realized full that his presence as legal adviser to the Secretary might prove embarrassing. These are Mr. Entenza's reasons as expressed.

Started as a Metal Worker

Mr. Davis was born in Wales, spent his early childhood in Anderson, Ind., and was a resident of Pittsburgh when called to the Harding cabinet. For the rest we shall quote Mr. Entenza:

"I first became well acquainted with Jim Davis when he was a metal worker around Sharon, Pa., and I was a cigar maker. We both were union card men. Jim was just a plain card man. He attended the meetings and paid his dues. He believed in trade unionism with all his heart, but in all the fifteen or twenty years I have known him I never knew or heard of his holding any official position in the union. In fact I never knew him to take any part in union politics.

"Davis is not an educated man as the term is usually applied. I believe the extent of his schooling will not exceed eight months. He had to work for a living when he should have been in school. During the days we "pailed" together he often regretted his lack of education and looked forward to the day when he might go to school. That day never came, but he educated himself by that hardest of methods spare time study. He read a great deal and his principal indoor sport was practicing handwriting. As a result he writes a beautiful hand.

"One thing his associates are going to find out very soon is that Secretary Davis knows the labor problem as few men know it, and not from book-made theories or doctrines. He knows it first hand. During the days he worked at his trade he associated with working men in all trades. He learned something of the trend of every man he came in contact with. He has said to me more than once: 'The trouble with a lot of union leaders is that just as soon as they get into office they forget the men they worked beside. They become organizers, conscious only of organization and its power. They lose personal touch and personal sympathy with each individual workman. Personal ambition often leads them to put self before the very principles which they are in duty bound to uphold and practice.'

"Jim studied hard. He was thrifty, as becomes a Welshman. He saved his money and even as a workman he made small investments. I know of one occasion when he bought stock in a steel plant in which he was working. His first step out of overalls was as county clerk in Anderson, Ind. It was likewise his first shot at politics. Jim was always a popular fellow, and popularity elected him. I think his campaign for county clerk brought his organizing ability to the fore.

His Work for the Moose

"At any rate when he joined the Loyal Order of Moose as the 247th member in an organization now numbering 600,000, almost immediately he was recognized as a leader and an organizer. All that the order has done in a big way it owes to the vision of Jim Davis. It was his idea that the Moose should be the benefactor of the widow and the fatherless or motherless children. Moosehart was his idea. He said to me once: 'These things, dreams if you choose to call them that, I desire accomplished are to me the nearest approach to those principles which should govern trade unionism.'

"I think that Jim's inherent love of children has made him a great man. He has two of his own, he is educating several at his own expense, and his plans for Moosehart were all built for and around the problems of helpless childhood. His careful planning has made it possible for the children in Moosehart to learn trades, get a high school and college education if they desire it, and if not, a union card immediately upon their graduation from their trade course. I mention these details because they point clearly to the type of man who hopes to bring labor and capital closer together as Secretary of Labor.

"I like and admire Sam Gompers. You see I have his photograph on my wall. I know Jim Davis better and consequently my affection for him is deeper. I know that Gompers, nor any other man can or will put a snaffle bit in Jim Davis' mouth. He is gentle, conciliating and humorous, but once his mind is made up he is as immovable as the Rock of Gibraltar. I sit with him on the Moose board as a director.

(*Continued on Page* 34)

Digitized by Google

The Board of Commerce and the Future of Detroit

By JOHN A RUSSELL

[Part of an address written by Mr. Russell, as vice-president of the Detroit Board of Commerce, and read, in Mr. Russell's absence, by Arthur T. Waterfall, vice-president of the Board, at the banquet last Saturday evening, which marked the culmination of "Detroit Week."]

THE Commercial future of Detroit is bound to be one of progress. No city which has assembled an industrial army of three hundred thousand men and women; which has accumulated a population of a million within its boundaries and a million and a third within twelve miles of its center; which has within half a generation of the lives of men transformed its industrial processes from those which characterized unit production into those which mark quantity production; which has destroyed its old types of industrial structures and replaced them with modern types in which the health, the safety and the convenience of the workers are conserved and in which the processes of fabrication follow in orderly sequence without waste of time, reversal of direction or effort mis-spent in producing un-inspectable product, no such city can fail to go forward industrially from lack of workers or adequate facilities unless its people deliberately defeat their own purposes.

A city which has developed so high a sense of merchandising that its staple products may be found in every community of its own country, and in some further quantity in every commercial center of Europe, and which find sale in far Cathay and in those islands of the sea in whose skies shine the stars of the Southern Cross, can fail to go forward as a merchandiser unless its own people fail to keep pace with the progress of its contemporaries and competitors.

The stage has been set for the commercial future of Detroit. The actors and the play depends upon the actors and the management.

ASSUMING that we have the men to make, the factories in which to fabricate and assemble, the captains of industry to plan and direct, and the normal and up-to-date organizations for salesmanship and marketing, two lines of thought open up in respect of our commercial future. One has to do with the enlargement of our markets and the development of facilities for reaching them. The other has to do with local conditions which affect industry and commerce more than we ordinarily credit them. Let us leave the homelier considerations for the last and look at the more striking ones.

We are an inland city, nearly a thousand miles from the nearest seaboard. Having taken our share of the domestic demand and being assured that we can hold our own in the future, we, and by we I mean the directors of this Board of Commerce, have attacked the problem of exportation. Our attack began along the lines of bringing the seaboard to our very door. Last year we collected and formally presented the supporting facts for our claim that our own government and that of our friendly neighbor, Canada, should undertake a work of reforming the face of nature less gigantic than that of putting a canal through the Isthmus of Suez, less expensive than the making of the waterway from Panama to Colon, not more costly than the opening of the Manchester Canal in England, but more useful to us here in Michigan than all three of them put together.

So impressive was the array of figures presented by this city and state that the distinguished chairman of the International Joint Commission, the Honorable Charles McGrath of Canada, and former Senator Obadiah Gardner, for the United States, did this Association the honor of saying that the facts presented by this city of Detroit would alone justify the making of a waterway to the sea from the shores of our city to the Gulf of the St. Lawrence.

BUT our duty did not end in that effort. Spasmodic enthusiasm has about as much motive power as Chinese firecrackers.

If we are to follow up the work begun last summer and autumn, we have full ten years of study and work ahead of us, and the expenditure of not less than a quarter of a million dollars of money by this Association, for this city and for this state, to give it an outlet to the open sea with its products, and once upon the open sea, to every consuming port of the world.

The Germans taught us the science of building up an export market. They sent their own people abroad to be in constant contact with their foreign consumer, to study his tastes, to meet his demand and to make sure that he paid his bill sometime, with interest accruing for every month of delay.

That was a national program, but it was a provincial and municipal one as well, conducted no more by the nation than by provinces like our states, and cities like our cities. Match Saxony with Michigan, match Essen with Detroit, match Merck with Parke-Davis, match Krupp with American Car & Foundry, and you translate the terms of German export exploitation into Michigan English. Export is an aggregation of unit efforts and unit efforts can be made, and must be made, to be effective, by associations like ours.

It seems as if it were but yesterday, and yet it was five and twenty years ago that we entertained in this city Doctor Paul Zilling, the representative of the Commercial Museum of Stuttgart, who was finding out what we Detroit and Michigan people used which Stuttgart could make, and going home and telling his people what it was and how to make it, and finish it, and market it.

Translate Paul Zilling into John Smith, and the Commercial Museum of Stuttgart into the Detroit Board of Commerce, and you have the reverse of the commercial equation set up by the Germans.

It seems as if but yesterday, and yet it was a quarter of a century ago that a splendid Austrian Jew, Herman Linde, who sang like Ruffo, who played like Josef Hoffman, who read Shakespeare like Booth, and who boasted that he was as much at home on Woodward Avenue as he was on the streets of Alexandria or Tunis, dropped in on us summer after summer to study how we could absorb Austrian linens and Bohemian glass products. He was the emissary of the Vienna Bourse.

Translate Herman Linde into John Brown, equip him with the social graces of the ancient regime of Detroit and the energy of its present day, sign his warrant of authority with the name of the Detroit Board of Commerce instead of the Vienna Bourse, and you have turned some more European exportation of export trade into understandable Detroit English.

IT SEEMS only yesterday, and that again was two decades ago, since a polished Japanese, Mr. Wooyeno, walked Woodward Avenue season after season, pad and pencil in hand, and sketched the shapes of the newest designs in pottery which met the favor of our local buyers. These designs went by the fastest ships back to Japan, were reproduced in quantity, three months later were peddled by a smart Irish salesman, Mr. Woolley, at his favorite price of a dollar a million, and were bought by your neighbors and mine over the counter of Hudson's store and Heyn's Bazaar.

Translate Mr. Wooyeno into Jimmy Jones, his principal into any Detroit producer, his mission for salesmanship in Detroit for Japan into salesmanship in Japan for Detroit, and you have the reverse of a picture which I, myself, have seen.

We have the men. Others are using them and have used them. Fred Monahan, raised on Columbia street in this city, a mile from where you are sitting, introduced the American Radiator products into all of Germany and France. Edward Quarles, a Detroiter who is a member of this Board, is today finding a market for American Petroleum productions in Germany. "Bill" Church, who used to pound pills in a drug store on Cass avenue, is selling American Drug Products as the head of the biggest organization in the British Isles. Frank Karpp, a Detroit boy, has princely offices in the King's Chambers at Bombay selling petroleum products for the Texas Company. A missionary in Zanzibar, Father Geotz, who lived for years in Detroit, gathers up an order once a month for Detroit medicines. The chief clerk of the manager of the railway which runs up from the coast of Africa to Nairobi, in the heart of the continent, is a boy from Mount Pleasant, who is a missionary for the products of this city and state, who is making a market for you without pay.

LAST WEEK a learned Pole, for fifteen years a resident of this city, opened up on his own account a study of a project for an actual barter of the linen products of his native country for the automobile products of this city, with none of the hindrances of diverse money values.

Do these instances show us the place of the Detroit Board of Commerce in the future commercial possibilities of this city?

(Continued on Page 34)

Digitized by Google

What Detroit Plants Are Buying

A Review of the Purchasing Situation Existing Today And an Estimate of the Men Who Are Doing the Buying

By ELWOOD SAMPSON

Chairman, Public Relations Committee, National Association of Purchasing Agents, Detroit

THERE are very few business men who thoroughly understand the particular position which Detroit holds as a buying center.

Detroit's commanding position in the sale of automobiles, of stoves, of drugs, etc., has been made known to all the world. But almost no attention has been given to Detroit's commanding position in the purchase of the wide range of commodities necessary to provide for the manufacture and sale of the above products. In fact there is no city in the whole country which ranks so highly as a buying center in the sense of the large number and variety of commodities required. Even more so is this true in the large diversity of commodities where a highly developed, scientific buying knowledge is of such great importance.

In the other large buying centers of the country expenditures for materials are concentrated in a few particular kinds. Also, these immense purchased generally are confined to materials in the raw state or very close to the raw state, where a knowledge of an infinite number of gradations and specializations is not required.

In Connecticut, the greatest manufacturing center in the world of brass and copper, the immensely important purchases are limited almost entirely to the raw metals of copper and zinc, and to fuel. In New England, the textile center of America, the immensely important purchases are cotton, wool, silk and jiuen in the raw state. In Pittsburgh, the leading steel center in the New World, the tremendously important purchases are limited almost entirely to iron and fuel in the raw state.

But when we come to consider Detroit as a buying market, we find that purchases are not confined mainly to a few exceedingly important forms of raw material. Also, each of our important articles of purchase is only a small fraction of the tremendous quantity of each principal raw material ordered in the Eastern centers. Instead, they are spread out through an immense range, both of materials and of specialized forms of each kind of material.

This is particularly true with reference to the purchase of the materials required in the manufacture of automobiles. Every one of the common metals and almost all of the rare metals are required in large enough quantities and in special stages of manufacture to make necessary thorough and detailed purchasing knowledge and to produce intricate purchasing problems. This also holds true with reference to the purchase of a wide range of petroleum products; of paints, varnishes and japans; of electrical equipment; of glass; of lumber; of fuel; of leather and of textiles.

The natural result to be expected from this situation is that the purchasing agents of the Detroit territory will be different in many respects from the men holding the men holding the same positions in the other buying centers.

Comparing the two, we find, first of all, that inasmuch as Detroit is the youngest of the large industrial centers of the country, the purchasing heads average much younger in age than do the men with the same responsibility elsewhere. Youth produces activity, and age experience and knowledge. Accordingly we find that when it comes to the volume of work handled individually, the Detroit buyers far surpass those of any other part of the country. On the other hand, the Detroit buyers do not have so great a detailed knowledge of the various materials which they purchase as is true of other parts of the country. This condition is to a great extent enhanced because Detroit buyers have so many more kinds of important materials to purchase.

As was pointed out in a previous article by Mr. Hersey in this paper, the big problem of the past in the automobile industry has been production on a continuously increasing scale. This has reacted upon the purchasing department in a speeding up of "production of orders" and in continually getting material in quickly at the last moment. As a result, when it comes to getting things done in emergencies, Detroit buyers rank the highest of any city in the country. But this continual emphasis upon speed of incoming shipments has carried with it a corresponding lack of detailed knowledge of economic conditions, of price trends, of price analysis and of ability to get the greatest value possible in every purchase made. In all of these last factors the purchasing agents of Detroit, as a class, have been outranked. For in every other part of the country the industrial development is an older one than it is here. Industrial conditions therefore have passed through the stage of rapid growth into the stage of keen competition where only the strong survive.

When an industry reaches the point of keen competition, the ability of any firm to purchase rightly is an exceedingly important factor in the ability of that firm to succeed in the face of competition. When that stage has been reached, that firm must have a purchasing head who is far sighted, who knows economic conditions and what effect each condition and factor will have on the price and delivery of each commodity which he is buying. He must have developed that instinctive sense of values which will tell him whether a price quoted to him is too high or not, even though he receives only one quotation.

He must have a detailed knowledge of the properties of materials which he purchases and a general knowledge of the manufacturing processes of his own company. This is essential in order that he purchase the one kind and grade of material which will produce the lowest unit cost of manufacture in his own plant. And, more than all these, he must keep always in mind the relation of the thing he buys to the thing his

LUCKY HE HAS A STRONG CONSTITUTION



—Darling in Collier's Weekly.

Recovery will be more rapid when we have a little better hospital discipline.

Digitized by Google

company sells, so that in his purchasing he does nothing whatever detrimental to the good will and reputation which his company has taken so much pains to build up.

It takes only a moment's consideration of these qualifications to make it apparent that the purchasing position of a company should not be filled by any other than a high calibered man. Too many factors necessarily are involved; too much knowledge, clear-headedness and balanced judgment is required for it to be possible of any except a high-grade man to measure up to the conditions.

What It Means to the Manufacturer

The understanding of the importance of the purchasing division of a firm is something which every manufacturer in this territory is going to find it increasingly necessary to bear in mind.

Automobile executives are almost unanimous in agreeing that the automobile industry has now reached its full growth. As a result, the big problem of the future will be primarily a sales one. To solve this the automobile manufacturer will more and more strive to build a car high enough in quality and low enough in price to be sold in the face of keen competition.

With the problems of manufacturing, production, sales, etc., necessary to face the new situation, this article is not concerned. These problems, anyway, are already being given intense study and consideration. In so doing, however, the corresponding importance of purchasing should not be forgotten. It is to believe that the importance of this fact will be overlooked, if a thorough consideration is given to the relative strength in a financial sense of the various large companies in this territory, and to the relative strength in a buying sense of the same companies. These two factors almost invariably closely parallel each other. Take for example the Studebaker Corporation. It is known as one of the strongest companies financially in the motor car industry. It is more than a coincidence that throughout the profession of buying the Studebaker purchasing department is conceded to be one of the very strongest in the motor car companies. Correspondingly, on the other hand, certain of the motor car companies which have been in financial difficulties have purchasing departments of very poor standing in the profession of buying.

I emphasize this ranking in the profession of buying because it is true that the best men in any profession are those men who through their professional ability have been able to gain the highest respect of their own profession, whether it be that of law, medicine, engineering or purchasing.

Proceeding further with the analysis of the Detroit buyers, we find one thing that the purchasing agents of Detroit have developed, almost without exception, is the ability to meet and overcome the biggest emergencies. This particular outstanding feature has produced a big change in the Detroit buying profession during the last six months.

The immense inventories which their companies now have has proved to be a tremendous lesson to most purchasing agents. They now feel that they should not have been satisfied blindly to follow instructions given to them by the managing executives of their respective concerns. Instead, they individually should have studied in advance the conditions much more thoroughly than they did, so that they would have been in a position at all times to give in advance expert advice concerning the general buying policy which should be carried out by their companies.

The prosperity of the past has been such that most business men have unavoidably grown more or less stale. This has not held true in the purchasing departments, because, to obtain material in the seller's market has required the finest kind of keen wittedness and alert mindedness. This mental state has enabled the buyers to appreciate fully and immediately the change in conditions—to recognize clearly the part their respective companies must do to face the new condition and to judge carefully what they themselves must carry out to do their part.

Consequently, at present a more careful study of the economic conditions is being made. Particularly are old sources of supply being thoroughly gone over, analyzed and weighed in the scales of the new conditions. Many of these old sources of supply—a great many, in fact—are being found wanting in the sense that their management and organization has grown stale; that they have acquired uselessly expensive habits of manufacture; that they are loaded up with many unnecessary procedures and that they have lost the knack of manufacturing and selling profitably at a low price.

Analyzing Sources Anew

Accordingly, a thorough study is now being made of prospective new sources of supply to replace those who cannot measure up to the necessities of the future. Past records are not being forgotten by purchasing agents. In fact they were never more generally remembered in a buyer's market than they are at present. On the one hand, it is bad past records which will force many firms out of the Detroit market. On the other hand, every firm with a good past record must avoid the mistake of trying to live on its record. Other things being approximately equal, such firms will get the preference in the years to come. But no

(*Continued on Page* 30)

Facilitating Money Movements to Poland

By FRED W. ALLEN

Manager Foreign Exchange Department, American State Bank, Detroit

AN ITEM of interest to bankers throughout the country was released last week by the Guaranty Trust Company and the National Bank of Commerce of New York, and concerns remittances of Polish marks and dollars to the Republic of Poland.

Immediately after the signing of the Armistice it became apparent to the bankers in this country that this newly created sister republic would need the need of financial assistance as much, if not more so than any of those so hard hit by the world conflict.

Through the personal efforts and under the direct supervision of our present Secretary of Commerce, Herbert Hoover, arrangements were made for the transfer of American funds to Poland and other war-stricken countries in Europe, such funds being transferred in the form of "food drafts." These "food drafts" are drawn upon the warehouses of the American Relief Administration and are payable in wholesome food for a fixed quantity as stated upon the face of the draft.

The importance and value of these food drafts are inestimable and they relieved the situation from the standpoint of hunger and starvation in a most commendable way.

There is a great necessity, however, for the transfer of funds to Poland to be used in the purchase of other commodities and to this end the banks in this country have been striving to perfect a service that would insure accurate and expeditious handling of these funds.

Connections were established in the principal cities of Poland, such as Warsaw, Lemberg and Cracow, and "nostro" accounts opened with the largest banks in the republic. Polish marks being the official currency adopted by the country, trading in them is based upon the German mark rate and the "exchange" is quoted a trifle under that of German marks.

As the exchanges of the Allied powers depreciated in value in this country, the Polish mark, like all of the exchanges of the newly created countries of Europe and also the old Balkan states, naturally decreased in value in the United States, until today they are quoted nominally at 12 cents per 100 Polish marks.

Under the present arrangements that could be made, banks in this country were in a position to act as agents for their customers in the transfer of Polish marks to residents of Poland at the rate given at the time the transfer was requested.

Drafts were also drawn on these correspondents in the principal cities of Poland, payable in Polish marks.

If political and internal conditions had been as favorable throughout Poland as in the majority of the other countries of Europe, the Polish banks could probably have improved the service they have given the American banks, but this handicap, coupled with the shortage of competent clerical help, necessarily made the service so uncertain that the majority of banks in this country found it impractical to continue their efforts to effect remittances or to protect drafts.

Realizing the stress laid upon the necessity of transmitting funds to Poland at the earliest possible date, the larger banks in New York have been working on plans most practical in solving the problem, and it is as a result of these efforts that the two New York institutions are announcing the arrangement whereby funds can be transferred to Poland under the official supervision and guarantee of the Polish government.

According to the announcement, the Guaranty Trust Company of New York will now act as an agent for the Polish government, the arrangement entered into being for the purpose of supplementing the existing facilities for forwarding remittances.

As soon as practical arrangements have been completed, these remittances will be made on official Polish government forms.

In the event of non-delivery, due to various causes that might be given, it is planned to make refund to the sender of the funds of the full amount of dollars remitted, less a nominal fee to cover the cost to which the bank or its correspondent has been put in acting as an agent for the customer.

The dollars received by the Guaranty Trust Company of New York to "cover" remittances to Poland will be held in a special account until advices have reached this side that the payments have been effected, when such "cover" will be put at the disposal of the Polish government by the trust company.

It is also reported that the Minister of Finance of Poland will in the near future issue rules and regulations covering the delivery and receipt in that Republic of remittances from the United States.

Should the arrangement be completed whereby dollars can be transferred to Poland through the Polish government, commerce between these countries will necessarily benefit to the extent that through the creation of dollar balances here, a good portion will be utilized in the purchase of American goods, the new arrangement thereby proving of advantage to American manufacturers and exporters.

In the case of the National Bank of Commerce in New York, drafts will be issued in pounds sterling or United States dollars upon the banks established abroad, which drafts will be "payable at the bankers' buying rate for demand drafts on London" or "New York."

Digitized by Google

Milling Machines--When and How

Classes of Work on Which Their Use Is advantageous; A Discussion of the Several Types, and How Employed

By ALBERT A. DOWD*

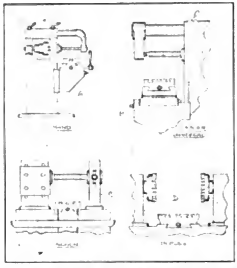


Fig. 1—Diagrams of Hand, Universal, Lincoln and Duplex Milling Machines.

WHY should I buy a milling machine for my work?"

"What type of machine do I need and how will the use of a suitable machine increase my production?"

These are pertinent questions which every executive will be asking very soon. In point of fact many wide-awake men are considering these matters right now, not only with respect to milling machines but to other types of machine tools as well, in order that production will not be held up when business stabilizes itself once more.

This article is written for the purpose of showing the busy executive, briefly, first how he can buy machine tools both wisely and well; and second, how he can obtain better production from the machines he is now using. The works manager or superintendent of a large factory and the foreman of a small shop both may find it profitable to look over the facts presented here and consider them carefully before getting ready for production.

Necessity For the Machine

It is essential for the executive to know just why his foreman tells him he needs a milling machine for a given piece of work. If he does not know the why and wherefore, he must be dependent upon his foreman for the information needed. Now a foreman may be and usually is a capable man, yet he does not know what plans may be ripening for future production, changes in design or possibly even a contemplated change in the character of the product to be manufactured.

The executive DOES know these things and therefore, if he has sufficient knowledge of machine usages to determine the type of machine best suited and most adaptable to his work for both present and future, he can judge and decide upon machine merits himself.

Let us assume that a factory is manufacturing a certain mechanism such as a pump, a gasoline motor, a motion picture machine or some other product requiring a great number of machining operations of various kinds. How then can an executive determine whether he requires a milling machine or not when his foreman recommends its purchase? Obviously the executive must know how a milling machine is used and what advantages, if any, it has over other types of machines for the operations to which he wishes to apply it.

The foreman says he wants a No. 2 plain milling machine for a certain job. Why can't he do the work on a planer or a shaper or a surface grinder? The factory has plenty of these machines. Why must a new machine be bought? The foreman knows that a milling machine with suitable fixtures will produce the work economically and rapidly and therefore he recommends the purchase. He knows the work is comparatively small and that it can be produced faster on a milling machine than in any other way. But the executive does not know this because he is more or less unfamiliar with machine tools. Let us see if we can make the matter clear by a few brief statements as to the kind of work adapted to milling operations.

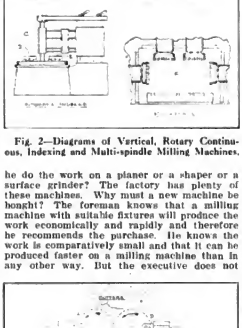


Fig. 2—Diagrams of Vertical, Rotary Continuous, Indexing and Multi-spindle Milling Machines.

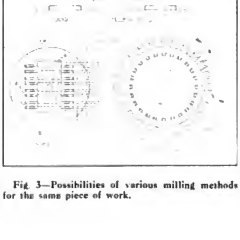


Fig. 3—Possibilities of various milling methods for the same piece of work.

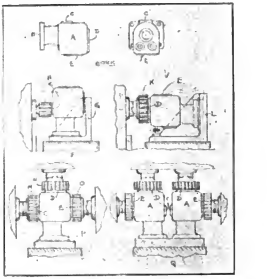


Fig. 4—Increasing production by utilizing the proper machine for the work.

Almost any kind of a casting having bosses, pads, short surfaces or slots to be finished can be profitably machined on some type of milling machine by using suitable fixtures. For very long plain surfaces, angular ways like those on the bed of an engine lathe or other machine tool, and for other work of this general character, a planer is more suitable than a milling machine but it is much slower in action.

Slides of various kinds, dovetail, square and taper, which require scraping for the final fitting, are usually machined on a planer not only for the reasons mentioned but also because a planer surface consisting of a series of parallel grooves can be scraped to a finish much more easily than if the same surface had been milled.

There is no intention in the foregoing discussion to compare milling machines and planers except to show in a general way the class of work to which each machine is particularly adapted. Both machines have their own fields and both are valuable producers.

Type of Machine Needed

Now let us see if we have arrived at a sufficiently clear understanding of the uses of planers and milling machines to decide whether the work to be done is better adapted to one machine than the other. The work for which the foreman says he wants a milling machine is a transmission gear case about 12"x15"x10". It has several finished bosses and pads on three sides of it and it is open at the top with a finished flange all around the opening. Now then, based on the description of the class of work which has been mentioned as distinctly suited to a milling machine, we would be inclined to agree with the foreman's judgment and say definitely that we need a milling machine for the work in question.

We have reached a point now where we have definitely decided that we need a milling ma-

*Albert A. Dowd, who has written this article especially for the Michigan Manufacturer and Financial Record, is president and general manager of the Albert A. Dowd Engineering Company, New York. Frank W. Curtis, chief engineer of the concern, has collaborated.

Digitized by Google

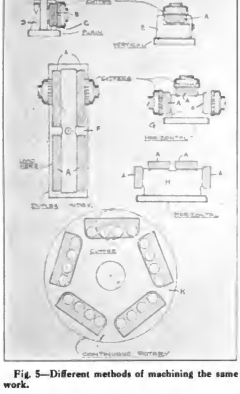


Fig. 5—Different methods of machining the same work.

chine, but we do not know what type of machine is most suitable for our work. Let us then forget the transmission case and the foreman and take up the various types of milling machines and see just why they are adapted and used for various kinds of work.

Practically all types of milling machines are built in several sizes and with various modifications or improvements governed by the manufactnrer whose prodncts they are. Each type of machine is, however, more or less distinct in its functions and purposes, although it may be somewhat different in general design.

Fig. 1 shows several diagramatic representations of hand, plain and universal, Lincoln and dnplex types of milling machines. The hand machine "A" usually is driven by an open belt and has no back gearing, nor has it power feed to the table. In some designs the head carrying the arbor and cutters moves up and down and the table is fed backward and forward by means of a hand lever. In other designs the head remains stationary while the table is fed hackward and forward or up and down by a hand lever. Hand milling machines are used principally for light facing, slotting, forming or straddle milling cuts—short in length —and on materials which can be cut at comparatively high speed, such as brass, aluminum, malleable iron, soft steel and the like.

The plain and universal machines shown at "B" are not exactly the same but are similar in general construction. The difference between them is principally in the table, which can be swiveled in the universal machine, while on the plain type it moves only in a plane at right angles to the spindle. Machines of the universal type are for the most part used in the tool room and not generally for manufacturing purposes. The plain machines are made in a number of sizes, the lighter varieties being driven in some cases by an open belt without back gearing, but in the heavier types the gearing is powerful and feeds in all directions are provided for the table. Machines of this type are used for medium and heavy cutting of cast-iron and steel. Straddle milling, surfacing, form and gang milling operations can all be done on these machines.

The Lincoln type milling machine shown at "C" has a vertical adjustment to the head but none to the table. It is back geared and suitable for medium heavy forming cuts, straddle and slot milling and surfacing. Machines of this kind are much nsed in general manufacturing of medium sized and small mechanisms.

The duplex milling machine shown at "D" is made in several sizes, the lighter designs being driven by an open belt while the heavier types are back geared. Spindles can be adjusted horizontally and vertically. For facing opposite sides of casting or forgings and for cutting shoulders or slots these machines are particularly adapted.

Fig. 2 shows diagrams of vertical, rotary, continuous, automatic indexing and multi-spindle milling machines. The vertical type "A" is belt-driven on the smaller sizes and back geared on the larger. Usually the spindle and table are both adjustable. Suitable feeds are provided for the latter. Machines of this kind are much used for light and medium facing and surfacing work, also for shoulder work of certain kinds. Spindle speeds are such as to permit rapid cutting of aluminum and brass. The rotary continuous type "B" is similar to type "A" except that it has a revolving table on which work can be set up so that continuous cutting is achieved as the table rotates.

The automatic indexing type "C" consists of a heavy bed with an adjustable spindle carrying head and an indexing table on which two sliding tables "D" and "E" are mounted in

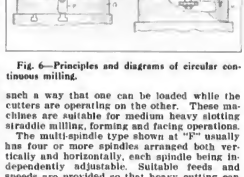


Fig. 6—Principles and diagrams of circular continuous milling.

such a way that one can be loaded while the cutters are operating on the other. These machines are suitable for medium heavy slotting straddle milling, forming and facing operations.

The multi-spindle type shown at "F" usually has four or more spindles arranged both vertically and horizontally, each spindle being independently adjustable. Suitable feeds and speeds are provided so that heavy cutting can be done economically. These machines are particularly adapted to facing operations on large castings, and it is customary to set up a number of pieces of work on the long table so that pieces are milled successively.

Points Affecting Selection of Machines

A general idea has now been given of the purposes to which the various types of milling machines are most suited; yet it will be seen that certain classes of work can be machined on several of the types shown. For this reason the manufacturer should select his machines with a view to their adaptability.

If the product which is being manufactured is subject to a change in design or if it is likely to become obsolete in a short time, care should be taken to select a machine which can be adapted for other purposes.

Let us consider the various factors which have an effect on the selection of a milling machine.

1. Production required. If the machine will be required continuously on the same product and if the product is not likely to be materially changed in design, the selection can be made to suit the particular work on this piece. If, however, a comparatively small production is needed a machine should be selected which can be readily adapted to other work.

2. Size of work and character of cuts to be made, whether light or heavy. In considering this aspect of the situation the power and capacity of the machine should be such as to give the greatest possible production.

3. Material to be cut. Cast-iron, steel, aluminum and bronze are cut at different rates of speed and feed. Steel and cast-iron require more power and less speed than aluminum and bronze.

4. Accuracy required. This may be an important factor, as a comparatively cheap machine may be all right for rough work, while a more expensive and better made machine would be required for work requiring great accuracy.

5. Cost of machine. If the amount of time saved by the use of a milling machine is not sufficient to pay a good premium on the investment, it would not be wise to buy it.

6. Cost of tool equipment. A milling machine in itself is not sufficient for production work unless the tool equipment is suitable. If the machine is intended for toolroom work the equipment should be purchased in accordance with these requirements. If, however, the machine is to be used for production purposes it usually is necessary to design fixtures in order to hold the work properly. The importance of suitable fixtures cannot be overestimated, as the production can be increased materially by the use of well designed fixtures and correct methods of handling.

A number of points in connection with the design and use of milling fixtures will be brought out in this article and the importance of proper planning an efficient design will be made apparent.

The method used in handling any piece of work depends to a considerable extent on the production required. It is possible to mill a certain surface or slot in a number of different ways, but the efficiency of one method may be far greater than another. Probably the best way to illustrate this point is by means of diagrams, and therefore we will mention a few cases which show clearly the advantages of a proper selection of machines with suitable tooling in order to obtain maximum production.

Fig. 3 shows at "A" a piece of work which is to be straddle milled and slotted. Probably the simplest way to do this work would be by holding it in a fixture similar to that shown at "B" and machining the pieces one at a time

(*Continued on Page 31*)



Fig. 7—Index milling fixture for surfacing castings.

Digitized by Google

Welfare Work by a Third Party

Hal a Hundred Michigan Manufacturers Adopt Unique Plan to Show Interest-Plus in Employes

HOW THE DODGE MANUFACTURING COMPANY GOT ITS EMPLOYES TO "TELL WHY"

PERHAPS the most difficult problem The man in charge of personnel work has to coniend with, is to get a definite, worth-while expression from the employe of just what he thinks of the various forms of welfare work and of the organization that employs him. This was the situation Dr. W. A. Moore, manager of industrial relations for the Dodge Manufacturing Company, Mishawaka, Ind., ran up against.

There were six questions which puzzled Dr. Moore and which might well be asked in every organization, whether or not that organization is of sufficient size to warrant the employment of a highly trained personnel man.

They were: What is the Dodge spirit? Why do so many stay so long with Dodge? How can we get old Dodge spirit into new men? How does an old Dodge man feel about the company? What are the impressions of a new man? How can we attract and hold the kind of a man who will stick?

At last the idea came to carry out a prize contest in the Dodge News, the weekly internal house organ. The rules governing were made just as fair as possible. Any employe was eligible; one subject could be selected and the answer was not to contain in excess of 1,000 words. No names were to be signed to any paper, but the name, department and



THE WINNER

clock number of each contestant was to be written on a separate sheet of paper, enclosed in an envelope and attached to the entry. Three prizes were offered: $25, $10 and $5. The judges were selected from among the factory executives.

When the judges' decisions were compared it was found that the first prize was awarded to a worker in the steel shop who had chosen to give the impressions of a new Dodge man. This man had been a "boomer" and an industrial drifter all his life but had decided that he liked the organization so well that he was going to stick. To say that the ideas he advanced were valuable to the manager of industrial relations is to put the matter mildly. For example, this man liked the commissary, where the company sells groceries and clothing to employes at cost; he enjoyed the benefits of the Relief Association; he had saved money through the thrift club; he had particularly enjoyed the advantages of the employes' club, the cafeteria and the Dodge News. He was especially grateful for the treatment accorded him by his superiors and of the general spirit of good-fellowship and co-operation between all units of the organization.

The company is now running in its internal house organ the papers of the winners and of those who obtained honorable mention.

The company believes the contest idea is well worth the time and money spent. The number of entries were large and answers came from its branches from Seattle, Wash., to New York City. Incidentally, it developed a number of new ideas which eventually will bring changes in the welfare and personnel work.

FAITH in human nature has been known to be upset by so small a thing as a plug in a gasoline tank, and, as strangely, restored by such a thing as a pair of work horses. Withal, some faith persists, which explains why some industrial executives adopt and swear by plant welfare schemes. Others for reasons good and sufficient, do not. They have their employes' well being just as much at heart, but they are wary of anything that smacks of paternalism.

Human nature in industry is constantly tipping backward and forward the faith in the ultimate good intentions of the majority of the wage-workers, which the executive office strives to retain in the face of many discouragements. Take the case of a prominent Michigan manufacturer, to whom the virtues of plant welfare work were being presented.

"Welfare! I wouldn't give my employes the satisfaction of spending money on welfare work," he said. "They wouldn't appreciate it in the first place, and in the second place I haven't any faith in their loyalty to my interests. Here is one reason: The other night I started home in my car. Going up a hill the car balked. I searched for the cause without success, but finally got the car started again. After dinner that evening I took the machine out, but before I had gone very far it stopped again. Finally I had to have it towed to a garage. There a mechanic discovered a wooden plug in the tank. The plug had been whittled down to a nicety by some worker in my plant who knew what would happen.

"Do you think I am in a frame of mind to do a little something extra for employes who will treat me like that? That plug represents largely the attitude of workers toward their employers. Yes, I've lost faith in human nature. It is 'dog eat dog' and we might as well recognize it."

On the other hand, here is a little story about an employer and a pair of horses. This man was a gentleman farmer, by which is meant that he farmed for the love of it when not directing the activities of a great manufacturing plant. He resisted overtures on welfare work, on the ground that its principles were founded upon sentimentality and its results on production negligible. This man had a pair of work horses on his farm of which he was justly proud. In his spare time he often rode behind those animals in the fields.

On one occasion he found his horses lily prepared for the day's work. They were drooping, restless, uncleaned and altogether a pitiful contrast to their usual sleek, spirited selves. Investigation showed that they had not been properly groomed, if groomed at all; they had not been half fed and their stalls had not been bedded down, all due to neglect by the caretaker.

They could have been driven to work by the whip, but that was not this man's way. He was upset by this neglect of his good animals. He saw both the inhuman and the uneconomic phases of the neglect. Introspection drove his mind back to his plant and a comparison was built up from which came this realization: If a man owes something to his dumb beasts who work for him without choice, certainly his human fellow who work for him by choice are entitled to something more than a place at a machine and a daily wage. The majority deserves it, even though there is an undeserving minority. This man was sold on basic principles in the improvement of working and living conditions.

This article does not set out to argue for or against so-called welfare work. It is recognized that following this depression the need of and the desire for employment will place the privilege of work and the pay envelope above all other considerations. But many employers nevertheless will continue their various recreational, welfare or good will methods, with perhaps some restrictions on past policies. With the resumption of industry some employers will for the first time attempt to introduce some facilities or plans for expressing their interest in their workers over and above the recognition given in the pay check. They will endeavor to reduce working forces to a minimum and at the same time gain a greater production and lessen the turnover cost as applied to labor. There are many ways of working toward this end, all of which have been given no end of prominence. In this article, however, there is presented a new and unique method of supply-

To avoid the appearance of "publicity," the editors have omitted the name of the company supplying the service described in this article. Readers who may be interested, however, in ascertaining its identity will be informed by letter if they will communicate with the Editorial Department.

Digitized by Google

ing a good will service to the employer, which owes its existence to the fact that many smaller manufacturing plants in Michigan did not feel able to provide extensive facilities of their own.

In the effort to supply a substitute for the contact between employer and employe possible in the days of the guilds and the master and his journeymen, many plants have installed costly systems. In many cases these have been tainted with condescension or tinged with a charity either resented or unappreciated. The systems have been always a part of the plant machinery. Neither the desired object nor the whole-hearted loyalty of the workers have been accomplished in every case, nor to the degree desired in any case.

It was the opinion of a Michigan man who had given the subject some study that most of these systems failed in accomplishing the desired results because of the lack of a third and independent party; and furthermore, that plant welfare was as important in the small factories as in the larger ones. It occurred to him that there was a large field for an indirect contact service to employer and employe, which would benefit where compensation left off and proceed through the whole gamut of employer-employe relationship as far as necessary or acceptable; a service providing the best element in all known welfare plans at a cost as low, or lower than any employer could instal his own method.

This man saw a certain value in such a service organization, a value derived from the freedom to give the same amount of unbiased consideration to the problems of the employe as to those of the employer, which would result from the more or less disinterested position of the third party, even though the pay check came from the employer.

The success of such a service as this man has established in more than 50 plants in the state was and still is dependent upon satisfying the employe that they were in no better off in the plants which show a consideration of their needs by using the service, to accomplish which the agency must win and hold their confidence. This confidence maintained reacts in like manner upon the employers using the service, who report increased production, lower turnover, better quality of work and other advantages.

The Program Formulated

It was 18 months ago that this man put his ideas to the acid test by organizing in a populous Michigan industrial center a corporation to supply such a service. At that time labor turnover was a problem of large dimensions. Also the mouthings of the agitators were spreading discontent. High wages were turning heads and the inspiring watchfulness in hours and money. This man organized a working staff consisting of doctors, trained nurses, lawyers and salesmen and prepared a platform embodying these principles:

That labor is entitled to fair consideration in the conduct of industry.

That labor is entitled to something more at the hands of capital than wages.

That industry should safeguard the health of labor.

That both employer and employe are entitled to a fair understanding at all times with each other.

That industry should meet its costs and that a part of these costs is a contribution to the expense incurred from the breaking down in the health of the wage-earner. At the same time such expense will be more than offsetted by the increased production obtained thereby.

That the employer is entitled to receive a dollar's worth of work for each dollar paid in wages.

That every employer should display in a substantial manner a personal interest in his employes by establishing a relationship of consideration and understanding.

The man sold the manufacturers on a guarantee that he could tell them what was the matter with their employes if they were burdened with excessive turnover, low production or troubles due to general or group discontent. He agreed that, after discovering the causes of any of the foregoing conditions, he would eradicate or minimize them if the employers would grant him reasonable co-operation.

The hypothesis upon which he operated was that the employe rarely expressed his real sentiments in his place of employment, except in a guarded and more or less underhand manner, the reason being his fear of losing employment or incurring the enmity of those superiors with whom he came in closest contact; also that such complaints or sentiments as gained circulation often were colored or misrepresented by the time they reached the ears of the employers.

In the home, however, he felt sure the real mental attitude of the employe would be expressed because there he was at his home and that the service was expected to do its most effective work.

Two methods of application of this service and two rates are offered the employer. Rate No. 1 is based upon weekly benefits to the amount of 50 per cent of the insured's weekly wage, these benefits increasing or decreasing with the policy holders wages, the minimum cost being two per cent of the wages. This rate is subject to increase based upon the experience had in the factory or shop, due to the nature of the individual business. Under this rate the employer pays the entire cost.

The second rate is based upon fixed weekly benefits upon which the minimum benefits for all men of all occupations, and also for women in offices and stores, is $10, and for women in shops and factories $8. The minimum cost upon such policies is 40 cents a week, which cost is paid by the employer. If additional indemnity is desired it may be had by the payment of 4 per cent of such increases. This extra cost may be paid by either the employer or the employe, but in any event must be included in the payment to the service of the regular cost. No contracts are made.

How It Works Out

From the time the service is subscribed for by the employer, the work of the organization is concentrated upon the employes to whom direct benefits accrue, while the benefits to the employer are indirect.

Each morning the factory or shop provides the service with a list of all absentees. This is turned over to the head nurse, who has divided the city into districts, with physicians and nurses subject to call in each. The home of the absent employe is then visited, who "lay" is merely ascertains the cause of the absence. There is no interference with the home life, no attempt to dictate and no rendering of help unless desired.

If, for instance, the nurse finds that the employe remained away from work to go hunting, she merely asks when he expects to return to work. If he considers a report to the effect that the employe has taken the day off and will return to work later. On the other hand, should the nurse find the employe ill she refers a doctor's service and gives such nursing attention as may be required. The employer is notified of the employe's illness, and if it is prolonged, benefits of one-half of his wages, based on the eight day and continue through the illness.

In the meantime the nurse makes daily visits to the home and endeavors to establish a friendly sympathetic relationships with the wife and other members of the family. As important, perhaps, as medicine or nursing is the confidence which the nurse strives to create by impressing the employe with the fact that she represents a third party in whom he may confide without the feeling that whatever he may say will be carried back to the employer.

Should the nurse find that an employe has met with an accident, his benefits begin immediately. Where it is found that a child or some other member of the family is ill and the employe has remained at home on that account, the nurse offers to take charge, thus enabling the worker to return to the factory. As the service means no expense to him, the employe can do better work because his mind is at ease.

Temporary "crouches" make periodic absences of many men who otherwise are good employes. These negative mental attitudes arise from many causes. Perhaps the foreman has been critical or abusive. Maybe a machine is not working right, or the room in which the man works is too hot or too cold. The employe may be the victim of some idle agitator's eloquence and knows of no other way to express his sense of injustice than by staying home.

Now if the service merely contented itself with repeating the employe's expressions of dissatisfaction to the employer, its value to either the employe or the employer would soon be discounted. That is not the policy. Instead, a representative is sent to the shop or factory to ascertain how much of the employe's dissatisfaction is justified before any report is rendered the employer. In every case the confidence in the employe is respected where evidence of his attitude would accomplish no special good.

Unreasonably low wages and improper working conditions may cause discontent. When the service representatives have established to their satisfaction that either one of these conditions, or both of them are responsible for the employer's inattentive habits, he is urged to make some concessions, either in the improvement of working conditions or by increasing wages.

Bulletins Help

Immediately after an employer has subscribed to the industrial service, the employes are informed of the fact by a circular explaining just what the service is and why the employer has made it available. From that time on the employe receives monthly bulletins of an educational and entertaining character. These explain many of the problems confronting the employer.

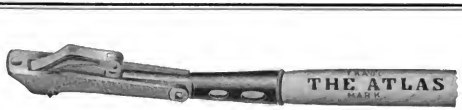
This bulletin service takes the place of the shop paper or house organ published by most of the larger plants. It is written in simple language. From its pages a typical workman character named "Bill" speaks to his fellows in a practical, understandable manner. He discusses working conditions, praises or criticizes according to the demands of the occasion; speaks a few "plain words" to the slow and endeavors to talk pointedly on all current events as they affect the factories in which his fellow workers are employed. These points and such changes as may be made in them are discussed at length, so that the employes know why certain changes are made and what the "big boss" is trying to do for his working partners.

As might be expected, occasionally employes try to impose upon the service. One man, for instance, was confined to his home by illness. Instead of returning to work when able, he decided to take it easy for a few days. He sent in a doctor's certificate to that effect. As a result his disability allowance was cut. He resented it and on returning to work informed his fellow workmen that he had been cheated. They urged the head of the service to insist. So he suggested that the employe submit his case to a group of his fellow employes. At the hearing each side gave its version and in the end the jury decided against the employe. Had the jury decided for the employe the service would have accepted the decision and taken its loss, for it would have felt that, "I would rather lose a case and money as well than lose the confidence of the men we serve, unless of course there is sufficient evidence to show a frame-up."

The company will sell a mutual service, paid for by the employer and employe, but not without reluctance. The founder's experience leads him to believe that such arrangements seldom succeed, and he does not believe the efficient worker should be taxed to support the inefficient, or the strong made to indemnify the weak. Where the employe pays a small fee in co-partnership with his employer there always is the possibility of unreasonable demands.

The mutual system was tried once and it lasted three weeks. An employe who disliked the service physician demanded one of his own selection; another employe demanded two doctors and a third started a campaign of abuse against the service because he was not permitted to have a nurse on full time during a short and not at all serious illness.

Digitized by Google



Do Your Own Switching

THE above cut shows the powerful compound action of the famous Atlas Car Mover.

To be independent of switching crews, to be able to place a loaded car no matter how heavy, to get it out of the way when unloaded—without trouble, without extra expense, is worth many times the cost of one of these Movers, yet this is the service rendered by an Atlas Car Mover in the hands of one man.

Always ready and never on a strike

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

Signs of Automotive Revival Multiply

By MARC BRAUN

WHILE in Portland, Ore., a few days ago, Robert J. Schmunk, general sales manager of the Peerless Motor Car Company, Cleveland, expressed himself as follows on the general situation, says the Sunday Oregonian:

"Business has really picked up wonderfully in the East during the last 30 days. The factories already have been given impetus, and, speaking from our standpoint, we have received encouraging orders from practically every section.

"Manufacturers of medium-priced and higher-priced cars throughout the Middle West are assuming an attitude of careful and conservative production and this may result in a shortage of cars during the peak season of the spring. Many of the factories, like the Peerless, are planning a program of 50 per cent of maximum production for the coming year and unless demand proves far beyond expectation this will not be exceeded."

Mr. Schmunk is quoted as saying that no reduction in prices of motor cars is possible for many months.

In a letter to its distributors the Oakland Motor Car Company, Pontiac, says in part: "The last year has been as a kaleidoscope, for we have journeyed within a period of 12 months from conditions which were tremendously abnormal to a sales period which was distinctly subnormal, and we have now come to an era of prosperity which convinces us that normal times are returning. The fluctuation of the retail market has been quite as severe on the manufacturer as it has been unfavorable to the interests of the dealer.

"With the opening of the New York show we heard a few suggestions of price increase and no discussion of price reduction. The price sentiment, as expressed in New York, has been materially strengthened in Chicago, where we have had frequently brought to our attention suggestions of early price raises on some cars.

"Though we have given a positive guarantee against any price reduction, we do not give any guarantee against a possible increase. We do not say that the price of Oakland cars will be raised, but there are far more chances of price increase than a price reduction, and there are many reasons why an upward revision of retail prices is justified."

The first of a number of trainload shipments of Oldsmobile cars for J. W. Leavitt & Company, San Francisco, left the Olds Motor Works, at Lansing, the latter part of February. The train was made up of 62 cars and contained 248 Oldsmobiles. The Leavitt concern is said to have place orders for $5,000,000 worth of cars.

The Dashiell Motor Company, Chicago, distributor for Dodge, is quoted in the Chicago Evening Post as having said that its business for the period of November to the end of February was the best in the company's history and that February sales of commercial vehicles were five times as great as during February, 1920.

Information coming from the H. H. Franklin Manufacturing Company, Syracuse, N. Y., is that during February 1,107 orders for cars were received and that production totaled 952 automobiles. For March the production schedule was 1,031 cars, and, according to the Chicago Franklin dealer, 65 per cent of this output had been sold some time ago.

Fort the third time the Overland-Harper Company, Philadelphia, tops the sales list of Overland branches for the year. The final compilations for 1920 have been announced by the Toledo concern. In speaking of the general situation, President H. B. Harper, of the Philadelphia corporation, says: "January was the best month we had since August; February was 40 per cent better than January, and the next three months will show considerable gains from month to month."

"Business has been coming back nicely of late and we expect to continue to add men and increase our output," said an official of the Columbia Motors Company, Detroit. "It will not be long until we shall be up to 50 per cent of normal if business keeps on coming in as it has during the last few weeks. The comeback started after the New York automobile show, as we had expected. It has been improving ever since. Conditions are especially improved in the East and in the Chicago territory."

There is as yet no indication as to when the plant of Dodge Brothers will resume activities. It was, however, not denied by an official that men were likely to be called back from now on in small numbers. Business has not picked up as much as the public has been made to believe and it would be a deception, the official added, to reopen the factory now with a flourish. Some of the Dodge dealers have

(*Continued on Page 18*)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

Business Bills Piling Up

The Flood Continues at Lansing, With Taxation One of the Chief Issues; New Utility Measures

[By Staff Correspondent]

LANSING, March 14.—In the midst of investigations and probes and scandals and charges and proposed laws of all kinds and styles, there continue to pour into the state legislature bills affecting business, utilities, automobiles, highways, finance and commerce.

Hoping further to protect automobile owners, Senator George M. Condon has introduced a bill to provide for the issuance of certificates of title and to regulate the sales and purchase of used cars or transfers thereof. This plan to stop thievery and assist in recovery of stolen cars has been advocated by the Detroit Automobile Club and other similar organizations. Dealers in used cars would be licensed and a state detective system would be devised to assist owners to recover their stolen machines. The cost of the certificate to owners would be $1 and the papers would not have to be renewed until the car was disposed of. After July 1, 1922, the Department of State would be empowered to refuse to sell a license unless a certificate of ownership were either shown or purchased. Full information on each car would be recorded. Anyone who sold a car after October 1, 1921, without following the provisions set forth, would be liable to a fine of $1,000 or 10 years in prison. In case a statement is forged when obtaining a certificate or transfer is made when the party purchasing the machine knows it has been stolen, a fine of $5,000 or 10 years in prison is provided. Sheriffs and chiefs of police would be obliged to report stolen and recovered cars to the state department.

Further progress was made in the reorganization of the state government. The bill to create a department of conservation has been passed by the House. This would combine half a dozen departments and save $100,000 a year in salaries. The agriculture bill has also been passed by the House.

The tax question is one of the big issues before the legislature and many schemes to raise more money are being proposed, including a state income tax. Another plan considered by Gov. Groesbeck is to increase the inheritance taxes and levies on insurance companies. The inheritance tax would be taken from the primary school fund and diverted to the sinking fund with which to pay the highway bonds. The tax on insurance companies, which also goes to the primary fund, would be increased sufficiently to make up for the loss of the inheritance tax. Last year the inheritance tax was $780,000, and this would be increased to a total of $2,000,000. It is also proposed to provide an annual franchise tax on all corporations, domestic and foreign, operating in Michigan.

The proposed state income tax system as provided for in the bill of Rep. Frank B. Mosier was strongly opposed by a delegation of 100 manufacturers last week, Hal H. Smith, counsel for the Michigan Manufacturers' Association, declaring that the tax was not fair, that it levied its toll on brains and ingenuity, and that there should be more co-operation now between manufacturer and farmer. Hiram W. Savage, president of the Saginaw Valley Manufacturers' Association, also opposed the income tax and rather favored a gross sales tax. Orlando Barnes, member of the state tax commission, said he believes the income tax was "here to stay."

The Watson-Olnstead bill, which gives state banks will less than $150,000 capital and surplus, the privilege of acting as administrators and guardians of estates, has been passed by the House. An amendment gives trust companies the right to engage in savings and commercial bank business.

Representatives of railroad lines protested before the Senate committee on railroads against the passage of Rep. Andrew B. Glaspie's resolution asking Congress to repeal the act which takes from the states control over intra-state rates.

Absolute power and control over all privately owned public utilities would be conferred upon the Michigan Public Utilities commission by a bill introduced in the house by Rep. Lemuel G. Dafoe, of Alpena. Street and interurban railways, water, electric light, gas and telephone utilities would be included, and the Commission would have full control of rates and service. The cost of appraisals would be paid by the concerns, the money to go into a commission fund. The five members of the Commission would be appointed for four years at an annual salary of $8,000. The Commission would have access to all books and could require annual reports. The bill would prevent discrimination by utilities against any individual or firm. A bill by Rep. W. F. Miller, Houghton, would prohibit discrimination in fixing rates by power utilities, and no electric utility could fix or change rates until ordered by the utilities commission.

Further labor bills have been offered by Rep. Walter A. Henze, of Dickinson. Among these is a bill which would require any corporation in which beneficiary fund is maintained by employes, to pay out of this fund any fees contracted by an employe from a physician or doctor other than the regular medical aid offered by the corporation.

As the banks informed the administrative board they could not take up the $5,000,000 highway bonds at 5 per cent interest, the fate of Michigan's road building program is up to the legislature.

WOOD LAUNCHES OWN FIRM

Albert Wood who designed and supervised construction of the Henry Ford hospital, Detroit, and who has been president and chief of construction of the Dearborn Realty & Construction Company, has organized the firm of Albert Wood, engineer and architect, with offices in Dearborn. Mr. Wood is a member of the American Institute of Architects.

WADSWORTH'S NEW CONNECTION

Albert W. Wadsworth, for the last five years manager of the Grinnell Realty Company, Detroit, has become associated with the Webster-Oliver-Streeter Company in the same capacity and will have charge of the Detroit office. Mr. Wadsworth is an active member of the Detroit Real Estate Board. He was engaged in the abstract and mortgage loan business for a number of years in Rock Island, Ill., Pittsburgh, and Cincinnati, previous to locating in Detroit.

The Webster-Oliver-Streeter Company, has opened a branch office in Royal Oak, with B. J. Williams, formerly manager of the North End Realty Company, in charge.

ADDING EMPLOYES AT BRONSON

Two concerns in Bronson are putting on more employes, having received substantial orders. The concerns are the Visel-Darling Company and the Douglass-Rudd Company.

Digitized by Google

Grand Rapids to Hold Office Appliance Show

The Grand Rapids Office Appliance Show has been promoted by the Grand Rapids Business Show Association and will be held April 7 to 9 inclusive, in the Klingman building.

This will be the first show of its kind in Michigan, and, judged by the preliminary list of exhibitors, it will be an event of considerable importance. Similar shows have been held in some of the larger cities of the country and resulted not merely in a large attendance but were the means of obtaining much business by the concerns taking part. It would not be surprising if after the Grand Rapids show similar ones will be held in other Michigan cities, according to office appliance dealers.

The partial list of exhibitors just announced consists of the following: Fox Typewriter Company; Prondfit Loose Leaf; Metal Furniture Company; Macey Company; Underwood Typewriter Company; National Cash Register Company; Burroughs Adding Machine Company; Kalamazoo Loose Leaf Binder Company; Michigan Litho; Whits Printing; McLaughin Business College; B. D. Coats, form letters; International Time Recording; Metzgar Register; Todd Protectograph; L. C. Smith & Brothers; Standard Register Company; Zimmer Brothers; Toledo Scale; Taylor Typewriter Store, Corona, Woodstock and Neostyle; Tisch-Hine Company, Ediphone, Mimeographs, Gunn desks and office snpplies; Bixby Office Supply Company; Comptometer; Addressograph Company; Serfing Company; Victor Adding Machine Company; Multigraph Sales Company; Remington Typewriter; Challenge Machinery Company; Klingman Furniture Company; Monroe Calculating Machine Company; Sundstrand Adding Machine Company; Tabulating Machine Company; City Trust & Savings Bank; Dictaphone Company.

The Grand Rapids Business Show Association was formed in February especially for the purpose of organizing the office appliance show. The officers are: W. F. Hentschel, president, division manager for the American Multigraph Company; W. H. Kessler, vice-president, vice-president and sales manager of the Tisch-Hine Company; Lee M. Dygert, secretary, district manager for the Addressograph Company; A. F. Marks, treasurer, district manager for the Burroughs Adding Machine Company.

AETNA RUBBER AT CAPACITY

The Aetna Rubber Company, Cleveland, which makes hard rubber parts for batteries, plumbers' force cups and various articles in which hard and soft rubber is used, as well as rubber gloves used by electricians and linemen, is working two 12-hour shifts and is reported to have business on its books which will keep it in full operation for a long time. The concern is not making any rubber articles for the automotive industry, it is said.

McGREW JOINS MASON & CO.

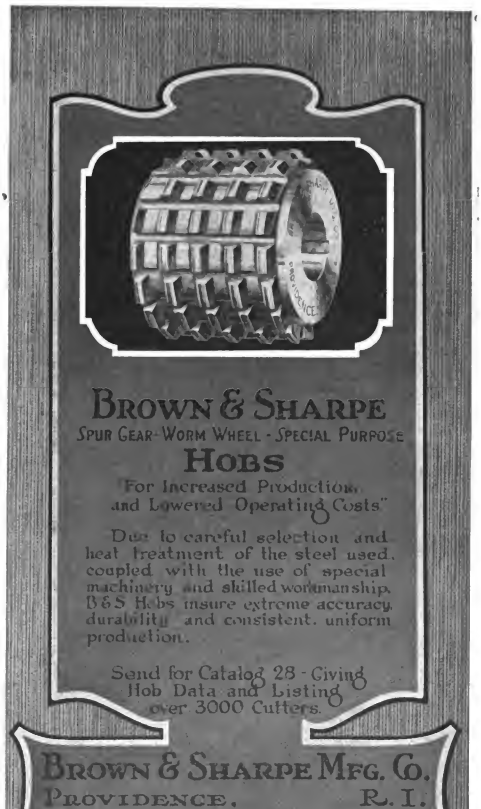
C. B. McGrew, Jr., architect, who was associated with Smith, Hinchman & Grylls for some three years, has severed his connection with the latter and has joined the forces of George D. Mason & Company, 508 Griswold street, Detroit, where he is working on plans for the new 13-story Shrine Club.

STEERE ON 70% BASIS

The Steere Engineering Company is operating its Owosso plant on a 70 per cent basis. Orders sufficient to keep the works busy for two months have been received during the last ten days.

CONSTANTINE MILL RESUMES

Operations have been resumed at the mill of the Constantine Board & Paper Company, at Constantine. The plant had been idle since about February 1.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

NEW ROLLS-ROYCE PERSONNEL

S. deB. Keim, general sales manager, American Works, Rolls-Royce, Springfield, Mass., reports the following changes in sales personnel:

R. W. Schuette, for many years Rolls Royce distributor for the United States, and of late, New York branch manager, has resigned with the object of taking an extended trip through Europe, to be gone several months.

J. S. Inskip, formerly of the sales department of the New York branch of the Locomobile Company, has been appointed New York manager, succeeding Mr. Schuette.

Richard Travers, for the last seven years Pierce-Arrow salesman in Chicago, has joined the Chicago branch of Rolls-Royce.

J. Roy Hiltz, for a number of years with the Locomobile, and recently with Hare's Motors of New England, has resigned and accepted a position on special sales work, making his headquarters at the American Works, Springfield.

C. R. WILSON BODY DIVIDEND

The directors of the C. R. Wilson Body Company, Detroit, have authorized payment on April 1 of the regular quarterly dividend of 1¾ per cent upon the outstanding preferred stock to stockholders of record March 21.

SHERIDAN BODY ORDER PLACED

The Erdman-Gaider Company, Detroit and Saginaw, has received a substantial order for Sheridan motor car bodies from the General Motors Corporation, the construction to be done at the Saginaw plant and the painting and trimming at the Detroit unit. Erdman-Gaider expects to manufacture at least 5,000 bodies this year.

VINCENT'S NEW MOTOR

An airplane engine designed especially for use at altitudes above 5,000 feet has been developed by Col. Jesse G. Vincent, vice-president of engineering of the Packard Motor Car Company, Detroit. The new motor, known as "1237 Packard," is said to be one of the lightest engines per horsepower ever built, producing, as it does, a maximum h. p. of 400 for a total weight of 725 pounds, or 1.85 per h. p. The engine is equipped with a safety stop which prevents opening the throttle full until an altitude of 5,000 feet has been reached. While built especially for Army and Navy use, it is expected that the motor will have wide commercial possibilities.

LINCOLN RE-ELECTS LELAND

Following his re-election as president of the Lincoln Motor Company, Detroit, Henry M. Leland reported that sales for February showed an increase of 130 per cent over those of January.

ALPERIN MANAGES KING SALES

The King Motor Car Company, Detroit, has appointed Herman Alperin, Buffalo, sales manager.

BEARINGS SERVICE PERSONNEL

The full roster of directors and officers of the Bearings Service Company, Detroit, which acts as service department for the Timken Roller Bearing Company, Hyatt Roller Bearing Company and New Departure Manufacturing Company, is as follows: Directors—Horace Ely, vice-president and treasurer, Timken Roller Bearing Company; Alfred K. Hebner, president and general manager, Bearings Service Company; L. M. Klinedinst, vice-president, Bearings Service Company and assistant manager of sales, Timken Roller Bearing Company; B. G. Koether, vice-president and assistant general manager, Hyatt Roller Bearing Company; Harry J. Porter, manager of sales, Timken Roller Bearing Company; Alfred P. Sloan, Jr., vice-president, General Motors Corporation; William M. Sweet, vice-president, Bearings Service Company and assistant secretary, General Motors Corporation.

The officers are: Alfred K. Hebner, president, L. M. Klinedinst, vice-president, William N. Sweet, vice-president, Dana H. Torrey, secretary, William A. Brooks, treasurer. Executive committee: Alfred K. Hebner, L. M. Klinedinst, William N. Sweet.

MOTOR SALES PICKING UP

James I. VanKeuren, of the Lansing First Bond & Mortgage Company, reports that agents of the concern throughout the state announce a decided increase in the sales of automobiles during the last month. These sales are largely for cash and are of the more moderately priced cars. While many have been out of work for a long time, few seem to have suffered or have been forced to sell their Liberty bonds, Mr. VanKeuren says. Savings deposits in the banks continue to increase. Mr. Van Keuren also finds considerable activity in the real estate line, with plans being made for the construction of many homes.

SPEEDING UP IN CLEVELAND

The Eaton axle division of the Standard Parts Company, Cleveland, is reported to have speeded up operations, principally on account of orders from C. Harold Wills & Company, Marysville. Another concern in the Cleveland district which has increased its activities is the Walker Motor Company, which makes engines for the Grant Motor Car Corporation. It is said to have received orders to double its output for Grant, which had been at the rate of 10 to 15 engines daily.

GIER INCREASING ITS LINE

The Gier Pressed Steel Company unit of the Motor Wheel Corporation, Lansing, is preparing to bring out more models of the new Gier pressed steel auto wheel, and in addition will make steel truck wheels. The company is also increasing its tractor parts output.

S. A. E. MEETS MAY 24-8

The summer meeting of the Society of Automotive Engineers will be held at West Baden, Ind., from Tuesday, May 24, to Saturday, May 28. It is expected that a large number of the members will then go to Indianapolis, which is only 120 miles distant, to attend the annual 500-mile race held on the speedway of the Hoosier city. According to present indications there will be a large attendance at the convention.

GMC DIVIDEND REPORTED UNCERTAIN

A report is current in the financial district of New York that it is not impossible that the next quarterly dividend of 25 cents a share on General Motors common stock will be passed. The matter will be decided at the meeting of the directors March 24. The New York report further says that the dividend has not been earned during the last 90 days but that General Motors business during March showed marked improvement.

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4638 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

SEND US YOUR ORDERS
for gray iron castings, finished or in the rough. Motor blocks our specialty. We are equipped to give you prompt delivery. Address:
Boyne City Chamber of Commerce
BOYNE CITY, MICHIGAN

Digitized by Google

Firestone Passes Dividend But Its Position Is Strong

Although the Firestone Tire & Rubber Company has passed the quarterly dividend on its common stock, its executives consider the out look as improving. As a matter of fact, says the Akron correspondent of the Cleveland Plain Dealer, the statement to the stockholders is the most optimistic that has emanated from Akron since the beginning of the tire slump, last May.

The announcement says the company has a surplus of approximately $33,000,000 and cash in banks in excess of $7,500,000 but that the passing of the dividend was deemed advisable to conserve cash resources so that the company might increase production and replenish stocks of finished tires that have been depleted during the last eight months. Officials estimate that sales during March will exceed $6,000,000. During peak months last year monthly sales averaged $10,000,000. As an indication that business is increasing, it was announced that several hundred men were added last week to the force and that two full eight-hour shifts were now working five days a week.

"We have reduced our sales and administrative expenses more than 60 per cent," says the statement, "which, with lower labor cost, gives us a firm foundation for increased production and increased earnings, justifying a resumption of the dividend on common stock the next quarter."

It was also stated that the company had set aside a fund for employes holding contracts under the employes' stock plan, paying them $1.50 a share, payment to be credited upon their contracts March 20.

J. E. BURNS JOINS ALLEN

H. G. Elwell has resigned as sales and advertising manager of the Allen Motor Car Company, Columbus, O., and has been succeeded by Joseph E. Burns, who has been territorial representative for Allen. Mr. Burns formerly was connected with the Cole Motor Car Company, Indianapolis.

TRUCK MANAGERS PICK WHITTAKER

The National Association of Motor Truck Sales Managers has named Don F. Whittaker, formerly with the Federal and Acason companies, executive secretary, with headquarters at 1157 Book building, Detroit. Homer Hilton, who resigned as managing director, is now vice-president and general manager of the Winther Motor Truck Company. The association directors will meet March 25.

POND JOINS UNITED BODY

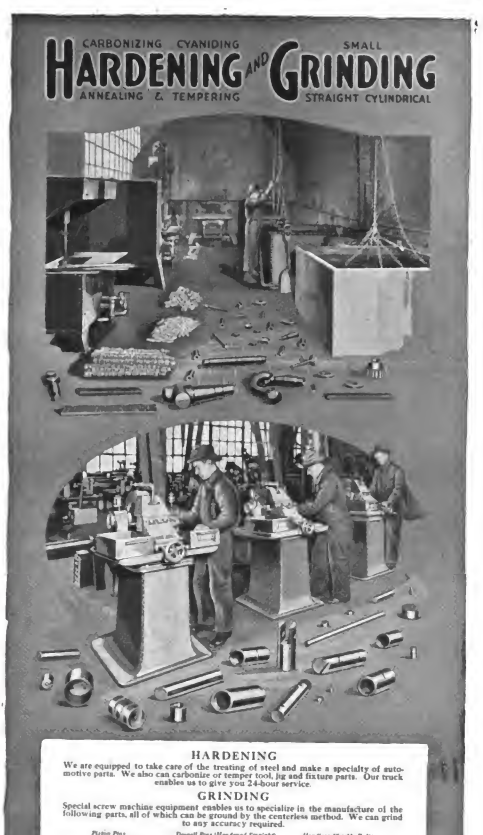
Leo S. Pond, formerly assistant manager of the Lansing Body Company, has been appointed district sales manager of the United Automotive Body Company, Lansing, which manufactures and distributes all types of commercial bodies. Large orders are on hand from both outside and local truck manufacturers.

J. C. FLEMING GOING ABROAD

J. C. Fleming, president of Detroit Hoist & Machine Company, will sail on the Steamer Finland, March 26, for a two months trip to Belgium, France and England. He will visit his brother in Brussels, who is president of the American Board of Commerce of that city, and also representative of the United States Steel Products Company. Mr. Fleming will confer with the company's export agents in the different countries.

MERRYWEATHER ON DAVENPORT BOARD

George E. Merryweather, president of the Motch & Merryweather Machinery Company, has become a member of the board of directors of the Davenport Machine Tool Company, Inc., Rochester, N. Y.



Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

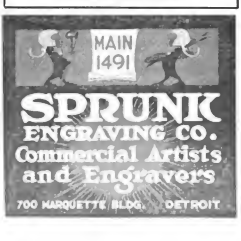
Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN



Transportation

Lansing—A marked increase is noted in the volume of both outgoing and incoming freight in Lansing on both the steam and electric lines, and railroads are adding to their forces. Some of the largest consignments in many months are being received and sent out from the local yards. The Michigan Central has organized another switching crew and now has five crews in the Lansing yards. The amount of less-than-carload shipments is unusually large, as many factories are purchasing material only for orders they have on hand.

Port Huron—The Grand Trunk shops, which were reopened two weeks ago, have been closed again and it is reported that the reopening probably will not take place until April 1. Several hundred men are thus again temporarily thrown out of work.

Lansing—Petitions relative to the sale of the Lansing Connecting Railroad Company to the Grand Trunk have been filed with the Michigan Public Utilities Commission by Joseph H. Dunnebacke, counsel for the local road. After advertising the petition for three weeks the Commission either will confirm or deny it. The Lansing railroad has no debts. It has no physical connection with local lines except the Pere Marquette, which also bid for the property. The Grand Trunk will establish physical connections with the road, and this will give a new freight outlet to 12 local factories.

Mansfield Steel Corp. Buys Detroit Trailer Co.

At the annual meeting of the stockholders of the Detroit Trailer Company the following officers were elected: J. B. Mansfield, president and general manager; Stephen A. Griggs, Walkerville, Ont., vice-president; E. B. Newton, treasurer, and F. L. Tully, secretary.

S. A. Griggs, who has retired from the presidency, has been in the harness continuously without a day's loss of time for fifty-five years and felt that he had reached that time of life where he was entitled to a well-earned rest. He has sold to Mr. Mansfield and his associates a controlling interest in the Detroit Trailer Company. Association with the management of the Mansfield Steel Corporation places the trailer company in a position to meet any and all requirements and competition.

The Mansfield Steel Corporation, of which Mr. Mansfield is also president, is possibly the largest steel body building corporation in the United States. It makes a specialty of all kinds of steel placing of the Detroit Trailer Company under the same management will enable it to sell its trailers complete with all kinds of steel stake bodies, steel dump bodies, and steel bodies for its drop frame trailers for use in the hauling of garbage.

The Mansfield Steel Corporation announces that its steel is all completely fabricated for its addition, which will be 85 feet by 155 feet deep. Plans were prepared by Smith, Hinchman & Grylls, Detroit architects. This building will be erected immediately, to be completed on or about May 15. This addition to the plant will house show rooms and finished stock of the Detroit Trailer Company.

Directors of the trailer company have been elected as follows: Stephen A. Griggs, J. B. Mansfield and F. L. Tully.

WYANDOTTE B. OF C. ELECTS

Charles Gartner has been elected president, Hubert S. Amoit vice-president, and James C. Headman treasurer of the reorganized Wyandotte Board of Commerce. A paid secretary and manager will be named later. Meanwhile James Pinson, who has acted as secretary since November, will continue to serve temporarily.

AUGUST N. JOHNSON MACHINE CO.

MANISTEE, MICHIGAN

MACHINE AND BOILER SHOPS

General Repairing

MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS

BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING

We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

Need an Elevator?

Ask LEITELT

Modern Designs
Superior Construction

LEITELT IRON WORKS

Office and Factory
315 Mill Ave., Grand Rapids, Mich.

Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

L-XX
HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

Detroit, Mich.

There are many Advantages to the

TAYLOR & FENN

Double Spindle Spline Milling Machine



Let us send a Specialist to see.

THE MOTCH & MERRYWEATHER MACHINERY CO.

MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

MORTON AUDIT COMPANY
1301 MAJESTIC BLDG. PHONE CHERRY 4515 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

Purchasing Agent Association of Detroit is one of the 36 divisions comprising the *National Association of Purchasing Agents.*
Office 49 Garfield Building
Glendale 3819

CHERRY 6788
The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602 680 Fort St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—Contracts for two school buildings to cost $2,000,000 have been awarded by the Detroit Board of Education, and a supplementary estimate of $29,182 will be asked for two temporary buildings on sites purchased by the board.

Pontiac—The Pontiac jail building committee last week opened the bids received on the intended new jail, and as had been the case on two previous occasions, the estimates were higher than the amount allowed by the appropriation. However, owing to stipulated allowances and deductions, it is expected that no fourth call will be necessary. Total amount available is $375,000. Following are the new bids: S. E. Benjamin Company, Detroit, $184,985, less $26,779 deductions; DuBois Construction Company, Flint, $194,293, less $19,577; Culbertson & Kelly Company, Detroit, $187,470, and certain deductions; W. H. Ingrigg & Son, Pontiac, $187,965, less $20,666. Bids for the equipment were as follows: Stewart Iron Works, Cincinnati, $175,348, less $43,668; Whitehead & Kales Company, Detroit, $165,375, less $43,885; Panly Jail Building Company, St. Louis, Mo., $201,575, less $57,456; Van Dorn Iron Works, Cleveland, $159,407, less $45,669. There were three bids on heating, ranging from $14,796 to $16,653, with reductions of $2,611 to $3,030.

Lansing—The Briggs Company, which has just passed its sixteenth year, looks for an unusually brisk building season. The company handles all building materials except lumber and employs 18 salesmen in Michigan, Ohio, Indiana, Illinois and Wisconsin. Branch offices in Michigan are located in Detroit, Grand Rapids and Flint. The company owns a large, modern face brick plant at Grand Ledge which manufactures 13,000,000 brick a year, and will erect soon a common brick and tile plant on a 100-acre tract of clay land at Durand.

Detroit—The week ended March 12 disclosed very little new in the way of industrial construction, contracts awarded by architects being largely of a private nature. There was quite a drop in the outlay represented in permits issued. The total was $622,840, as compared with $966,670 for the previous week and $3,340,900 for the corresponding week of 1920.

Grand Rapids—In point of number of permits issued, the week ended March 11 was the best thus far this year, there being 52 permits, which is 18 in excess of the previous best week. In expenditure represented, the week was the second best of the year, the total involved being $79,575, as compared with $108,128 for the week ended January 21. The majority of the permits were for residences.

Signs of Motor Revival Multiply

(*Continued from Page* 11)

been reporting better business in some sections of the country, but the condition does not prevail with the majority of the distributors.

"We do not feel pessimistic," said this man. "We only feel that the return of the business is going to be slow, very much slower than most of us had hoped and expected. There is only thing to do, and that is to be patient."

In connection with the declaration of its regular quarterly dividend the Chandler Motor Car Company, Cleveland, says: "Business for some time has shown a marked improvement and shipments are on a satisfactory basis and increasing. The company has a strong cash position, has a large volume of business on its books, and no indebtedness outside of current account."

The Auburn Automobile Company, Auburn, Ind., which also has declared its regular dividends, announced that sales in February were about 70 per cent of those of a year ago, same month, and that March sales were running ahead of last year's. Substantial cash balances, with no indebtedness except current accounts and taxes, were shown and the management expressed the belief that business had been considerably stimulated by recent substantial price reductions on all its models.

President L. Ludium, of the Autocar Company, Ardmore, Pa., one of the larger truck manufacturers, says: "The outlook is better than it was add it is my opinion that the natural supply and demand will regulate production." "Notwithstanding general conditions," adds the Philadelphia Record, "the company did $2,000,000 more business last year than in 1919, which increase was made during the first six months, while during the second half there was a small loss, leaving, however, a net profit of $70,000 in excess of the 1919 net."

In Akron, where most of the tires for the automotive industry are made, activities are increasing, but have not yet reached 50 per cent of normal. Most of the plants, big and little, now have a fair number of orders, which will keep them busy for some time. While definite data is not available, it appears that, taken as a whole, the tire makers are nearing 33 per cent of normal production. According to the Boston News Bureau, the Goodyear Tire & Rubber Company has increased production to 30 per cent of peak capacity of last July, or 60,000 tires a week. Some Goodyear dealers are quoted as having said that the shortage of tires forecast a month ago is already felt. The B. F. Goodrich Rubber Company is said to be making 7,200 tires a day. Firestone has not announced definitely what steps will be taken to increase production, says the Boston paper, but it is well known that resumption on the part of the Ford Motor Company has brought orders which will mean an increase.

In the March issue of the Buick Bulletin, the house organ of the Buick Motor Company, Flint, E. T. Strong, general sales manager writes as follows: "Why did five Chicago dealers on one day invest nearly a half a million dollars in Buick motor cars? There is but one answer. Why did Mr. Southworth, of the New York Buick branch, wire: 'Every indication points to very satisfactory business for the next three or four months. In figuring our requirements we will need upwards of 1,050 jobs between now and April 1'?

"Conditions existing throughout the country indicate that this spring and summer will see another shortage of Buick cars, even though we are planning our production so that we will disappoint as few buyers as possible.

"Dealers, visualizing the future, are making every effort to be able to provide spring and summer buyers with Buick cars. But, they are bound to be handicapped in their work unless buyers place their orders early."

Digitized by Google

Third Builders' Show In Detroit, March 19-27

From the list of exhibits and the general plans so far recorded, the Third Annual Detroit Builders' Show, to be held in the Armory, March 19 to 27, will be informative and entertaining to a degree hitherto unknown. In building as in every other line of business calling for a considerable expenditure of money and a future investment, public confidence must be restored and intsrest reawakened.

If this builders' show does not accomplish both results it will not be the fault of the exhibition. It will mark the opening of the building season. The 82 exhibitors so far given space represent a 100 per cent increase over last year, and their exhibit quality will be far superior in every way. Undoubtedly both the contracting builders and the materials makers and dealers will have interesting revelations to make concerning building possibilities and costs.

The general desire for possession of a home is in no way diminished. It has merely been held in abeyance. What is needed is information and reiteration of the basic economic values of home ownership. To meet this demand the show manager, C. H. Mooney, has established an informatsn bureau where builders, material men and prospective home owners can, without the payment of a fee, obtain answers to all questions which have been troubling them. This bureau will be prepared to answer all questions concerning materials best adapted to various types of buildings, plans, costs, ventilation, fireproofing, loans, insurance, investment returns and other details.

Included in the entertainment program will be historical lectures by C. M. Burton, illustrated with 300 stereoptican slides showing the progress of building in Detroit since 1700; band and orchestral concerts in the exhibition hall; vocal numbers; an exhibition by the Michigan State Telephone Company, lectures on building and home-owning subjects, and motion pictures.

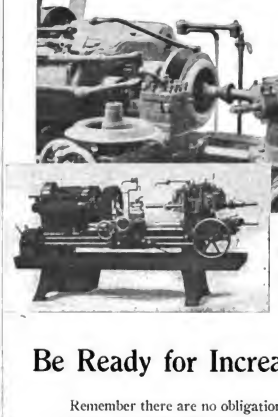
For every visitor, whether a prospective builder or not, the show will be a school of instruction. The American State Bank, Detroit, for instance, will have an exhibit explanatory of the banking business as it concerns building loans. Bank officials will be prepared to give information concerning the methods of financing home construction, and advice where it is desired.

DETROIT GRAPHITE SALESMEN MEET

Business and pleasnre was the agreeable mixture served to some 125 branch office managers and salesmen of the Detroit Graphite Company, Detroit, who came last week to attend a four-day convention. The business meetings were held at the factory and the intermissions were taken up, among other things, with two banquets; one at the Detroit Athletic Club, and the other at the Hotel Statler. There also was a theater party at the Garrick. F. W. Davis, Jr., president of the company, delivered the welcoming address and discussed problems affecting the sale of paint in the various industrial fields, defining sales and service policy. Vice-President T. R. Wyles discussed phases of paint manufacture and sale.

The fact was brought out during the convention that during the last five years business of the company has grown 600 per cent, with a corresponding increase in both manufacturing and selling forces. In this period the manufacturing facilities have been increased twice, a new pulverizing plant has been erected and a five-story administration building put up.

It was the first convention of the entire sales force at the home office in the last four years.



A Malleable Iron Pressure Ring (12⅜" diam.) for a Tractor finished on a W. & S. No. 2-A. The tools on the two turrets are the entire equipment necessary for completing both chuckings.

Be Ready for Increasing Business

Remember there are no obligations attached to the engineering services we offer you. If we cannot help you we tell you so. But—we have helped others to increase the earning capacity of their turret lathe equipments and are ready to try to help you if you wish.

We've had forty years experience making and tooling turret lathes to satisfy unusual demands. Draw on our experience and be ready for the business increases which are bound to come soon.

Write us and we'll send an engineer to consult with you, or send us blueprints and samples of your work for estimate.

World's Largest Manufacturer of Turret Lathes
4½"x44"—21" Swing to 5/8"x4"—10" Swing

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office—Ford Building
Chicago Office—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Pita Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, MARCH 19, 1921

The Automobile Trade and Its Fair

FOLLOWING the custom of years, this paper issues this week a section largely devoted to the automobile industry. This comes in connection with the annual fair, or motor car show, of the trade in Detroit. For years these shows have been the dating-point of the season's activities. This year it is awaited with more than ordinary anxiety, because of the conditions which have affected the trade for the last eight months. Much is expected of it in the way of impetus to manufacture, much in the way of relief of a situation, which, to say the least, has become very tense. We have not been doing as well as we should like to have been doing in the motor car business for some time. Our factories have had to cease production because the public was not buying. The great distributors have not been able to maintain their usual and ordinary credit relations with their customers because the Federal Reserve Bank threw a monkey-wrench into the machinery of their credit by declining to re-discount commercial paper based upon their transactions, on the theory that the motor car is a luxury rather than a necessity. The closing down of the motor car factories left the train of agencies of supply of materials and parts in the doldrums because they were dependent upon the activity of manufacturers to maintain a state of activity for themselves.

On the whole, the situation has been a bad one, but the clouds are breaking, and through the breaks the manufacturers begin to see the sunlight. It is to be hoped that the impetus given to sales on the occasion of an annual dealers' show in Detroit, which is really one of the great automobile fairs of the country, will be such as seriously to affect the activity of the trade to its betterment.

That such betterment has already partially arrived and is bound to continue until facilities are all in use again is beyond question. A necessity of life and trade, which has been put into service by the hundreds of thousands each year for a considerable number of years past, is not likely to go into sudden disuse. Nobody dreams of recurrence to the horse-drawn vehicle in exchange for the mechanically driven one. The motor cars that have been put out are, therefore, in use. Being in use they must, perforce, wear out. Whatever the pinch for money, whatever the hesitancy about investing in renewals, the people whose motor cars and trucks have outlived their usefulness must acquire new ones. This necessity of replacement was part of the demand of the factories before they closed down so generally. Their period of idleness has already lasted so long that the mere accumulation of necessities for replacement must by now constitute a very great aggregate of demand. If our information is true, and we have no occasion to doubt it, the factories are already in receipt of considerable orders from this source alone. Great industrial organizations of the quantity production type cannot afford to reorganize and go back into production until their advance orders have accumulated in sufficient quantity to make the run worth while. This process of accumulation has been going on for quite a few weeks now.

The country is making money today, although not in quite the degree that it made money some years ago. But even on the basis of its money-making of the several years ago period, it was a large buyer and consumer of automotive vehicle product. It was during that period that the great foundations of the industry were laid. With the prosperity still evident, and with the betterment bound to come from a change in the federal administration and the consequent appeal to the psychology of the buying public, there seems to be no logical reason why proportionate buying should not be maintained and proportionate activity come to the industry.

Already the units of the industry are setting their wheels to spinning anew and making product. The greatest of the industries is already realizing half of its former production. The next in size in Detroit has just sent out a hurry call for its men. Several of the factories are putting out what would have been considered a satisfactory output a few years ago. While all is not cakes and all, still all is not distress.

The demand for the motor truck has, to a large extent, taken the place of the demand for the personal carriage, and if one reads the signs of the times aright, it looks as if a very substantial percentage of the motor car production of the future is going to be in the way of commercial vehicles. The facility with which work may be done by the truck, the independence of rail-side locations which it gives to small factories, the facility for intercity deliveries, the improvement and extension of the hard roads systems and a dozen other minor factors are contributing to this condition of demand. So long as the time of men employed continues to have more value than will permit it to be spent on managing horse-drawn vehicles, just so long are the economics of the situation bound to increase the demand for mechanically-driven carriers.

The motor show of 1921 marks, we believe, the beginning of a new era in motor car production and salesmanship. The industry is today Michigan's leader. Let us hope that the hammers will be clanging, the furnaces blazing and the wheels spinning all at their liveliest before the year is half old.

Getting Up Steam

WHILE subscriptions have not been coming in as rapidly as might be desired, it was gratifying to learn early in the week that approximately $20,000,000 of stock in the new $100,000,000 Foreign Trade Financing Corporation had been subscribed. This particular institution is the one which students of world commerce look to for solution of the riddle of how to sell goods to customers who have very little ready cash and whose credit is already seriously strained. The services of J. Rufus Wallingford may be needed before the problem is entirely solved, but in the meantime there come reports of actual functioning on the part of some of the earlier Edge law banks.

New York bankers say that hardly a day passes but a horde of agents of foreign purchasers seek credit to finance the acquisition of American goods. In many instances the borrowers are known to have good credit ratings, but because of conditions in Europe and South America much longer terms are needed than either the commercial banks or the Edge law banks, which deal in short term foreign credits, are in position to grant. It is just in this respect that the Foreign Trade Financing Corporation will fill the gap. However, the ingenuity of the Yankee financier is making itself evident, as is illustrated by the following example:

Advices from New Orleans are that the Federal International Banking Company of that city has joined with the First Federal Foreign Banking Association of New York in extending a 90-day credit to certain cotton shippers whereby 15,000 bales of low grade cotton will be shipped to mills in

Digitized by Google

Czecho-Slovakia. These mills will fabricate the cotton and retain a portion of the raw cotton for their services, and the finished product will be sold in central Europe. Title to the goods is guaranteed by a bank in Prague.

This is believed to be a new machine in foreign trade. It gives the Czecho-Slovaks an opportunity to run their mills without paying out cash for raw materials and suffering discount on payments due to exchange conditions. Likewise the Southern cotton grower obtains a market which would not be otherwise available and the foreign banking corporations do not have to advance any funds except to cover freight and insurance costs. When the goods are finished they will be sold to those parts of Europe that are in position to pay for them.

Mr. Mellon and His Tasks

NO MAN ever faced more perplexing fiscal problems of magitude than the new Secretary of the Treasury, Andrew W. Mellon. So far as the financing of it is concerned, the war is still in progress. The burden of keeping the process of liquidating the debt going has only been transferred from one pair of shoulders to another.

One of the most important and at the same time most pressing problems of the Treasury has to do with financing the heavy Treasury obligations. Upwards of $8,000,000,000 of government securities will have to be paid off or refunded within the next two years, and one of the first indications of Mr. Mellon's ability to cope with the duties of his high office will be the measures he adopts to take care of this situation. One of the fundamentals economists will agree, is that there be no aggravation of the present intolerable situation in which the Government is bidding against industry and commerce for funds. If Mr. Mellon is able to find a way out, he will have proved his metal.

It is significant that he starts with both feet on the ground. In his first public statement the Secretary reminds us quite bluntly that we need not expect to find a cure-all for our financial ills. The only relief, he says, will lie in the strictest kind of thrift, both public and private. He means that the foundation of our banking structure of the next few years will have to be built broader; in other words, that the foundation of credit, savings deposits, will have to increase. And on the other hand, we shall have to do away with the frills in government. In other words, both the governed and the governing will have to co-operate. There can be no remission at either end. This is good common sense and the right basis on which to build.

No man ever assumed the management of the Treasury Department more of a stranger to the public at large than does Andrew W. Mellon. That does not mean that the new Secretary is not a man of large ability. It was rather his aversion to any form of publicity that has kept him out of print, although his personal success has been one of the most conspicuous. A dispatch out of Pittsburgh, his home, says that "those who know Andrew W. Mellon intimately consider him the greatest constructive genius ever called upon to administer the Treasury." And it goes on to enumerate some of his achievements.

Mr. Mellon has resigned as president of the Mellon National Bank, vice-president of the Union Savings Bank, both of Pittsburgh, and as a director of the National Bank of Commerce in New York and a number of other corporations. He has been an officer or director of more than 50 business enterprises. His early training was looked after by his father, Judge Thomas Mellon, one of the big men in Pennsylvania finance in his day. It was at this time that the younger Mellon evinced a genius for organization. The latter was brought into play in his participation in the affairs of the Aluminum Company of America, for the remarkable success of which he is given a good share of the credit. The Standard Steel Car Company, which was acquired by the Mellons in a weakened financial condition, and the Gulf Oil Corporation, to which they gave their attention, have developed into two of the outstanding concerns in their lines. It is said of Mr. Mellon that "whatever he touched turned to gold." It must have, for at the time of his acceptance of the Treasury portfolio he was an officer or director of corporations with aggregate capitalization in excess of $1,600,000,000. The Secretary has devoted much time to the study of national and international banking and is said to have a keen insight into both.

In view of his record, and because of his disinclination to be a limelighter, much may be expected of Mellon.

Short Measure Stuff

CHRISTOPHER MORELY, who columns for the New York Evening Post, will have to excuse us for snitching the following from his column, which he reprints from the Park County Enterprise, Cody, Wyo.:

OHM, SWEET OHM, SAYS CHRISTOPHER

"The rumor that J. H. Vogel, our popular undertaker, was electrocuted during the mass meeting at the Masonic Temple last Wednesday evening, is, we are happy to say, untrue.

"It was reported that A. S. McClain of the electric light company had wired the chairs, and at the psychological moment when Mr. L. L. Newton asked for all present who would subscribe $1,000 for a hotel on this side of the river to please rise, McClain turned on the electric current.

"It was alleged that everybody rose with alacrity except J. H. Vogel, who preferred death and was burned to a crackling in his chair.

"We have been unable to trace this rumor to its source, but we are glad to contradict it, and the least we can wish Mr. Vogel is that he may live to bury us all."

* * *

Everything gets settled on its merits some day.

* * *

TRAINING CAMP INTERVIEWS

"I'm as good as I was seaven before last."
"Watch me show up some of those old-timers with my fast one."
"I'm fifteen pounds lighter than I was at this time a year ago."
"If that trainer'd only gimme a chance, I'd show 'em something."
"The manager's got it in for me."
"Come up to the hotel tonight and sit in."

* * *

You bid the coat man
An revoir,
The ice man bangs
On your back door.

—A. F.

The Turn of the Road

SPECIAL advices from J. J. Earley, president of the North Dakota Bankers Association, state that the Supreme Court of North Dakota has just decided by a 4 to 1 vote that the Bank of North Dakota is a "bank" and not a department of state, and that it therefore is subject to garnishment or any other legal process. This is a body blow to the Non-Partisan League interests in that it will result in immediate pressing of all claims by depositing banks and municipal treasurers who have been unable to withdraw tax money. As shown by the last official statement issued by the Bank of North Dakota, and printed in this publication last week, the total of demand deposits totals more than $12,652,000 and the only available cash assets were at the time of the statement less than $100,000. There was $2,607,000 of loans outstanding, part of which is collectible and $6,204,000 redeposited in state banks, more than $1,000,000 of which is tied up in the thirty-odd closed banks and the balance largely subject to offset in case of withdrawal by deposits of the state banks with the Bank of North Dakota. A close estimate of the available cash resources of the Bank of North Dakota today which can be marshalled to pay up to $13,000,000 deposits is less than $3,000,000. And $1,000,000 of bills payable is not included therein.

A more serious development in connection with the winding-up of the Bank of North Dakota, which now seems certain, is the probability of finding "non-book liabilities" or other contingent contracts which are not shown on the bank's books. No one knows outside of the League officials who have run the Bank of Dakota to what extent the officials have gone in pledging assets and borrowing money to keep the institution alive since December when the state legislature started to yank the skeletons out of the bank's closets. But it is uniform opinion by the conservative bankers of North Dakota that this decision of the Supreme Court marks the first sharp turn in the road toward bringing the finances of the state out of the chaos created by the Townley schemes.

Digitized by Google

FINANCIAL

The Outlook

By PHIL S. HANNA

The tone of business the last week undeniably has hettered. There are copious signs of improved sentiment notwithstanding unwelcome news regarding the railroad situation. The latter is such a large and far-reaching factor making for the good or ill of business that it cannot for long be overlooked, but in spite of this stumbling block there is testimony on all sides of improvement. The stock exchange professionals have about given up trying to hold back the tide of growing confidence in stocks. Canada soon will pay us $25,000,000, mostly in gold, and, best of all, perhaps, secretary Mellon states that ordinary income of the Government for eight months to February 28 exceeded outgo by $186,115,506.

The Detroit clearings for the week ended Wednesday were $96,000,000, of which about $20,000,000 was income tax payments, but notwithstanding, a net of $76,000,000 represents the first upturn since the first of the year. Bank deposits will show a temporary falling off because of the income tax payments, but the converts to the savings account doctrine are beginning to replace capital heretofore withdrawn by the needy ones.

But no consideration of the future of business can be had without taking in world conditions. It is herein that one gets his encouragement. British treasury bills were reduced from a 6¼ per cent to a 6 per cent rate, March 12, which is everywhere conceded a forerunner of cheaper rates and more plentiful money. Almost simultaneously the Treasury Department at Washington announced a reduction from 6 to 5¾ per cent on the new issue of certificates of indebtedness in case of the long-term certificates. The Federal Reserve Banks combined increased the reserve ratio from 50.8 last week to 50.9, notwithstanding slightly increased accommodations to member banks amounting to $37,000,000. Member banks' reserve deposits went up $26,000,000. Doubtless the increases reflect preparations on the part of many banks in anticipation of income tax payments.

But here is something. The Erie railroad coal companies reduced the price of anthracite at the mines 55 to 75 cents a ton below quoted prices March 16. Set out in relief against this the earlier story about a coal shortage. Also play your spotlight on the various advertisements for coal salesmen. If older heads in the coal business are to be trusted, the consumer may even yet make his own bargain with the coal man. One wholesaler believes that there is as much coal above ground that any further breaks by operators to hurry sales may result in the consumer's obtaining coal during the summer for cost at the mines plus freight. We like the sound of this immensely.

Bond Men on the Lord Bill

Some of the bond men are apprehensive lest the Lord bill, which is apt to become a law, may interfere with their municipal bond sales. But there is another side to it, for, as one of the largest municipal dealers says, "The effect of the law may mean a building boom for Detroit which will give us a chance to handle mortgage bonds, in which there is greater margin of profit." And another opines: "Yes, as matters have stood the last few years, we have had to do an increasingly large municipal turnover to maintain a steady level of profit."

But, better than these reasons, there is the outlook under the Lord bill of more money for industry, which means an increasing number of savers, more bank deposits and more money locally for all good bonds. In the end the bond merchant should gain by the passage of the Lord bill.

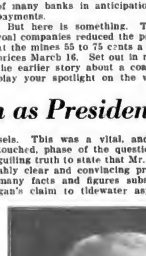
Mr. Russell's Election as President of the Board of Commerce

DIRECTORS of the Detroit Board of Commerce chose officers this week for the ensuing year. Under the circumstances it is difficult to chronicle with becoming modesty that part of the election which placed John A. Russell, editor of this paper, at the head of Detroit's business organization.

The honor conferred on Mr. Russell is perhaps the greatest within the gift of Detroit business men, and it comes to him after many years of service in the ranks of the organization workers. For the last four terms Mr. Russell has served as first vice-president. The position, however, is even more important because of the opportunity it offers to serve. Perhaps the present generation will not again face a period when the need of a vigorous, serviceable, thorough-going "agency of business for the best interests of business," such as is the Board of Commerce of Detroit, will be as great as it is today. The responsibilities resting on the shoulders of the new board are of the same measure as the need for their services.

With respect to the service opportunity which this election brings to Mr. Russell, Detroit may contemplate the future by reviewing some of the major activities of the Board of Commerce which were initiated or supported by the newly elected president.

Of first rank, no doubt, and most recent, was Mr. Russell's presentation of Michigan's case before the International Joint Commission of the United States and Canada which held hearings in Detroit and elsewhere last summer on the proposed Great Lakes-St. Lawrence deep waterway route. It was Mr. Russell who brought home to Michigan people, and to the Commission, the fact that our tanneries, our pottery interests, our furniture interests, our paper manufacturers, our sugar factories and many other industries normally provide suitable incoming cargoes for boats sailing from foreign ports which may balance the round-trips into Great Lake ports of ocean-going vessels. This was a vital, and theretofore untouched, phase of the question. It is not beguiling truth to state that Mr. Russell's remarkably clear and convincing presentation of the many facts and figures substantiating Michigan's claim to tidewater aspirations, on the basis of economic expediency and justification, had telling effect on the deliberations of the investigating body.



JOHN A. RUSSELL

Other achievements of the Board of Commerce, the initiation and success of which was due in part to Mr. Russell's efforts, were those of obtaining reductions in the city tax levies of $500,000 in 1902 and $350,000 in 1916, also a saving of $600,000 in 1903 through elimination of extravagant proposals for the new city hall, Belle Isle casino and Art Museum additions. The $1,500,000 Detroit United Railway freight terminal and the $1,000,000 Grand Trunk freight distributing yards obtained in 1916 were among other achievements. Again, there was the organization of the Americanization Bureau of the Board of Commerce, which has done much toward making Detroit aliens better members of the community. In 1911 the first public hearing on obtaining the equalization of state taxes for Wayne county was promoted, when encouraging reductions were obtained. Then there came the fight for reasonable freight rates and transfer charges, wherein Mr. Russell represented the people of Detroit before the Michigan Railroad Commission. And last, but none the less important, the organization of a bureau of commercial and industrial statistics which has the reputation of being the most complete and dependable of any similar body in the country.

As Detroit goes on through the business readjustment period, which is now ushered in as a successor to the last five years of boom and bluster, it may look forward to greater achievements and more intense service from its Board of Commerce, the guaranty of which is the following complete roster of the officers which were elected March 16:

President, John A. Russell; first vice-president, Harvey B. Wallace, president, Wheel Trueing Tool Company; second vice-president, Arthur T. Waterfall, vice-president and assistant general manager, Dodge Brothers; third vice-president, Thomas J. Marsden, vice-president, Lee & Cady; treasurer, W. L. Davis, of Fenton, Corrigan & Boyle, investment bankers; secretary, Harry B. Warner. New directors elected are: John A. Brown, vice-president, T. B. Rayl Company, and Lynn B. Dudley, advertising manager, Federal Motor Truck Company.—P. S. H.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Bankers Land & Inv	3½	4
Burroughs Adding Machine	149	150
Columbia Nat. Fire	16	17
Commerce Fin.	15	20
Detroit Mortgage, com	8¾	4½
Detroit Mortgage, pfd	6½	6¾
Detroit Copper & Brass	12	20
Detroit National Fire	25	26
Detroit Life	55	65
Federal Bakeries Co	28	33
Federal Discount Co	7	7½
Fisher Body	83	84
(New) Nerkwitches Corp	10½	11¾
Gladys Belle Oil, com	39	40
Gladys Belle Oil, pfd	58	64
Great Lakes Engineering, new	11	14
*Great Lakes Engineering, old	58	65
Hoover Steel Ball	14	16
Hayes Wheel Co	13	15
Interstate Fire	20	25
Invader Oil	149	153
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com	7	7½
Kelsey Wheel	38	42
Little Wonder Stove	1½	2
Monroe Binder Board	35	40
Detroit Motor Bus	8	9
McCord Manufacturing, com	5½	5¾
McCord Manufacturing, pfd	40	45
Michigan Copper & Brass	16	17
Noble Oil, com	51	53
Petoskey Portland Cement	11	12
Peninsular Fire Ins	21	30
River Raisin Paper	12	13
Trippensee Mfg. Co	7½	8
Union Mtge. 10% com	9	11
Union Mtge. 90% com	7	9
Range During 1920, Approximate		
Hoover Steel Ball	24½	18
Columbia Motors	6	5¼
Noble Oil, com	1.30	53
Mich. Copper & Brass	26	19½
Detroit Mtge., pfd	6¾	5½
Motor Stocks	**Bid**	**Asked**
Briscoe Motors	15	17
Columbia Motors	4¾	5
Chalmers	1	2
Chevrolet	175	200
Cole	240	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	2	5
Denby Truck	1	2
Elgin Motors	5¼	6½
Harroun	¾	1¼
Haynes	170	175
Hupp	13¾	19½
Jackson, com	⅞	1½
Jackson, pfd		3½
Keystone Tire	14¾	14¾
Lafayette Motors	36	60
Liberty Motors	5¾	6
Liberty Motors, pfd	60	70
Lee Tire	21	21½
Locomobile	2	3
Mercer	4½	5¾
Nash	290	325
Pierce-Arrow Truck	36½	38¾
Republic Truck	16	17
Saxon Motors	4¾	4¾
Scripps Booth	20	30
Stevens Duryea Units	80	90
Stromberg Carburetor	31	32
Wilson Truck	4¾	5¾

Grand Rapids Stocks

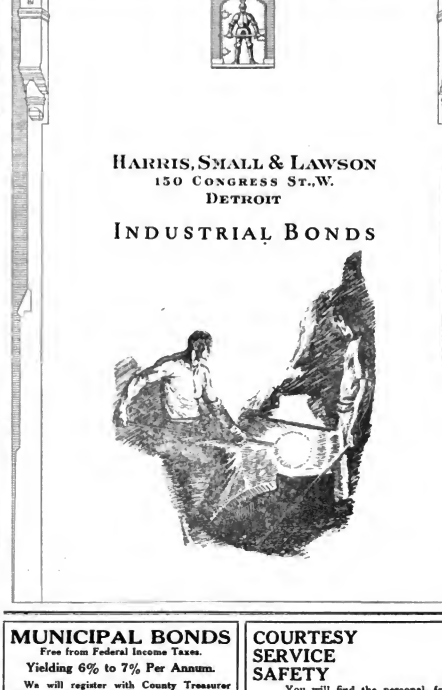
American Public Utilities, Commen	7	- 12
American Public Utilities, Preferred	17	- 21
Commonwealth Power Railway & Light, Common	13	- 13¾
Commonwealth Power Railway & Light, Preferred	32	-34
Citizens Telephone Company	4½	- 4¾
United Light & Railways, Common	23½	- 24½
United Light & Railways, Preferred	58	60
Cities Service Bankers' Shares	37	- 37½
Cities Service, Common	232	237
Cities Service, Preferred	67	- 67½
Cities Service, Debenture "B"	123	125
Cities Service, Debenture "C"	91	93
Cities Service, Debenture "D"	84	87

Quotes by Howe, Snow, Corrigan & Bertles, March 15.

CITIZENS TELEPHONE COMPANY

At the annual meeting of the stockholders of the Citizens Telephone Company, Grand Rapids, to be held Tuesday, March 22, the following report will be presented covering operations for the year ended December 31, 1920: Operating expenses were $1,432,010, net earnings, $274,269. The former increased $243,721 and the latter $14,323 over the year previous. Net earnings were disposed of as follows: $52,875 bond interest, $154,069 dividend of stock of 4 per cent, $24,781 added to surplus. Total assets of the company increased nearly $500,000 during the year, the total December 31 being $6,115,022, of which nearly $5,000,000 represents investment in plant, equipment and supplies.

Total number of telephones in service is 41,436, of which 17,828 are in Grand Rapids. Total number of stockholders is about 3,000, of whom 1,333 live in the Kent metropolis.



MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

State of San Paulo, Brazil

15-Year 8% Sinking Fund Gold Bonds

Issue $10,000,000

THE State of San Paulo is the economic center of Brazil, with total resources estimated four billion dollars. Its total debt is very low—$25 per capita.

These bonds are a direct obligation of the State, further secured by the tax on coffee exports. A sinking fund operates to retire the entire issue at 105 at or before maturity, making the par value $1,050 per $1,000 bond.

The credit of the State has always ranked high; since 1906 it has retired about $144,000,000 of its bonds.

Price to Yield about 8.47%
(if held until maturity)

Write for Circular D-100

Merrill, Lynch & Co.
Members New York Stock Exchange
1056 Penobscot B.dg., Detroit
Chicago, New York, Milwaukee, Denver, Los Angeles

MANAGED BY MEN YOU KNOW

ABLE BUSINESS MEN FAVOR LIVING TRUSTS

More and more, men of affairs are employing the plan of the Living Trust for various purposes.

A living Trust will assure a child's college education; a daughter's financial independence; a son capital to enter business when of age; an old age competence for relatives.

Men in the thick of business who must take constant risks with their resources find Living Trusts useful in assuring their family's security, come what may.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan

CAPITAL AND SURPLUS $450,000

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

Resources and Liabilities of the Twelve Federal Reserve Banks Combined

RESOURCES	Mar. 11, 1921	Mar. 4, 1921	Mar. 12, 1920
Total reserves	$2,397,924,000	$6,678,763,000	$6,056,720,000
Bills discounted—Sec'd by U. S. Gov. obligations	1,005,177,000	981,640,000	1,515,959,000
All other	1,642,472,000	1,359,665,000	607,467,000
Bills bought in open market	146,508,000	164,004,000	204,172,000
Total bills on hand	2,515,058,000	2,505,506,000	6,927,618,000
U. S. Government bonds	35,347,000	25,848,000	26,775,000
U. S. Victory notes	17,000	19,000	68,000
U. S. Certificates of Indebtedness	655,000	657,668,000	267,461,000
Total earning assets	2,796,611,000	2,788,066,000	6,821,922,000
Total resources	5,645,656,000	*5,840,601,000	6,156,521,000
LIABILITIES			
Capital paid in	101,003,000	100,865,000	90,671,000
Surplus	202,036,000	202,036,000	150,160,000
Government deposits	51,523,000	56,941,000	55,524,000
Due to members—Reserve account	1,731,429,000	1,705,364,000	1,856,456,000
Deferred availability items	467,221,000	482,385,000	606,600,000
Other deposits, including foreign gov't. credits	30,776,000	64,064,000	97,009,000
Total gross deposits	2,310,947,000	*2,368,754,000	2,547,682,000
F. R. notes in actual circulation	2,605,510,000	2,646,611,000	2,683,750,000
F. R. Bank notes in circulation—net liability	156,087,000	155,109,000	620,736,000
All other liabilities	43,746,000	41,666,000	49,196,000
Total liabilities	5,845,656,000	*5,840,601,000	6,156,521,000
Ratio of total reserves to net deposit and F. R. note liabilities combined	50.9%	50.6%	46.5%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against net deposit liabilities	59.6%	59.3%	47.0%

*Revised figures.

Who's Who in Michigan Finance

Alvah D. Crimmins, Cashier, Charlevoix State Savings Bank, Charlevoix

When the Michigan Bankers' Association held its 1919 convention at Charlevoix there were very few delegates who failed to make or renew acquaintance with the genial cashier of the Charlevoix State Savings Bank. Alvah D. Crimmins' "long suit" is personality, although he is no mean hand at lending money safely and profitably, and he has come up into prominence in banking circles rapidly therefor. Mr. Crimmins was born at Marysville, Mich., in 1888, February 19, which was long before C. Harold Wills had any idea of building automobiles or building docks for his yacht to hitch to at little hamlet. He finished high school and went to Ferris Institute, at Big Rapids, and became bookkeeper in 1906 at the Bank of Copemish, Manistee county. By 1909, when he was only 21, he became cashier of the Bank of Mesick, at Mesick, where he remained until 1916, when he purchased an interest in the Charlevoix State Savings Bank and became cashier as successor to W. J. Rachow. Under his management the bank has grown from total footings of $265,954.35, on December 27, 1916, to more than half a million dollars.



A. D. CRIMMINS

Mr. Crimmins is also vice-president and director of the new Peoples State Bank of Hoyne City.

BETTER NEWS FROM BRITAIN

According to information furnished to Percy Owen, president of the Liberty Motor Car Company by friends writing from England, there are many encouraging trends in business affairs of Great Britain. Conspicuous among sentiments expressed is that money in England is soon to be available at cheaper rates. It is also stated that the shipbuilding industry of Great Britain is receiving a steady supply of orders. Unemployment is given as 1,500,000 out of 45,000,000 population, but the situation is improving.

WOMAN BANK PRESIDENT DIES

Mrs. Mary E. Webber, who died a few days ago in Portland at the age of 74 years, had been president of the Webber State Bank during the last three years, having been elected to the position by the directors at the death of her husband. Her daughter, Lorenzo Webber, is cashier of the bank.

IRON SILVER MINING COMPANY

COMPARATIVE STATEMENT

ASSETS	Dec. 31, 1920	Dec. 31, 1919
Ore Reserves—		
Estimated value of deposits, March 1, 1916, old properties	$1,254,978.82	$1,254,978.76
Cost new properties	217,654.09	217,654.09
Mayer & Tucson equipment, assessed valuation	46,443.00	46,443.00
Marion equipment, cost	163,468.28	163,468.28
Pyrenes equipment, cash and assessed valuation	63,737.26	63,737.26
Cash	293,012.21	692,364.43
Mining estate	1,179,856.18	1,176,856.18
	$3,144,869.86	$3,354,892.04
LIABILITIES		
Reserve for depletion natural deposits	$ 590,866.01	$ 586,486.96
Reserve for depreciation of equipment	61,120.64	74,426.57
Lease deposit	100.00	100.00
Capital stock	6,500,000.00	2,500,000.00
Surplus	*7,646.53	6,124.45
	$3,144,869.86	$3,354,892.04

Changes in Operating Surplus Account

Balance at beginning of year	*$ 6,124.45
Plus net loss for 1920	10,056.66
	*$16,178.67
Less reduction of deficit due to adjustment of equipment reserve for 1919	6,966.14
Balance at end of year	*$ 7,643.56

*Deficit

Digitized by Google

S. S. KRESGE STATEMENT

A comparative annual statement of the S. S. Kresge Company, Detroit, is presented herewith, as of December 31, 1920, with December 31, 1919. The 1920 statement includes figures of the Mount Clemens Pottery Company, which was acquired recently. Construction has begun on a large addition to the Mount Clemens plant and the first of the new kilns has been put into operation. The rate of output was in excess of the entire output of the former plant. The number of employes has been increased from 86 to 250. A comparative record of sales is also given following the balance sheet.

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Land, bldgs., mach., etc.	$ 2,799,483.91	$ 741,397.37
Furn. and fixtures and perm. imp.	7,980,852.64	4,764,826.33
Leasehold, organizations, etc. (Inc. $139,359.84 good will of subsidiary co. acquired for cash.)	6,128,787.67	5,989,407.83
	$17,909,054.22	$11,495,631.53
Inventories (at or below cost)	$ 7,351,039.22	$ 6,296,330.77
Accounts receivable	198,243.26	134,488.25
Liberty bonds at market	588,100.00	1,306,250.00
Cash	1,157,921.23	656,583.45
	$ 9,295,303.75	$ 8,493,871.47
Rentals pd. in adv., note exp., ins., supplies, etc.	901,557.30	572,281.35
	$26,101,915.27	$20,471,884.35

LIABILITIES

Preferred 7% stk. outstanding par $100	$ 2,000,000.00	$ 2,000,000.00
Common outstanding par $100	10,000,000.00	10,000,000.00
Pref. subsidiary stock outstanding	20,650.00	.....
	$12,020,650.00	$12,000,000.00
7% note due serially to 1926	2,000,000.00	300,000.00
Mtge. and land cont. obligations	582,000.00	.....
	$ 3,582,000.00	$ 300,000.00
Notes payable	587,500.00	500,000.00
Accounts payable (inc. tax reserve)	2,546,241.95	3,295,357.05
Rent and int. accrued	58,701.43	50,211.73
	$ 3,159,443.43	$ 2,845,568.77
Surplus	$ 7,339,821.84	$ 6,326,315.58
	$26,101,915.27	$20,471,884.35

Changes in Surplus

	Dec. 31, 1920	Dec. 31, 1919
Balance Jan. 1, 1920	$6,326,315.58	$3,788,114.41
Add: Net profit for 1921 after allowing $925,000 for taxes and contingencies	2,753,506.26	3,280,201.17
	$9,079,821.84	$6,066,315.58
Less: Prof. div's 7% $140,000 Com. div's 6% 600,000	740,000.00	740,000.00
Balance Dec. 31, 1920	$7,339,821.84	$5,326,315.58

Record of Sales

	Sales	Earnings on
1912	$10,225,487.84	$5,000,000
1913	12,258,227.69	5,000,000
1914	16,097,393.43	5,000,000
1915	20,943,200.85	5,000,000
*1916	26,396,547.84	10,000,000
*1917	29,890,700.37	10,000,000
*1918	36,309,513.67	10,000,000
*1919	42,648,060.91	10,000,000
*1920	51,245,311.23	10,000,000

	Earnings %
1912	11.51%
1913	14.68%
1914	20.42%
1915	23.34%
*1916	19.92%
*1917	17.21%
*1918	15.61%
*1919	21.40%
*1920	26.14%

*Earnings shown are after provision is made for the payment of war excess profits and income taxes.

EMPLOYMENT SITUATION IMPROVES

Latest reports from the Employers' Association of Detroit show a marked increase in factory payrolls. The 79 plants represented in the Association now have 67,137 employes, as against 8,000 when the depression set in several months ago. Forty of these plants are employing 41,668 on a schedule calling for 39 working hours a week.



She Will Need Faithful Counsel

When you are gone your good counsel and thoughtful care are gone, too. Your wife and your executor are left to settle up your numerous, and often complicated, activities.

Careful men make wills. It is the only safe way to assure the carrying out of their plans for their families.

Certain it is that you know best how your estate should be divided.

And you know best, too, whom you should have as executor of your will—someone experienced, faithful and never-dying who will carry out your wishes to the letter—who will give faithful counsel to your family.

Trust Companies are ideal executors because it is their business to fulfill duties of trust. They have the necessary knowledge and facilities. They have a permanence in organization which means that neither death, sickness nor absence can interrupt the settling up of estates.

The Union Trust Company has acted in the capacity of executor or co-executor of hundreds of wills. It has the experience gained in thirty years of service. Its officers will gladly give you their expert counsel. Let us send you valuable literature on wills and executors.

Union Trust Company

First trust company in Detroit.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MARCH 16th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.	60	66	100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Ld. & Trac. Co., com.	103½	106	100	114 - 69	204 - 85	8%	4%	Quarterly	Feb. 1, 1921	2%	1%	1½%	1½%	$26,274,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,296,300
Auto Body Co.	5½	7	10	5¾ - 4¾	12½ - 5½				Jan. 20, 1917		25%			$1,074,000
Do., pfd.			10		10½ - 10¼	6%		Semi-Ann	Jan. 1, 1921	3%		3%		$127,100
Bower Roller Bearing Co.	15	19	10	17¾ - 17	29¾ - 16				July 1, 1920	10%				$600,000
Chevrolet Iron Co. of America, com.	2¾	3¾	10	3 - 2¾	6¼ - 1¼				Apr. 1, 1919	2%				$2,529,350
Do., pfd.	3	3½	10	3½ - 3	8½ - 3				July 1, 1919	3%				$6,217,250
Cline Service Co., com.	231	235	100		355 - 250½	⅝%		Monthly	Mar. 1, 1921	1¾%	1¾%	1¾%	3½%	$42,277,800
Do., pfd.	66½	67	100		70 - 66	6%		Monthly	Mar. 1, 1921	1%		1%		$6,625,400
Coalville Lead & Zinc Co.			1	16 - 12¾	25 - 6				Nov. 15, 1917	2%				$700,000
Columbia Sugar	11¾	11¾	10	14½ - 10½	20¼ - 11¾	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co.	3	4	10	4¾ - 3	13½ - 3				Dec. 1, 1920	5%				$400,000
Cons. Pw. Ry. & Light Co., com.	13½	100	100	16 - 13¾	43½ - 10½				Nov. 1, 1917	1%				$18,585,900
Do., pfd.	84	90	100	85 - 84	92 - 84	6%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,893,200
Continental Motor Co., com.	6¾	8½	10	7¾ - 5¾	14½ - 5¾				Dec. 20, 1920	1%				$7,248,300
Do., pfd.	97	97½	100		100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,141,700
Detroit Iron & Malleable Works		97½	100	98 - 98	96 - 93	8%		Monthly	Mar. 1, 1921	1%		1%		$1,000,000
Detroit & Cleveland Navigation Co.		70	100	70 - 70	100 - 67	5%		Quarterly	Feb. 1, 1921	2½%		2½%		$4,033,600
Detroit Creamery Co.	23	23½	100	25¼ - 22½	39¾ - 16	2%		Quarterly	Dec. 24, 1920	1%				$1,600,000
Detroit Edison Co., XD.	97	97½	100	98 - 92½	114 - 92½	8%		Quarterly	Jan. 18, 1921	2		2%		$27,650,200
Detroit United			100			6%		Quarterly	Mar. 1, 1921	1½%				$18,680,600
Fairmanda & Jones, com.		14	None	14½ - 9¾	34 - 9¾	$2.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,000 shs.
Do., pfd.	70½	80	100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$843,200
Federal Truck			10	22½ - 18	82 - 16¾				Jan. 1, 1921					$2,000,000
Ford Motor Co of Canada	282	284	100	295 - 217	460 - 212	Varies		As Dec'd	July 15, 1921	10%				$7,000,000
General Alum & Br. Mfg. Co., com.	10½	12½	10	13½ - 10½	28 - 11	Varies		As Dec'd	Oct. 1, 1920		5%			$1,093,750
General Motors	23	24	10	26 - 17¾	39 - 17¾	$1.60		Quarterly	Feb. 1, 1921	25c		25c		20,961,385 shs.
Goebeler Sugar, com.	20	23	None		89½ - 39½									$ 70,000 shs.
Do., pfd.	100		100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$1,500,000
Hanna Furnace, com.	27	37¾	10	36 - 25								2%		$1,895,000
Do., pfd.	XD	97½	100			8%		Quarterly	Mar. 15, 1921	2%				$750,000
Hall Lamp Co.	11½	13½	10	15 - 13¾	32½ - 16	Varies		As Dec'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	8	9	10	13¾ - 7¾	24¾ - 7¾	Varies		As Dec'd	Feb. 1, 1921	2%				$1,500,000
Holland-St. Louis Sugar Co.	9¾	10	10	10 - 7	19½ - 7¾	8%			Oct. 15, 1920	1%				$2,000,000
Iron silver Mining Co.	40	45	20		62 - 45				July 1, 1919	10c				$2,500,000
S. S. Kresge Co., com.	128	145	100	96¾ - 90¾	151 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.	101	102	100			6%		Quarterly	Jan. 2, 1921	1½%		1½%		$2,000,000
Lindsay-Light Co., com.			10		24½ - 15½	6%		Quarterly	Jan. 1, 1921	1½%		1½%		$1,595,450
Lincoln Motors, Class A	15½	18½	50	21½ - 17½	50¾ - 13½				July 20, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co.		7	10	6¾ - 6¾	15¾ - 6¾				Dec. 1, 1914					$1,000,000
Michigan Drop Forge, com.			None		50 - 38½	$3.00		Monthly	Mar. 1, 1921	25c				$ 12,500 shs.
Do., pfd.			100		100 - 100	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$250,000
Michigan Stamping Co., com.	17½	18	10	18 - 17½	30 - 16½	9%		Monthly	Mar. 1, 1921	1%		3½%		$1,200,000
Michigan Sugar Co., com.	8½	8¾	10	9 - 8¾	13¾ - 7¾	4%		Quarterly	Dec. 15, 1920	1%				$7,471,100
Do., pfd.	8	8¾	10	8¾ - 8	9¾ - 9¼	6%		Quarterly	Dec. 15, 1920	1½%				$3,703,500
Miles-Detroit Theater Co.	13½		100		27 - 16½	*16%		Quarterly	Jan. 31, 1921	4%		4%		$250,000
Motor Products	41	44	None	43 - 32½	60¾ - 37¾	4%		Monthly	Feb. 2, 1921	$1.25		$1.25		$ 100,000 shs.
Motor Wheel	10½	10¾	10	11¾ - 8¼	23½ - 7¾	4%		Quarterly	Nov. 20, 1920	1%				$4,500,940
Murray Mfg.			18	10 - 10	35 - 33	12%		Monthly	Mar. 15, 1921	1		2%		$733,463
National Motor Co.			10	9½ - 8½	15¾ - 8½	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$2,000,000
Do., pfd.		92	100		187 - 90	8%		Semi-Ann	Jan. 2, 1921	4		4%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	106	107	1.30	1 26-1 00	2 00-0 65	*18%		Quarterly	Jan. 2, 1921	1¼%		4½%		$1,000,000
Packard Motor Co., com.	11	11¼	10	11¼ - 9¾	28½ - 9¾				Oct. 31, 1920	3½				$13,886,100
Do., pfd.	XD	72	100	75 - 69½	90¾ - 67	7%		Quarterly	Mar. 15, 1920	1¾%		1¾%		$18,253,500
Page-Detroit Motor Car Co.	20	21	10	21 - 12	45 - 12				Dec. 16, 1918					$2,000,000
Parke, Davis & Co.	90	90¾	25	90¾ - 89	117½ - 95	*16%		Quarterly	Jan. 3, 1921	8%		8%		$11,841,945
Penberthy Injector, pfd			100			8%		Quarterly	Jan. 1, 1921	2%		2%		$2,000,000
Reo Motor Co.	21¾	22	10	23¾ - 17½	29¾ - 16¾	10%		Quarterly	Jan. 1, 1921	2½%		2½%		$8,947,250
Scotten-Dillon Co.	15½		10	21 - 18½	35 - 20	8%		Quarterly	Jan. 1, 1921	2	50%	2	50%	$1,500,000
Timken Axle, com., XD.	31	31½	10	34¾ - 26½	*63¾ - 26	12%		Bi-Month	Jan. 15, 1921	2%		2%		$3,000,000
Do., pfd.	99	99½	100		100½ - 98	7%			Mar. 1, 1921	1¾%		1¾%		$5,000,000
True-Con. Steel Co., com., XD.	27¾	28¾	10	28½ - 27¾	29½ - 29½	16%		Quarterly	Jan. 15, 1921	4		4%		$1,480,250
Do., pfd.	8¾		10	9¾ - 8¾	9¾ - 9¾	8%		Quarterly	Mar. 1, 1921	1%		1%		$1,637,200
U. S. Radiator, com.	15	17¾	100		31½ - 20									$4,000,000
Do., pfd.	80	90	100		93½ - 80	7%			Jan. 25, 1921	1¾%		7%		$2,000,000
Waring Hat Co., com.		25	None											
Do., pfd.	92	100	100			8%		Quarterly	Jan. 1, 1921	2%		2%		$250,000
Western Knitting Mills	9½	10½	None	11 - 8½	30¾ - 8½				Nov. 23, 1920	50c				$ 140,000 shs.
White Star Line		42	50		50½ - 50½				Aug. 25, 1919	2½%				$1,000,000
Wolverine Portland Cement Co.	2½	3	10	3 - 2	3¾ - 2½				Dec. 15, 1917					$1,000,000

*Old 800-870: new 6¾% 27. 4% in 1911, 7% in 1920, only dividends since organized. †Extra dividend 18cap. ‡Book value $859,409, Ed. & J. ‖Book value, $3,219,327, Godchaux. Book value, $2,277,694 00. Western Knitting Mills ‖Book value $5,984,4/0, Motor Products. 1083 ‖Taken from other exchanges.

Foreign Exchange

Country	Par	Mar. 15, 1921	Feb. 2, 1921	Mar. 15, 1921
London	4.8665	3.6275	3.8800	3.8850
Switzerland	.1930	.1652	.1662	.1691
Paris	.1930	.0599	.0706	.0694
Belgium	.1930	.0625	.0743	.0725
Holland	.4019	.3162	.3275	.3420
Italy	.1930	.03465	.0366	.0356
Greece	.1930	.0763	.0735	.0752
Spain	.1930	.1328	.1392	.1388
Austria	.2027	.0025	.0025	.0027
Berlin	.2527	.01345	.0158	.1580
Denmark	.2679	.1585	.1810	.1585
Norway	.2682	.1615	.1860	.1615
Sweden	.2680	.2042	.2180	.2055

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Mar. 15, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	90.30	92.50	90.60	91.06	99.20	99.75	99.56	99.82
U. S. Liberty 1st 4s	87.16	89.50	86.32	85.60	93.00	94.90	93.00	94.12
U. S. Liberty 2nd 4s	86.78	86.30	84.16	85.00	91.58	92.84	93.04	94.10
U. S. Liberty 1st 4¼s	87.16	86.35	85.50	85.18	93.46	95.14	96.50	....
U. S. Liberty 2nd 4¼s	86.74	86.20	84.24	85.00	93.20	94.06	95.70	....
U. S. Liberty 3rd 4¼s	90.16	90.04	87.20	86.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4¼s	86.90	86.46	84.96	85.56	93.76	100.10	....	....
Victory Bonds, 4½s	97.28	96.48	94.50	88.50	94.00	95.06	95.12	96.22

Digitized by Google

Current Investment Offerings

Name	Rate	Maturity	Price Yield
Halsey, Stuart & Co., Chicago			
The Empire Dist. Electric Co. 1st Lien & Gen. Mtge.	5	1949	100 5
Joint Stock Land Bank bonds	5	1938-39	4½
Public Service Co. of No. Ill. Conv. Deb.	7½	1242-48	102.45 5.80
State of San Paulo bonds	8	1636	97.50 6.47
State of Washington	4½	1941	102.70 5.15
Fenton, Davis & Boyle, Detroit			
Chicago & Northwestern Ry. Co. Mortgage	6½	2-1-36	6.52
Louisville & Nashville Equipment Trust	6½	Serially	6.50
Republic of Cuba	6	7-1-41	6.10
Province of Ontario	5	5-26-22	7.50
United Iron Works	6	6-1-36	7.10
Oklahoma Gas & Electric Co.	7½	2-1-41	2.00
American Loan & Trust Co., Detroit			
Clayton & Lambert Mfg. Co.	6	1924-30	7
The Bemb-Robinson Co.	6	1926-27	6
Carpathia Sinking Society	5	1933-35	6
Wm. E. Johnson	5	1921-35	6
Northwestern Service Garage Co.	6	1924-25	6

Lansing Stocks

	Bid	Asked
Auto Body Co.	4½	5
Auto Body, pfd.		7
Duplex Truck Co.	5¾	6½
Hatch & Edmonds Motor Co.		15
Motor Wheel Corp.	10	10¾
First Bond & Mortgage Co.	65	
Michigan Mortgage Co.	9	10
Michigan Screw Co. (ex. stock div.)	18	20
Lansing Co.	35	42
Atlas Body Forge Co.	25	26½
Federal Forge Co.	15½	16½
Novo Engine	33	36

Quotes by G. M. Murchey & Co., March 15.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,262,994	$121,493,504
January 12	96,172,447	126,667,009
January 19	101,495,902	121,941,085
January 26	79,015,607	97,641,653
February 2	87,998,925	91,772,433
February 9	76,606,482	101,049,604
February 16	76,021,333	101,294,977
February 23	67,711,031	96,523,757
March 2	73,286,592	127,098,854
March 9	76,762,612	105,011,466
March 16	66,886,483	133,023,504
Month of		
January	389,430,266	467,321,870
February	308,841,488	436,266,886
March		570,626,229
April		540,373,669
May		484,268,859
June		555,766,367
July		626,634,146
August		562,469,904
September		561,692,240
October		518,425,760
November		466,922,446
December		462,261,246
Yearly totals, 1920		$6,193,823,902
Yearly totals, 1919		$4,504,896,158

NEW SAVINGS MANAGER

W. J. Kinmot, who was for 10 years connected with the Old Commercial National Bank of Detroit, has become manager of the savings department of the First and Old Detroit National Bank, succeeding W. J. Rachow, who has gone into the banking business in Hamtramck.

NOBLE OIL ASSETS $19,271,000

Bauer & Clark, appraisers for H. W. Noble & Company, Detroit, have recently completed an appraisal of the Noble Oil & Gas Company holdings which shows assets of the company, less depreciation, to be $19,271,000. The total indebtedness is reported as less than $1,250,000. Book value of Noble common, based on these figures and after allowing for the preferred stock and all indebtedness, is $1.65 a share.

The stock exchange was advised Wednesday that the next dividend probably would be paid April 15 to stock of record April 1.

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.	19	21
American Box Board, pfd.	6½	10
Bardeen	17	18½
Bryant	18	19½
Eddy, com.	4½	6½
Eddy, pfd.	90	98
Hawthorne	12½	15
Kalamazoo, new	18	22
Parchment, stock	12½	13¼
Parchment, rights		2¼
Mfg.	19	20
Lee, units	125	150
Mac Sim Bar	16½	14¾
Michigan	18	19
Monarch		14½
Rex	17½	18¼
Northern Michigan Pulp	100	125
Standard	60	65
Sutherland	3½	10¼
Waterfield	20	21
Western Board	24	26
Banks		
First National	336	
Home Savings	170	180
Kalamazoo City Savings	190	200
Kalamazoo National	150	162
Miscellaneous		
Barley Motor, com.	23	46
Barley Motor, pfd.	65	85
Hayes Wheel	14	16
Kasco Loose Leaf	14	15
Kazoo Corset	10	
Utah-Idaho Sugar	5½	6¼
Kalamazoo Sanitary Mfg.	9¾	10¾
Limousine Body	10	12

Quotes by Olmsted & Mulhall, March 15.

Cleveland Stocks

	Bid	Asked
March 2, close:		
American Multigraph		20
Bon Chemical		200
Firestone Tire & Rubber	64	66
Do. preferred		100
Fisher Ohio Body	17	12
Do. preferred	60	
Goodyear Tire & Rubber	12¾	
Do. preferred	29¼	30
Grant Motor	3	4¼
Interlake Steamship	210	
Jordan Motor	130	
Miller Rubber	60	66
Murray Ohio	6	
National Acme	31	21½
Paragon Refining	21	26
Peerless Motor	23	25
Portage Rubber	20	24
Do. preferred		23
Prod. & Refin. Corp.	4	5
Do. preferred	7	7½
Standard Parts	2¾	3
Do. preferred	5	8
Stearns Motor	20	26
Victor Rubber	17¾	60
White Motor	30	39
Youngstown Sheet & Tube	71	
Do. preferred	103	

Quotes by Otis & Co.

Detroit Listed Bonds

Name	Mar. 15, 1921 Bid	Ask	Last Sale
Cons. Pow. Co.—5s, 1936	80	81	81
Detroit & Flint—5s, 1923	87½	89½	87½
Det. Ft. W. & H. L.—5s, 1927	80½	76	72
D. M. & T. Motor—5s, 1933	60	81	
Det. & Northw'n—4½s, 1931	38	93	96
Detroit & Pontiac—5s, 1922	95	99	96
Detroit & Pontiac—4½s, 1926	44	64	
Det. & P. S. R. L.—5s, 1926	61	66	
Detroit Railway—6s, 1924	26	36	
Det. Ypsi. & A. A.—6s, 1924	100		
D. Y. & A. A. Jackson—5s, 1936	14¼		
Det. United Ry.—4½s, 1933	60	63	
Detroit Edison Co.—4s, 1933	88½	89½	
D. Ed. Co.—1st & ref. 5s, 1940	81	66	80
East Mich. Corp.—6s, 1931	75	84	
Detroit Edison Deb. 7s, 1923	96½	93	
Detroit Edison deb. 6s, 1926	66	96	95¾
Detroit Edison deb. 7s, 1930	95¾	64¾	
Detroit Edison deb. 6s, 1931	101	101¾	
D. C. Gas Co., G. M.—5s, 1915-23	91		
D. C. Gas Co., P. L.—5s, 1923	90	95	
Detroit & Gas Co.—5s, 1923-28	74	84	
Mich. State Tel. Co.—6s, 1924	87½		
Tol., Fremt'n & Norw.—6s, 1920			
Wyan. & Det. River—5s, 1918			
Ry-Prod. Steel Corp.—6s, 1360			
Detroit Rock Salt 8s, 1932	91		

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric		6
Economy Baler Co., com.	2	10½
King Trailer Co., pfd.		7
Hoover Steel Ball, com.	15	16
Mich. Milling Co., com.		7½
Motor Products Co., com.	42	44
Nat. Foundries, com.	7½	3
C. A. Sauer Co.	6	6

Quotes by Langley, Hildner & Co., March 15.

HAYES MANUFACTURING CO.

Comparative Balance Sheet

ASSETS (Cents omitted)

	Dec. 31, '20	Dec. 31, '19
Land	$ 96,326	$ 90,326
Buildings	395,566	364,466
Machinery and equipment	656,264	584,964
Tool dies and patterns	358,442	336,024
Trucks and pass. autos	26,920	25,920
Office fur. and fixtures	26,052	24,864
	$1,446,642	$1,466,299
Less depreciation reserve	592,106	524,091
Total property account	$1,054,566	$1,139,307
Investments	15,700	7,500
Cash for retiring preferred stock		50,389
Inventories of raw worked material supplies at cost or market	1,062,920	963,752
Accounts and notes rec. less reserve for federal taxes	96,041	250,001
Cash in banks and on hand	10,160	99,356
Total current assets	$1,169,112	$1,313,146
Deferred charges	39,671	105,448
Total assets	$2,279,016	$2,615,780
LIABILITIES		
Pref. stock outstanding	$ 717,900	$ 800,000
Common stock outstanding	1,500,000	1,500,000
Notes and acceptances payable	68,200	
Accounts payable	97,561	96,184
Accrued salaries and wages	10,493	42,526
Reserve for federal taxes	15,647	52,900
Total current liabilities	$ 191,856	$ 172,610
Balance of surplus	$* 129,936	$ 142,770
Total liabilities	$2,279,015	$2,615,780
Changes in Surplus, Year Ended Dec. 31, 1920		
Balance Jan. 1, 1920		$142,770.03
Plus—Unused reserve for doubtful accounts		4,440.43
		$147,210.46
Less—		
Preferred dividends	$ 39,466.00	
Common dividends	72,490.00	
Loss 1920 operations	189,326.26	
Net cost pref. stock purchase	6,850.72	
		$*77,147.00
Balance Dec. 61, 1920		$129,936.54

*Deficit.

Despite the fact that the company ended its fiscal year December 31, 1920, with a deficit of $129,936.54, the condition of its finances would appear to justify faith in the future. Many manufacturing companies ended the year with swollen inventories and swollen fixed investments but in the main there has been an accompanying swell in liabilities, which in this instance has not taken place. Current assets decreased $294,000 but the total is still more than five times current liabilities. Eighty-two thousand dollars was taken out of profits to retire preferred stock.

Unfilled orders as of March 1 are reported as approximately $2,000,000.

UNITED LIGHT AND RAILWAYS COMPANY

Davenport—Chicago—Grand Rapids

Common Stock Dividend No. 3

The Board of Directors has declared a dividend of one and one-half (1½) per cent on the First Preferred Stock, payable out of the surplus earnings, on April 1, 1921, to stockholders of record at the close of business Tuesday, March 15, 1921.

First Preferred Stock transfer books will reopen for transfer of stock certificates at the opening of business, March 16, 1921.

L. H. HEINKE, Secretary.

March 8, 1921.

The Bellefontaine Bridge & Steel Co.

Engineers, Fabricators and Erectors

STEEL BUILDINGS AND BRIDGES

Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6565.

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg.

Phones Cherry 8640

We solicit your inquiries

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks
Investment Houses
Trade Associations

IRENE WILLIAMS
104 South Michigan Avenue
CHICAGO

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building
524 Griswold Street

FREE FACTORY SITES

At Harbor Springs, Michigan.

On Railroad and Pure Water. Write the Chamber of Commerce for Particulars.

Durant Stock Sale Analysis

IN NOVEMBER, when W. C. Durant went to the du Pont people and obtained their assistance in financing the large block of stock theretofore owned by Mr. Durant, there was an abundance of speculation and gossip in the New York financial papers as to the price at which the stock was taken over by the du Ponts and as to the amount of cash which the transaction netted Mr. Durant. The gossip at that time was to the effect that stock worth about $27,000,000 was pledged to secure bank loans aggregating about $20,000,000, and that in the transaction Mr. Durant paid off the banks and realized something less than $7,000,000 in cash.

On Saturday of last week the annual report of E. I. du Pont de Nemours & Company was issued. It was revealed therein that Mr. Durant received $23,790,600 in cash and 40,000 shares of common stock of the du Pont Securities Company for 2,504,273 shares of General Motors common, and that afterward the 40,000 shares of the du Pont Securities Company was exchanged for 230,000 shares of General Motors common. The result, therefore was that Mr. Durant received $23,790,600 in cash for 2,274,273 shares, or about $10.40 a share, and had 230,000 shares remaining of an aggregate value of $3,980,000, based on $13 a share. Cash proceeds therefore were $3,790,600 above the assumed bank indebtedness of $20,000,000, and the value of 230,000 shares of General Motors common at $13, or $2,990,000, would bring his cash and equities growing out of the transaction up to $6,780,600.

Those who believe that even the du Ponts have $27,000,000 cash lying around loose these days may find interest in the description of how the du Pont Securities Company raised the necessary cash involved in the transaction and how it acquired the necessary General Motors stock which was put up as collateral. The du Pont Securities Company gave the du Pont American Industries (owned by E. I. du Pont de Nemours) $4,200,000 of its preferred stock and 38,000 shares of its common in exchange for $4,200,000 cash and 824,179 shares of GMC. It then gave the Chevrolet Motor Company $2,500,000 shares of its preferred stock and 24,000 shares of its common in exchange for $2,500,000 cash and 549,453 shares of GMC. It then pledged all the GMC stock so acquired, together with that of Mr. Durant, totaling 4,000,000 shares, with J. P. Morgan & Company for a loan of $20,000,000. This fund, with the two cash payments received from the du Pont American Industries and the Chevrolet company, totaling $7,000,000, brought the total cash funds up to $27,000,000, which it is assumed was used to pay the banks $20,000,000 and the remainder to Mr. Durant. The following table explains the transaction somewhat more clearly:

du Pont Securities Receipts		Company How Raised
Cash	GMC Stock	
$ 4,200,000	824,179 shares	Received from du Pont Amer. Industries in exchange for $4,200,000 pfd. stock du Pont Sec. Co. 38,000 shares com. stock du Pont Sec. Co.
$ 2,500,000	549,453 shares	Received from Chevrolet Co. in exchange for $2,500,000 pfd. stock du Pont Sec. Co. 24,000 shares com. stock du Pont Sec. Co.
	122,095 shares	Purchased from a syndicate for $2,163,857 cash or $17 per share.
"	2,504,273 shares	Purchased from Mr. Durant.
20,000,000		Borrowed from Morgan & Co. on 4,000,000 shares GMC acquired as above.
$27,000,000	4,000,000 shares	

WATERWAY HEARING FOR DETROIT

The International Joint Commission of the United States and Canada will conduct the final hearing on the proposed Great Lakes-St. Lawrence waterway and power project, at the Board of Commerce, Detroit, October 30. This will permit opponents and proponents to present their arguments for and against the project.

AN UNIQUE VELIE EXHIBIT

The Detroit distributor of the Velie has an unique exhibit in his Woodward avenue show room. The body of a touring car has been cut into cross section so as to show the different materials going into the construction of every part of the body and top. The other side of the car shows the different coats of paint and finishing materials used, the entire side being divided into sections, each of which shows the finish after first coat, second coat, etc., together with a brief description of each operation.

B. OF C. GAINS MEMBERS

The membership drive started Monday, March 14, by the Detroit Board of Commerce, is bringing results. Tuesday evening the members of the drive teams had dinner with the board of directors in the Board of Commerce grill room and heard reports of progress in obtaining new members. Lewis Cohane made a short talk on the accomplishments of the Board and his value to its members and the city of Detroit. His arguments were in the nature of a sales talk which was forceful and impressive. If any present were in doubt, Mr. Cohane "sold" them handsomely.

The membership drivers and the Board wish it understood that while every effort possible should be made during this week, the drive is to continue throughout the year. No manufacturer would attempt to sell his entire output in a single week, and it is the intention of the committee to spread its efforts over the whole year.

Price Range Detroit Bank Stocks

Name	Detroit Stock Exchange							
	Range 1921		Range 1920		Mar. 15, '21	
	High	Low	High	Low	Bid	Ask
American State	221	215	226	200	*221	...
Detroit Savings	260	258	259	259	*259	...
Dime Savings	258	258	259	258	*258	...
First and Old Detroit Nat'l	273	271	278	268	*273	...
First State						
Highland Park State	260	260	298	295	*260	...
Merchants National	149	149	163	142	149	...
Nat'l Bank of Commerce	210	210	130	190	210	...
Peninsular State			220	215	*220	...
Peoples State	360	355	353	306	*355	...
United Savings	208	208	215	209	*208	...
Wayne County Home			347	306	347	
American Loan and Trust			155	155	...	127
Bankers Trust						
Guaranty Trust			148	148	1	160
Detroit Trust	295	255			275	300
Security Trust					1300	...
Union Trust	180	180	197	195	*180	190
Commonwealth-Federal	...	...	...	...	1103	107
Bank of Detroit	...	...	...	...	1192	200
Continental Bank	...	...	...	...	1198	...

*Last Sale.
†Nominal Quotation.

Digitized by Google

Dividends Payable

Company	Rate.	Stock or Payable.	Record.
Advance Rumely, pfd.	1½% Q	April 1	March 15
Amer. Chr. pfd.	1¾% Q	April 1	March 16
Amer. Steel Foundry	75 cts Q	April 15	.....
Amer. Steel Foundry, pfd.	1¾% Q	March 31	March 15
Amer. Car & Foundry, com.	3 % Q	April 1	March 16
Amer. Car & Foundry, pfd.	1¾% Q	April 1	March 16
Allis-Chalmers	1 % Q	May 16	April 25
Allis-Chalmers, pfd.	1¾% Q	April 15	March 24
Chlmers & Arlsons. Mining	50 cts	March 21	March 6
Cities service, bankers shares	2 per M	April 1	.....
E. & G. Navigation	$1.00 Q	April 1	March 15
E. I. du Pont de Nemours	2 % Q cash	March 15	Feb 28
E. I. du Pont de Nemours, deb	1½% Q	April 25	April 10
Guaranty Trust	5 % Q	March 21	March 18
Great Lakes Towing, com.	1¾% Q	March 31	.....
Great Lakes Towing, com.	1¾% Q	June 30	.....
Great Lakes Towing, com.	1¾% Q	Sept. 30	.....
Great Lakes Towing, com.	1¾% Q	Dec. 31	.....
Great Lakes Towing, pfd.	1¾% Q	April 1	.....
Hendee Mfg., pfd.	1¾% Q	April 1	March 21
Kelly-Springfield Tire, pfd.	$1.50 Q	April 1	March 15
Lake Arrow Motor Car, pfd.	$2.00 Q	April 1	March 15
Utah Copper	$1.00 Q	March 31	March 12
United Gas Improvement, pfd.	1¾% Q	March 15	.....
Worthington Pump	1¾% Q	April 15	April 5
Worthington Pump, pfd.	1¾% Q	April 15	April 5
Worthington Pump, pfd "B"	1¾% Q	April 15	April 5
Western Electric, com.	$2.50 Q	March 31	March 24

THE OLDEST HOUSE IN MICHIGAN

We own and offer

PROVINCE OF BUENOS AIRES BONDS

(The richest Province of the Argentine Republic)

To Yield 11%

Secured by taxes which annually earn over five times the interest and sinking fund requirements, and by the credit of the entire Province.

We believe this issue is exceptionally attractive.

Particulars on request.

H. W. NOBLE & COMPANY

Bond Department

318 Dime Bank Building Detroit, Michigan

NATIONAL AUTOMATIC MUSIC

Comparative Balance Sheet, December 31, 1920 with December 31, 1919.

ASSETS

	Dec. 31 1920	Dec. 31 1919
Income earning property, 2,015 coin controlled automatic pianos	$1,627,850.00	$1,188,000.00
Liberty bonds	20,150.00	20,150.00
Cash	407.78	48.50
Due from National Piano Mnfg. Co.	97,920.28	.....
Notes receivable	.....	22,923.00
Accounts receivable	.....	104,201.71
Total assets	$1,746,328.06	$1,344,423.21

LIABILITIES

Capital stock outstanding	$1,477,500.00	$1,117,500.00
Dividends unclaimed (cash reserved)	407.78	.....
Miscellaneous accounts	.....	48.50
Surplus piano account	.....	70,500.00
Surplus account	268,430.28	156,374.71
	$1,746,338.06	$1,344,423.21

Receipts and Disbursements for 12 Months Ended Dec. 31, 1920

Gross income for 12 months as stated	.....	$ 463,704.95
Dividends of 1 per cent monthly	$ 160,480.00	.....
Operating expense paid National Piano Mnfg. Co. as per contract	188,179.38	463,704.95
Carried to surplus	113,945.57	.....

This company was incorporated in Arizona, March 15, 1909, and admitted to do business in Michigan. Authorized capital $2,000,000, in 200,000 shares of $10 each.

Gross income since June, 1909, has been $1,456,609.08; cash dividends paid, $776,671.25; surplus, $288,430.28; expenses, $382,507.55; fire loss, $9,000.

TELEPHONE COMPANY ELECTION

Stockholders of the Michigan State Telephone Company have re-elected the following directors: Frank W. Blair, Emory W. Clark, Franz C. Kuhn, W. I. Mizner, G. M. Welsh, Detroit; William Judson, Dudley E. Waters, Grand Rapids; W. S. Gifford, H. B. Thayer, E. S. Wilson, New York; E. S. Bloom, Chicago. The directors re-elected the following officers: President, Franz C. Kuhn; vice-president, Dudley E. Waters; vice president and general manager, G. M. Welsh; secretary and treasurer, W. I. Mizner; general auditor, H. J. Booth.

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy.,GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

Digitized by Google

What Detroit Plants Are Buying

(Continued from Page 6)

firm, no matter how fine a record it has, can hope to get business with nothing more than that fine past record.

Without exception, every firm must do all it can to help along the immense after-the-war readjustment still ahead of us. All must do everything possible to get their costs down so that they can sell to their old customers at exceptionally low figures. If they do this, their customers in turn will then be able to go out and cope successfully with strongly competitive conditions. No firm can hope to keep in business if its policy is such as to be detrimental to the best interests of its various customers. And no policy is more detrimental to a firm's customers at the present time than the policy of some companies selling in this market, who expect their customers to carry them along purely on account of past favors.

Purchasing agents recognize their obligations to those firms which have helped them out so nobly in many serious situations during the last few years. But in the long, hard race ahead of us competitive conditions will not permit them to keep "tied up" with any firms who in the past were fine supports but in the present are clinging burdens.

I have emphasized this part of the situation so that the firms who are selling in this territory will not misunderstand the purchasing agent's viewpoint and the governing factors which he cannot get away from. Also, I do not believe there is a purchasing agent in this territory who is not personally anxious that every old, reliable source of supply shall continue in the same pleasant relations through its ability to meet every new condition.

In summing up the most important underlying factor in the automotive situation is that the industry as a whole has been and is now squarely facing the new conditions and rapidly making every adjustment necessary to prepare for the long, keenly competitive race ahead. In a corresponding degree the various purchasing divisions are adjusting themselves and their policies so they will be a real aid to their respective companies in the manufacture and sale of their particular make of motor cars.

A summary of what the individual companies are doing will undoubtedly be interesting.

At present the Studebaker Corporation is the most active motor car company in the buying market. Its inventory was relatively lower than nearly all other concerns when the slump came. As a result, it has been able to enter the market in a quantity sense sooner than the others. This is true with the exception of coal, of which the corporation still has a quantity of high-priced fuel on hand. To offset this, it is buying some four or five cars a week of the exceptionally good offers made. By this means it is bringing down its average coal cost.

The Ford Motor Company is releasing many of its orders which have been held up for some time. These releases are relatively larger in the large sized parts and units. This is because storage facilities have always acted to limit the number of such parts which could be taken in advance of production. In addition to these releases an appreciable amount of new business is being placed, either direct or through the accessory manufacturers who supply the company. These releases and new orders are, so far, entirely for the closed body cars. With reference to the tractor division the outlook is increasingly favorable. Many releases and some new orders are being placed to take care of a planned production schedule of 200 tractors a day. This is 50 per cent of the peak schedule last year.

The Ford purchasing department is going through a complete reorganization in which it is planned to carry on the purchasing with only a small fraction of the number previously employed.

The Cadillac, the Buick and the Reo are the other three motor car companies which are now doing a considerable amount of buying. Also, the Hupp and the Paige are in the market to a somewhat lesser extent. From present indications the Dodge, the Columbia, the Olds, the Denby and the Chevrolet will be buying various parts in appreciable amounts before the end of March. It is doubtful if any of the other motor car companies will be in the market for quantity production material before April at the earliest.

Buying in Small Quantities

Probably the most outstanding feature in the motor car buying activity to date is the exceptionally small quantities being ordered of each size and kind of material. This indicates that the present policy is entirely one of buying for immediate needs only.

The outlook is for a gradually increasing amount of buying, even though production schedules are not materially increased. The various inventories of stock are being worked down. As each particular part or kind of material is used up, releases of unfilled orders will be given, and after that new orders will be placed.

The activity among the accessory manufacturers is in direct proportion to the particular motor car manufacturers who are their customers.

The four leading stove manufacturers are sending out a considerable number of inquiries in preparation for a production of about 25 per cent of what it was this time last year.

The railroads and the manufacturers of railroad equipment are doing practically no buying of new equipment materials. This is partially due to the delay in the settlement of accounts and claims which the railroads have coming from the Government, and partially due to the fact that there is at present ample enough railroad equipment to handle all business which is moving. A third very important factor in the railroad situation is the national agreements which the Government forced upon

C. C. COAL COREY COKE
1908-4 MAJESTIC BLDG. DETROIT, MICH.

DIME SAVINGS BANK
FORT E. GRISWOLD STS.
DETROIT, MICH.
BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russell
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Financial and Industrial

Specializing in serving financial institutions and industrial establishments regardless of their location, we invite them to consult or correspond with us with a view to placing their Michigan banking needs in our care.

Capital and Surplus $3,750,000

TRADING DEPARTMENT
Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.
JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation, 70 Years of Service.
THE DETROIT SAVINGS BANK
OLDEST BANK IN MICHIGAN
MEMBER FEDERAL RESERVE SYSTEM
48-47 Fort St. West. 14 Branches
Penobscot Building.

Digitized by Google

the roads in behalf of the various unions during the war. These agreements impose such a heavy operating burden upon the railroads that this situation is commanding almost the entire attention of the transportation executives. They feel that this matter must be solved before any planning can be done for increasing rolling stock and terminal facilities.

In addition to the various buying to take care of immediate requirements, a certain amount of purchasing is being done by those concerns which are in a financial position to take advantage of the exceptional offers being made to them.

For Future Delivery

The situation with reference to contracting for future deliveries is always one on which it is difficult to give any first hand information.

The professional buyer desires to give his company any competitive advantage possible through his contracting at the best possible time and price. He therefore generally does not want his plans widely known. So I am not in a position to give any specific information on this subject without violating confidences.

However, in general the amount of contracting being done in Detroit at present is considerably less than in most of the other buying centers. Purchasing agents in other centers, who for years have specialized in certain specific commodities, feel after a long and careful analysis of the situation the bottom of the market has been reached in a few of the raw materials, especially copper, tin, lead, zinc, cotton and rubber. Accordingly, many of them are placing exceptionally advantageous contracts at a sufficient margin under the open market prices to make them feel safe against any further open market declines which might take place, and at the same time to protect them against any market advances and against the withdrawal of such offers because of the continued improvement in the financial situation.

Only the future, of course, can determine definitely whether the purchasing heads of Detroit or of the other centers of the country are exercising the most farsighted judgment.

Milling Machines, When and How

(*Continued from Page 8*)

on a plain milling machine or a hand machine. The production in a case of this kind would be rather slow but it could be increased greatly by setting up another fixture at "C" on the same machine and loading the work "D" while the cutter is operating at "A".

Still greater production could be obtained by making an index fixture as shown at "E" in the lower left hand part of the illustration. In this case four pieces "F" can be milled at one time by arranging the cutters in the form of a gang as indicated. While these pieces are being milled, four more can be set up as shown at "G", so that when one group has been machined the indexing fixture can be rapidly swung around to mill the other side. In this way four pieces can be done at the same time with very little loss of time. The machine used in this case is a plain milling machine. Another method of setting a piece of this kind to obtain high production is shown at "H" in the same illustration. This fixture is placed on a rotary continuous milling machine and as the table revolves continuously there would be practically no loss of time during the operation. The operator can remove the finished work and load the fixture while it is revolving.

From these examples it will be seen that both the indexing and continuous types of fixtures will give high production and between the examples "E" and "H" there is very little choice. Whether there might be a little greater production obtained from one or the other would depend largely upon the shape of the parts which are to be machine and their relative position to each other.

The work shown at "A" in Fig. 4 is a cylinder which has been previously bored and machined at "B". It is necessary also to mill the surfaces at "C," "D" and "E". Now a piece of work of this kind can be machined in several different ways according to the production required. It is evident that for small production it would not be profitable to set up a heavy and expensive machine, while for large production it might be a decided advantage. The method shown at "F" makes use of a plain milling machine with a single cutter shown at "H". This cutter mills a single sur-

No. 2 of a Series of Examples

Small Corporations as Well as Large Should Appoint Transfer Agents and Registrars

Irrespective of their size, corporations should recognize the advisability of placing their Stock Transfer Department in experienced hands. The fact that the stock is not actively traded in is one of the best reasons for the employment of Transfer Agents.

The transfer of shares bristles with technical points and liabilities which a corporation is seldom equipped to handle and the infrequency of transfers is the usual cause of unfamiliarity, not only with the law regarding transfers but also with the safeguards against any irregularity. Corporations acting as their own Transfer Agents frequently incur liability which is not compensated by the slight economy effected.

Our officers will be glad to explain this service in detail.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

A Matter of Ratio

Few stock companies are undercapitalized—particularly when their stock is to be offered for sale. Generally they represent 100% stock and 50% security. With our First Mortgage Bonds it is different. We offer 50% bond and 100% security—plus the $7,000,000 resources of this corporation.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

Digitized by Google

YIELDING 6% NET
The Bemb-Robinson Co.
$150,000
First Mortgage Real Estate Bonds

Security: First Mortgage on land and buildings valued at $355,000.

Location: 571 E. Larned St. and E. Congress St. between St. Antoine and Beaubien Sts.

Maturities: 1926 and 1927.

Denominations: $1,000.

Legal for Michigan Savings Banks.

For other details, call, 'phone or write

AMERICAN LOAN AND TRUST COMPANY
Griswold and Larned Streets Detroit, Mich.
(*Under Supervision of State Banking Dept.*)

LABELLE PLATES



Because "wearability" in the finished product is absolutely dependent upon quality in the raw material — manufacturers more and more are coming to LaBelle for their plates.

They can't afford— any more than LaBelle can afford—to put their trademarks on anything but the best.

Wheeling Steel Products Co.,
Exclusive Sales Agents for
La Belle Iron Works
"From Mine to Market"
General Offices, Steubenville, Ohio
Works, Wheeling, W. Va., and Steubenville, Ohio
Detroit Office, Book Bldg.

face "C", the work being set up on an angle plate fixture "G."

If this method were to be used, the second operation could be done on the same type of machine by means of the cutter "K," thus milling the upper surface on the casting "D." The work in this case would be set up on another angle plate "L." The third operation would be the milling of the surface "E" on the same type of machine and with a fixture similar to that shown at "G," except that the work would be set up in the opposite direction.

Now this method might be alright for small production, but when a great many pieces are to be milled it would be better to use a multi-spindle milling machine having three cutters us shown at "M," "N," and "O" in the same illustration. By this means a number of pieces could be set in a row on a fixture base "P" so that all three surfaces "C," "D," and "E" could be milled simultaneously. It is evident that this method would be more rapid than that previously described, as three cuts are being made at the same time.

A multiple spindle machine could also be used in the manner shown at "Q" by setting up the two pieces of work "A," so that the pads "D" and "E" on both pieces would be milled at the same time. It is evident that these pieces also would be set up in a row so that the cutters would operate on a number of pieces successfully. If this procedure were to be used, the surfaces "C" would be handled in another operation probably in a similar manner to the method shown at "F," except that several pieces could be set up on the same fixture if desired. It might also be profitable to set up two castings opposite each other on the duplex milling machine and do this final operation two pieces at a time on a suitable fixture.

In this case also it is evident that the amount of production required and the fixtures used are important factors in determining just how any pieces of work can best be machined. There is very little choice between the method shown at "P" and "Q," although in the former case all of the cuts made at one time, in the latter four surfaces are machined with the exception of the surface "C," yet two pieces of work can be fed through the machine in the same length of time that a single piece would be machined by the method "P."

Machining a Cylinder Head

Another example is shown in Fig. 5, which illustrates the various ways in which production can be increased in accordance with the amount of work required and the machines available. In the upper left hand illustration the work "A" is to be finished on the surface "B" and in this example the machine used is a plain milling machine with an inserted tooth cutter "C." The work is set up in this case on a simple fixture indicated at "D." This work could be done equally well on a vertical machine using a fixture like that shown at "E," provided the horizontal machine were not available. There would be an advantage in using this method, because the work could be set up more easily in this type of fixture than in the other. The method of clamping would be simpler because there would be no danger of tipping the piece out of position when clamping.

A duplex milling machine could also be used to advantage on this same piece of work as shown at "F." In this case four pieces could be set up as indicated and two surfaces would be machined at the same time in the same amount of time.

Going a step further, a multiple spindle machine could be used by locating the work as shown at "G," in such a way that three cutters could be in operation simultaneously. An arrangement like that shown at "H" could also be used on a multi-spindle machine, four pieces being set up so that they would all be milled at once. It is also evident that the work could be set up in a row in either of these two cases.

Another method could be used by utilizing a continuous rotary milling machine and making a suitable fixture to hold five pieces, as shown at "K." If this type of fixture were to be used there would be no lost time caused by loading and unloading the work, and yet it might not give as great a production as the examples "G" and "H" because in these cases several surfaces are being machined at the same time.

In determining whether a certain piece of work is suitable for circular continuous milling, the general shape of the piece is an important factor. Unless an arrangement can be made such that the parts are close together, it is not usually profitable to use this type of machine because there is so much lost time while the cutter is cutting "air" and therefore not producing work.

In analyzing a problem for this kind of milling, therefore, it is of great importance to decide whether it will be profitable or not. The ideal shape of work is that which is more or less triangular with sides sloping toward the center of the table, like the example shown at "A" in Fig. 6.

It will be noted that these pieces are roughly triangular in shape, so they can be set close together and clamped back against the locating pins "B" by means of suitable clamps "F." The work can be conveniently set up on the three points, "C," "D" and "E" in the fixture base "G." This example approaches the ideal condition for rotary continuous milling, as it is evident that the work is set up economically

Digitized by Google

and there is no time lost either by the work man in loading and unloading the fixture, or by the cutter which is operating continuously.

Another example which illustrates the possibilities of continuous milling is shown in the same illustration. The work "H" in this case is a forked stud which is to be straddle milled and slotted. In order to keep the ends of the work to be done, as close together as possible the pieces are set up from the inside of the ring fixture "K." Each piece is clamped by means of a special binding screw "M." The cutters used are arranged in multiple as shown clearly in the illustration.

These two examples, together with the others previously mentioned, will give the executive a very good idea of the factors which govern the selection of a circular continuous milling machine. It may be well here to mention the importance of high class tool engineering in connection with the design of fixtures. A first-class machine may be only partly efficient unless the fixtures used with it are designed by practical men of long experience in both shop and drafting room.

Index Milling Fixture

Everything which is done to save time while setting up and removing work from a fixture increases the production because it decreases the idle time on the machine. In other words, "keep the machine running and cutting continuously" if you wish to obtain maximum production from it. The tool engineer who knows his business understands this fundamental principle and designs his tools accordingly.

Many times it is possible to design an indexing fixture or a reciprocating fixture so that one piece of work can be loaded while another is being machined. It is evident that when this can be done the setting-up time is eliminated and the only lost time is in indexing and moving the milling machine table from one position to another. Fig. 7 shows an example of this kind in which the work "A" is to be faced across the top as indicated by the finish mark.

The work locates in V-blocks "B" and on the hardened stud "C" located in the indexing member "D" mounted on the base "H." The piece is clamped in place and held firmly by the swinging clamp "E" operated by the cam lever "F." The pins at "K" are intended to take the side thrust of the cutter and also to serve as a location sidewise. Suitable indexing pins are provided at "Q" to locate the indexing member when swinging it from one position to the other.

It is evident that the operator can load one piece while the cutter is facing the other, and as there is only one clamp to tighten the manipulation is very rapid. Fixtures of this general type can often be used to increase production when the work is of such a nature as to permit it. In the case illustrated it would also be possible to make two fixtures just alike and set them at opposite sides of the table. The same result could be obtained by this method but the operator would be obliged to work alternately on one side and the other which would not be quite as convenient. The production however would be about the same in either case.

Milling machines of special design can be obtained in considerable variety and they are useful for the particular kind of work for which they are designed. We have made no mention in this article of spline milling machines, thread milling machines, gear cutters, hobbing machines, etc., because these types are designed for special purposes and it would require more space than we have at our disposal to take up machining problems suitable for these machines. There are, however, occasional instances when high production is required in milling a certain piece of work which may normally require several operations.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

NOT AN AGENT BUT A MANUFACTURER
I WANT YOUR WORK
J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.
TELEPHONE MAIN 5545
MAY I SERVE YOU?
CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES
Production Machine Work
PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS
SEND ME YOUR INQUIRIES
FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $800,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

Smith-Hinchman and Grylls
Architects and Engineers
"Incorporated 1903" Detroit, Mich.

Digitized by Google

Enter Davis; Exit Gompers

(Continued from Page 3)

I was in conference with him when he was debating over the portfolio that had been offered. I opposed his acceptance. I argued that he would not be a success in such a position; that his dream of encouraging better leadership in labor and bringing labor and capital together on a more friendly basis was visionary and impossible. I feared then and do now that he is not enough of an astute politician to handle the many problems he will confront.

"In the first place he goes into the cabinet believing that there must be a decrease in wages in many lines. While he believes in trade unionism, he does not believe in union leadership that is autocratic, and he will not tolerate dictation. Threats of strikes will not scare him. If Mr. Gompers or any other labor officials approaches the department in a threatening attitude Jim Davis will be as hard-boiled as they make them. And he can be hard boiled. He believes that unorganized labor has as much right to be heard as organized labor. He believes in the open shop principle where the open shop is just and most beneficial to labor. On the other hand he is not likely to lend himself to any plot or plan to destroy the closed shop where it is just and acceptable.

"Jim Davis is not a man without an understanding of the problems of the employer. He is an employer himself. He maintains an office with 15 or 25 clerks. He is interested in many lines of manufacturing. He is a capitalist if the possession of a fortune of $2,000,000 or more places him in that category. But he still holds his union card. Capitalist or trade unionist, he will be Secretary of Labor with capital letters. Of that much I am certain.

"I believe Davis was picked by Harding because he occupied this dual position, because his ability as an organizer and his desire to be just were well known to the President. I do not know just when or how Mr. Harding came to know Mr. Davis. Sometimes I am tempted to believe that Secretary of the Treasury Mellon had something to do with Mr. Harding's decision. President Harding had known Davis for years. Mr. Davis visited Mr. Harding several times in Marion, during the front porch campaign. While most of the Moose membership was inclined toward Governor Lowden, Jim was a Harding man and a Harding worker. Mr. Mellon and Mr. Davis are both from Pittsburgh. They were well aequainted there. They are directors in at least one concern that I know of.

"Both President Harding and Secretary Mellon knew as well as I did that Jim Davis had no sympathy with radicalism in labor; that he was bitterly opposed to destructive measures or 'direct action' in labor politics. Very likely they consider him as conservative as I do, and for that reason, coupled with his wide experience as a trade unionist, employer and organizer, President Harding chose him. He is a director-general of the Moose for life, elected to that position as a reward for all he has done for the order, and as a business proposition. He will do a great deal more.

"As Secretary of Labor I believe Mr. Davis will have the hardest task of his life. I am afraid he will be abused more than he will be loved. I hope he succeeds. If he does not it will not be because Jim did not do his darndest, because he was unjust or because he was not capable. It will be because to do the task as he would have it done is humanly impossible."

The Board of Commerce and the Future of Detroit

(Continued from Page 4)

When I assure you that these instances are only a few from among the many casual experiences of a citizen who is neither a manufacture nor a merchant, may we not assume that they are probably duplicated in the minds of a thousand other men of Detroit more familiar with trade conditions than myself?

With this wealth of information and of opportunity that is in hand today to be followed up, analyzed and corrected, you wonder that with a mild enthusiasm which I hope you will consider pardonable, I venture that we are already on the verge of necessity for doing for Detroit what the Commercial Museum of Stuttgart and the Bourse of Vienna and the Industrial Associations of Tokio and Nagasaki were forward enough and brave to do for the cities in which they were interested and whose commerce they reverenced?

TURN a moment now, if you please, to the local conditions which are to influence the commerce of our future. In the stress of the moment we are apt to grow impatient with the detail work of our city governments. But if we are philosophic enough to be occasionally introspective we will catch ourselves finding fault with things as they go on nowadays, and holding that they are not being done as well as they were at some given dates in the past. We forget that when, from the standpoint of the present, we approve the past, we are criticizing the activities of the past, too, while they were accruing and before they had become history.

With all its faults—and God knows it has many—with all its wastes, with all its crudity of endeavor, with all its opportunity for self-constituted critics to boost themselves into paying jobs as the exponents of public criticism generally ill-founded—the American municipal government is the most flexible and responsive instrument at the service of commerce and industry that can be found in the wide, wide world.

So we, in common with all our fellow Americans, may depend upon our city governments to do the work that commercial development demands. They may not be as speedy as we would like, conditions of public incomes may temporarily delay or divert them from useful purposes. But they generally arrive. Like the bedbug, which has no wings at all, they get there just the same. They are not making problems for industry and trade; industry and trade are making the problems for them.

We have many local problems in Detroit affecting our commercial and industrial development, but we have in this great community leaders many minds fitted to solve them. Most of them are continuing and will require continuous pottering with them. Smith Waterfall has told you what we need in railroad facilities. Well, we will get those because we and all the parties to that problem understand each other and know how to work together to solve it. We need increasing educational facilities. This Board and the school author.ties know how to educate the public to loosen its purse strings to provide them.

And so with all the rest, save two which seem outstanding. If we are to support an increasing commercial and industrial supremacy we need food and we need homes. Detroit's population today consumes every day a million pounds of flesh meat foods, a million of grain foods and two million pounds more of diversified foods, including vegetables. If we are to grow our population we shall double in food demands.

WE draw our flesh meat foods from a great distance. Yet we have twelve thousand square miles of lands in the lower peninsula of Michigan which are fit for grazing, and only the fringes of which are touched for that purpose. The farmers of our state produce thousands of tons of food products which they say rot in the fields for lack of good distribution. If ours is to be as self-contained a city as it should he, it should not be dependent upon far-away food markets. If it were conceivable that rail transportation should suddenly and generally stop, we have on an average in our city five days of food supply between us and distress. Yet that is not bad, either, for New York is rarely stocked for three days' feeding ahead.

If we are to support an industrial population, we must see that our food supplies are kept ample and above all, accessible.

It should be a civic crime for Detroit to permit the product of an acre of the soil of Michigan to be wasted. That opens up a work for this Board in support of the industries of Detroit, of varied character. It includes the encouragement of the raising of meat food animals in our state and bringing of them to our own markets; the extension of the use of grazing areas; the betterment of distribution by rail; the opening up of motor rcutes; the development of truck gardening in territory contiguous to our city; the conservation of food from the season of maturity through the seasons of consumption—a big work and a varied work, yes, but a work upon which the activity of forge and foundry and machine shop will depend in the future. In this work your Board is already engaged, but not upon the scale which its importance demands. There is opportunity for the voluntary work of a thousand members of this Board along these lines suggested.

THE other glaring need of this city is housing, and housing is dependent upon transportation. Our city's pride used to be that it was a city of individual homes and home owners. That made it a city of conservative workers because they were rooted to our soil, like the peasants of France. We are fast becoming a city of tenants and tenements. We were twenty-five thousand homes short last year. The same shortage will be accentuated when our wheels begin to turn again and the hammers once more ring in the forges.

The reason that we have not made individual homes in the quantity demanded has been that our centrally located home sites are too costly and we have pro-

(Continued on Page 36)

Digitized by Google

New Corporations

FOR WEEK ENDED MARCH 12, 1921

Auto City Oil Co., Detroit; manufacture and sale of oils; W. H. Stack, Cleveland, O.; Mable I. Tweedie, August L. Miller, 1441 Iroquois Ave., Detroit.....$ 10,000

Longe-Wakefield Co., Ionia; buying, selling and dealing in all kinds of groceries, meats, etc.; William G. and W. Fred Longe, Edward E. Wakefield, Ionia 5,000

Bilt-Well Products Co., Bay City; manufacture of wood and metal parts and products; Grant A. Freeman, T. R. Peterson, Michael A. Schmidt, Bay City 10,000

Dinner Bell Nut Butter Co., Battle Creek; buying and selling both at wholesale and retail, nut butter, cheese, groceries and food products; Chester A. Shirkey, Memphis, Mich.; Henry C. Kewley, Carroll W. McConnell, Battle Creek 5,000

Wayne County Furniture & Lumber Co., Hamtramck; to manufacture, purchase, own, mortgage, invest, deed, deal in and with personal property; Peter Zwolinski, Walter A. Zwolinski, Joseph Olesinski, Hamtramck 20,000

Artificial Stone Co., Eaton Rapids; to conduct general construction and contracting business; I. W. and G. E. McArthur, C. D. Stringham, Eaton Rapids 30,000

Wayne Oilbway Land Co., Detroit and Oilbway, Canada; to buy, hold and sell real estate; Frank F. Barry, 3241 Philadelphia Ave., W.; Joseph A. Connors, Gretna I. Spence, Detroit 50,000

G. W. Wagner Lumber & Shingle Co., operations in Michigan, Washington and other states, office at Grand Rapids; George Nelson, Jessie L. and Frank H. Wagner, Grand Rapids..... 25,000

Brick & Supplies Corp., Lansing; to manufacture, buy and sell brick, cement and all kinds of builders' supplies; W. H. Porter, James F. Hamnell, Geo. P. Anderson, Lansing..... 100,000

Eaton-Smith Co., Kalamazoo; to deal in automobiles and automobile supplies, accessories and other electrical appliances; Stanley H. Eaton, Robert A. Smith, Albert L. Waldo, Dan H. Eaton, Kalamazoo 25,000

British Columbia Lumber Co., Manistee and Wardner, B. C.; to buy, sell and market, wholesale and retail, for export and domestic trade, lumber, timber and timber lands; William F. Baker, C. Sherwood Baker, Max E. Neal, Manistee 100,000

George E. Buchanan Investment Co., Detroit; to own, hold, buy, sell, lease, mortgage and deal in real estate, build or alter houses; George E. Buchanan, 281 Dexter Blvd.; George H. and Francis R. Buchanan, Detroit 75,000

Auto Finance Co., Detroit; to buy, sell, exchange, mortgage and deal in notes, bonds and mortgages; Charles Hamberger, 1430 Collingwood Ave.; Leonard E. Brown, Samuel Hamberger, Detroit 45,000

Dollar Shoe Stores, Inc., Detroit; to manufacture, buy, sell and deal in boots, shoes, rubbers, etc.; George F. Fisk, 713 Clairmont Ave., Detroit; Eugene A. Land, Royal Oak; Christopher Brien, Detroit 25,000

Flint Commonwealth Corp., Flint; to buy, purchase, own, sell, build, construct and operate hotels, apartment houses, theaters, office buildings, etc.; Peter Carton, Christopher Ghitsas, Paul G. Dale, Flint 1,000,000

Charles W. Kalder, Inc., of Detroit; Grand Rapids; sale of musical and other goods manufactured or imported or distributed by Charles W. Kalder, Inc.; Charles W. Kalder, Grand Rapids; James D. Brodie, Grace Sullivan, 323 Fort St. W., Detroit 1,000

Peters-Bishop, Inc., Wyandotte; to purchase, hold, etc., real estate; Jerome H. Bishop, Wyandotte; Herman T. Peters, Ford H. A. Peters, Wyandotte; Clark W. Bishop, Wyandotte.

H. H. Finn Corp., Detroit; purchasing, holding and dealing in real estate; Harold E. Finn, Hotel Borrowood, August C. Wunderlich, Fred A. Schaley, Detroit 250,000

Ryerson Co., Detroit; real estate; Albert W. Ryerson, 158 Larned St. W., Detroit; Norman Walker, Cleveland, O.; L. Campbell, Detroit 200,000

Safety Appliance & Machine Co., Detroit; manufacture and sale of machinery, and specially punch press

Waiting to see what the other fellow is going to do isn't going to put you in the lead



This little lever covered by the thumb selects the speeds.

If all motor car manufacturers hold up decisions on improvements and changes,—there is sure to be a jam when they all let go.

To step out now, to take a decided lead by telling the public that the cars you are now to offer will *actually* have some new worth-while features, will bring what buying there is to you.

In a 50-per-cent year you can do a normal business or better.

Clean up your front floor board, take out the obstruction—the gear-shift lever and emergency brake. Replace one with the C-H Magnetic Gear Shift and move the brake to the extreme left side.

Finger lever control on the steering wheel saves the clothes of the women drivers, prevents stripping of gears,—makes driving easy. It places your car ahead, where it will command the attention of the public.

The C-H Magnetic Gear Shift is made by The Cutler-Hammer Mfg. Co., one of the largest electrical manufacturers in the world—maker of the magnetic motor control systems used in steel mills, machine shops, industrial plants, on battleships and submarines.

This $10,000,000.00 company has stood back of this Shift and, though obeying Uncle Sam's request to curtail operation during the war, has nearly 6,000 in satisfactory use.

If you want to make a real interest-arousing motor car announcement, equip your cars now with the C-H Magnetic Gear Shift. You'll need to make no experiments—the device is perfected, and The Cutler-Hammer Co. is back of every one installed.

THE CUTLER-HAMMER MFG. CO.
Magnetic Gear Shift Dept.
Detroit Office: Kresge Bldg.

Works:
MILWAUKEE, NEW YORK, BEDFORD, ENGLAND

C-H Magnetic Gear Shift

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Digitized by Google

MEMBER A. S. M. E, CHERRY 3096 CADILLAC 5877 MEMBER A. S. T. M.

W. C. DU COMB, JR.

E AN ELIVER

FROM STOCK

THE JOHNSON FRICTION CLUTCH



COUNTERSHAFT EQUIPPED WITH THREE JOHNS ON CLUTCHSE

The Best Clutch on the Market For Light Power

Single and Double

SMALL—COMPACT—NEAT—ROUND—SMOOTH—FEW PARTS—POWERFUL—BALANCED—ADJUSTABLE

USED ON ALL KINDS OF MACHINERY—LINE SHAFTING—COUNTERSHAFTS

137-141 WOODBRIDGE ST. EAST DETROIT, MICH.

safety devices; Edward Roberts, 2598 Montclair Ave.; Robert A. Shaw, Forest E. McKee, Detroit .....

Textile, Leather & Metal Preserver Co., Kalamazoo; to manufacture, sell, buy and deal in waterproofing and preserver for textiles, leather, metals; Clarence D. Shaffer, Willard R. Sparks, Kalamazoo; Elbert W. Sweet, Benton Harbor .....

Wayne Trucking Co., Detroit; to carry on private trucking business in Michigan; Hugh McLean, Oakwood; Floyd R. Harding, Blain T. Colman, 256 California Ave., Detroit .....

Alpena Driving Assn., Alpena; to foster horse racing, public exhibitions of horse races, and charge admission; John A. McPhee, Charles R. Leavitt, Henry Douville, Alpena .....

Phillips Getschow Co. (P.), Chicago; Max Kahn, 415-42 Moffat Bldg., Detroit, Michigan agent .....

Monroe Co-operative Oil Co. (P.), Wilmington, Del.; Frank S. Schronder, Edgar H. Stadelman, secretary-treasurer, Monroe; $25,000 preferred and 2,500 shares common, non-par value.

Apeegee Mfg. Co., Detroit; to manufacture sheet metal parts and accessories for automobiles, novelties, toys, etc.; Henry M. Kohn, 111 Davison; John J. Bell, David L. Wilson, Detroit .....

Dupree Mfg. Co., Detroit; to manufacture, sell and deal in automobile jacks and switches, general automobile accessory manufacturing business; Samuel P. Dupree, 2535 W. Grand Blvd.; Roy E. Cole, Charles C. Dupree, Detroit .....

International Purchasing & Engineering Co., Detroit; to buy, sell, import and export, deal and trade in all kinds of machinery; Rudolph J. Schaller, John Adolph Kopf, 2129 Michigan Ave.; Henry Henkel, Detroit .....

Holland American Wafer Co., Grand Rapids; manufacture, purchase and sale of baked goods, dainties and confections; William P. Thomas, Adrian Dykhuis, John H. D. Wiedenhelm, Grand Rapids 75,000

Wyoming Sand & Gravel Co., operations in Wyoming, office in Grand Rapids; to dig, dredge, wash, buy, sell and deliver sand and gravel and other building material; Peter C. Peterson, Richard Derrick, James Voght, Grand Rapids .....

50,000		10,000

CHANGES OF NAME

	T. H. McAllister Co. (name changed to McAllister-Wallace Co.); St. Joseph ..	10,000
	Chamberlain-Holmes-Jefferds Co. (name changed to Port Huron Grain Co.), Port Huron	125,000
100,000	Financial Investments Co. (name changed to F. A. Sawall Co.), Grand Rapids	25,000

INCREASES

	Escanaba Paper Co., Escanaba, from $2,000,000 to	3,000,000
10,000	Michigan Tire and Accessories Co., Grand Rapids, from $100,000 to	275,000
	Sheriff-Doolin Co., Battle Creek, from $20,000 to	40,000
	Washington Realty Co., Detroit, from $10,000 to	100,000
7,000	J. D. Dopp & Co., Detroit, from $20,000 to	40,000
5,000	Dowagiac Creamery and Butter Co. (name changed to Dowagiac Ice Cream Co.), Dowagiac, from $5,000 to	15,000
	Victor-Vassar Knitting Mills, Detroit, from $100,000 to	250,000
	Pearson Steel Co., Detroit, from $1,500,000 to	3,500,000
	Bloomfield Construction Co., Detroit, from $10,000 to	25,000
	Barbers' Co-operative Co., Detroit, from $2,500 to	5,000
50,000		

B. of C. and Detroit

(*Continued from Page 34*)

200,000	

vided no facilities to get out into the open.

For thirty years we have fuddled with our transportation problem. Amateur Neros have played their out-starting fiddles. We have been interested in the access to and the exit from office of the favorites of the moment. But we have not provided transportation to the cheap heme sites. Instead, we have put more people to live to the acre on Hastings street than is good for them, more than live on an acre in any area outside of New York. We have crowded our retail and wholesale business into an area so congested that we have one of the most expensive conflagration districts in the United States, and we are paying the toll on it in insurance rates. We have taken from our home-owning workingman the privilege of choice of far-away urban employment, unless he sells his home and moves. We have made our tenants nomads who have to strike the r tents at every change of work. We levy a toll of two or three hours of daily travel as each worker's contribution for the privilege of doing a day's work.

We should find some way to reduce these tolls. These are excessive costs; these are imperceptible, but nonetheless real charges. When this Board sees its duty, and its members exercise their full influence in settling this problem once and for all, the greatest single contribution ever made to the permanency and settlement of industry in Detroit will have been made.

Gentlemen, this city of ours is worth it all. When St. Paul said: "I am a Roman," he spoke not more proudly than should you and I when we say, each for himself, "I am a Detroiter." His right to pride was not greater than ours.

On the escutcheon of the Prince of Wales is the pledge of his office to his people, a motto which reads: "I serve." The proud slogan of our neighbor metropolis, Chicago, is "I will." Is it too much to hope that the latter history of Detroit will show that the fealty pledge of this Board of Commerce to its community is not the subservient declaration of the one, nor the futurist promise of the other, but the present and active declaration, "We do"?

Digitized by Google


MICHIGAN
MANUFACTURER
AND
FINANCIAL RECORD
SUPPLEMENT
TWENTIETH ANNUAL
DETROIT
AUTOMOTIVE SHOW
MARCH 19-26, 1921

No Engine Can Be More Efficient Than Its Cooling System

ACCOMPLISHMENT is only achieved thru the coordination of efficient units.

The great success of Long Cooling Systems in performing their important function of keeping engines of motor cars, trucks and tractors properly cooled is the direct result of scientific coordination.

Exact engineering applies the Long principle of construction in the manner best suited to give the engine the full advantage of highest cooling efficiency.

Long Cooling Systems are now made in more than sixty different designs, adapted to every type of motor vehicle.

In selecting a motor car, truck or tractor equipped with a Long Cooling System, you are assured of continuous productive operation, uninterrupted by radiation troubles.

Long Manufacturing Company

DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines

LONG

COOLING SYSTEMS

The Recognized Standard for Motor Cars, Trucks and Tractors.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

This Is Buy-a-Car Week

Detroiters, Aloof for Months, Back in the Market; Twentieth Annual D. A. D. A. Show Is Under Way

THE LONG MONTHS of depression which have affected the automotive industry as well as every other line of business enterprise appear to be rapidly approaching an end, and the Twentieth Annual Show of the Detroit Auto Dealers' Association opens today under circumstances auspicious alike for manufacturer, dealer and prospective purchaser.

For the manufacturer and dealer the circumstances are auspicious for they afford opportunity to show the prospective purchaser, who has learned a good deal during the period of extravagance through which he has passed and is not going to invest his money without first knowing that he will receive full value for it, that at today's prices a motor vehicle is a "good buy" and that now is the time to buy.

For the purchaser the circumstances are auspicious because they afford opportunity, now that money is growing easier and he is ready to buy, to make the fullest examination of all the wide range of vehicles, comparing one with another, and finally to decide the make and model which best meets his needs and his purse. He will find each dealer anxious and equipped to go to any length in the way of explanation, to satisfy him. Instead of receiving orders only on Wednesdays and Fridays, with notices that "the line will form to the right," the dealers are hot after business now. It ought to be a most gratifying week for the buyer—and for the dealer as well.

And that is not saying that the dealer has been "up-stage." His trouble during the period of reckless buying, not many months back, was that he could not begin to get enough cars to supply the demand. His customers drove him to distraction demanding deliveries. The prices he asked never were unreasonable. If any industry should be absolved of the charge of having reaped inordinate profits, it is that which manufactures and sells automotive vehicles. But the rain that descends upon the unjust descends as well upon the just. The public, up in arms about prices it had to pay for necessities generally, "passed up" the motor vehicle along with the rest. It has been grouchy toward everybody who had anything to sell.

It is only natural, therefore, that trade in motor cars has been one of the first commercial lines to begin the "comeback." It has been one of the first, if not the first, to respond to the stimulus of improving times. The tide of buying began to swell at the New York show, gained volume at the Chicago exhibit and has been growing stronger as each motor show this year has been held. By contrast with a year ago, buying has been quiet and unpretentious, but it has been nonetheless real and growing. Purchasers are not buying with reckless abandon. They are taking their time about it, exercising discrimination, but buying.

The best evidence is offered by actual sales records. One company manufacturing a high-priced car turned over more business through its Detroit representative in January and February than for the same period any one of the last eight years. The answer of course is that new buyers of cars in this classification came into the market, many of them able for the first time to own machines of a higher order. The records of another well-priced car show more Detroit business since August than at any previous time in six years.

On the other hand we find the Detroit agency of a medium-priced automobile with a sales record of 78 vehicles in February, while orders for another car in the same classification have doubled the monthly production of the factory.

These early buyers belong to that class of people who purchase cars when they need them, who consider the automobile an economic necessity, and reasonably priced today. They have been doing a little figuring and have come to the conclusion that further price-cutting is hardly to be expected. They have not overlooked the fact that "cost of idleness," including deferred dividends and all postponed settlements, will have to be spread out over sales for some time to come. The pendulum has swung too far; the longer the buyer waits before making his legitimate purchases, the longer it will take the industry to regain its equilibrium. Added to that, it is becoming more generally known that the surplus of vehicles on hand is not more than enough to take care of two months of normal consumption. In view of this, the prospect of a shortage in the late spring and early summer is not remote. An era of marked prosperity would absorb the supply in two or three weeks, because of the pent-up demand which exists and the inability of the manufacturers to attain large production immediately. As a matter of fact, it is probable that more cars are being sold now than are being manufactured. In other words, the surplus is being eaten up. If sales get close on the heels of production, or overtake it, we shall see a scramble for cars, for there is nothing which will make the public buy vehicles so quickly as the inability to obtain them after they have been ordered. It is the experience of dealers who have been in the business long enough to have gone through former periods of depression that so long as cars are available and the market is "soft," so to speak, public interest falls off accordingly. On the other hand, if prices begin to rise and deliveries are hard to obtain, ordering becomes brisk. That is just a bit of what the savants term "mass psychology."

The prospective buyer will find a better type of vehicle awaiting his inspection this year, in spite of the fact that the engineering and experimental departments of most of the manufacturers have been on reduced time these last few months. Many improvements which had been developed earlier have been built into the 1921 product. Notable among these is a reduction to a previously unreached minimum of engine vibration, hardly any perceptible difference being noted between the highest and lowest speeds of which the motor is capable. This has been accomplished principally by better balancing of the crankshaft. Speaking more generally, however, the manufacturers, being on a smaller production

Digitized by Google

schedule, have had more time to devote to each vehicle. There has been opportunity for even more careful inspection and test. Thus it has become more a proposition of quality than quantity, a condition accentuated by the fact that it has not been possible to sell "just anything that came off the assembly line," as one automotive engineer recently has expressed it. "The cars which are coming through a good many factories today are more carefully made than those which came through six months ago," he said.

So that the buyer will get a better motor vehicle than ever before, in all cases at a reasonable price, and in many cases at prices considerably lower than a year ago.

Few if any radical departures are to be found in this year's models. There has been refinement of line, but conservatism characterizes nearly every change made. Detroit show visitors are seeing for the first time locally about a dozen new makes of motor cars, among them the Daniels, Handley-Knight, H-C-S, Kessler, LaFayette, Lincoln, Sheridan, Dixie Flyer, Moon, Roamer and Gardner. While some of these makes are not new this season, they have never before been shown at a D. A. D. A. exhibit.

Detroit show facilities this year surpass those of any previous year, both as to size of floor space and as to arrangements for caring for the crowds. Ever since the first show in 1902 this annual exhibition has been more or less of a shuttlecock of fate so far as a roof to shelter it is concerned. Because Detroit never has considered seriously its convention and exhibition building needs, the dealer show in a city known as the "Automotive Capital of the World" has appeared first in one makeshift building and then in another. More than once it has been saved from being utterly homeless by the civic pride of citizens who could and would offer a part of their industrial or commercial floor space.

The 1921 show is no exception to this rule. It opened today as the guest of the United States Tire Company, in the new Morgan & Wright industrial unit in Jefferson avenue, at Bellevue. This building is a show in itself. One of the largest manufacturing blocks in the world, it could easily accommodate two or three Detroit shows.

Thus the automotive show's misfortune is its good fortune in this case. The space allotted to it is 150,000 square feet, all on the one floor. This space provides for the largest show the city has ever had—300 passenger cars, 100 commercial vehicles and 65 exhibitors of accessories. The arrangement, both from the viewpoint of advantageous display and convenience of visitors, is the best so far offered.

Likewise, a one-floor display permits of splendid decorative motif. Manager H. H. Shuart and the show committee of the Detroit Auto Dealers' Association have taken advantage of this opportunity to lay out an ensemble superior to any of their former achievements. The great structure itself radiates power and substantial life. In a sense its temporary guest is its maker, for it is the automobile that has made the tire more than a tube of rubber, and the Morgan & Wright structure is merely another monument to the greatness of motor transportation.

The decorative committee has hung over the entrance a huge welcome sign, and by means of giant reflectors has directed powerful lights upon the sign and the facade of the building. Should there be any question as to the nationality of this show, the phalanx of poles flying the Stars and Stripes will settle the doubt —this show is an American institution.

Architectural thought of the Pompeiian era has been applied to the circular first-floor lobby, further emphasized by the use of mural decorations, boxwood trees in wall niches and cast Greek vases. A canopy in deep blue covers the lofty ceiling area, and suspended therefrom are silk drops decorated with dancing girl silhouettes and fringed with tassels. Divans and lounge chairs furnish convenient resting places.

Within the exhibition hall proper is the suggestion of spring fever, lazy days, long, smooth roads and easy-riding, swift-moving vehicles of an era rightly called "The Age of Transportation." Mellow light is cast over colorful drapery, flowers, palms and potted plants, and brings into bold relief the finished product of the motor industry. Panels of soft, silken materials and huge light shades decorated with dancing girl impressions, tasselled and corded, conceal the otherwise cold ceiling. Seven-foot columns, emerald green, orange striped frieze, a background of blue and coral-colored vases filled with blossomed foliage complete the general decorative scheme. Shadows which so often defy careful inspection of cars through faulty lighting have been eliminated by the arrangement of lights and the placing of cars.

As usual, a city official presided at the opening, delivering a brief address, to which President A. L. Zeckendorf, of the D. A. D. A., responded. From that on until the end of the week, the Twentieth Annual Detroit Automotive Show will unfold its promise to the world's second greatest industry.

It has been said that the motor truck and smaller commercial vehicle do not find their greatest chance of expression in an indoor show; that they are essentially of the road and by the road must be judged. Whether this be true or not, Detroit's annual display of motor vehicles would fall far short of expectations were commercial vehicles withdrawn

Michigan has been a great market for motorized commercial transportation units and will continue to be. Temporarily its market is apathetic merely because all business has been so. Commercial and industrial revival, now apparently so surely under way, will bring the motor vehicle into greater prominence than ever before. One of the best evidences of this is the agitation for store-door deliveries by railroads, which opens a new field for the truck. There is a desire that provision be made in rail rates for a charge for store-door deliveries. This movement has grown out of past experiences with delayed shipments and terminal congestion. Should the railroads decide to include a charge for store-door deliveries, they would immediately become customers for motor trucks, or contractors for truck service furnished by individuals or corporations.

During the last year the truck fleet strength in Michigan has been somewhat diminished because of the building and industrial depression. Building and industry already are on the mend, and with the revival will come demand for heavy duty trucks and light delivery cars. Consequently the commercial vehicle exhibits at this show will give every owner or prospective owner an opportunity to study transportation units of this character and take note of their possibilities. The Ship-by-Truck organization will lend emphasis to truck use by a parade of vehicles of various capacities.

The automotive equipment or accessory exhibit of the 1921 show is more complete than ever in the past, containing as it does commodities ranging from special bodies, California tops and small garages down to spark plugs and cotter pins. There are, as said, 65 exhibitors.

Detroit's first Salon is being held in the Hotel Statler, several makers having taken space for the showing of special jobs. At the Detroit Athletic Club is being shown a series of twelve oil paintings by some of the country's best known artists, each canvass depicting its creator's conception of "The Spirit of Transportation." Exhibited earlier at the New York and Chicago shows, these paintings, prepared under the auspices of the Clark Equipment Company, Buchanan, Mich., drew much attention. It was expected that the prize award on the series would be announced during the week.

This, then, is Transportation Week in Detroit, the city which produces such a host of units of transportation. It is the week in which the public, which long has held aloof because it had worries of its own, goes to market. The cars are in good supply, they are of quality 100 per cent, the prices are right. The buyer is ready to make a sound investment. Why shouldn't everybody be pleased?

List of Exhibitors Will Be Found on Page 40. Index to Advertisers, Page 44.

Digitized by Google



THREE OF MOTORDOM'S LATEST PRODUCTS

At the left is shown the Sheridan, latest member of the General Motors family. It is one of the cars which is being exhibited in Detroit for the first time, at the Twentieth Annual D. A. D. A. Show. At the right is the Kelsey friction drive automobile, which has elicited much comment since it was announced a short time ago. In the center is the Duesenberg, whose power plant is a "straight" eight-cylinder engine, the cylinders being on a line instead of in the "V" formation common to motors of this type.

What's New in the 1921 Vehicles

Detroit Exhibit Embraces Some Cars and Trucks Recently Brought Out; Refinements Featured

HUNTING for new designs and radical changes in passenger car and commercial vehicle construction continues to be a popular indoor sport although it lacks the thrills of a decade ago. If there is anything new enough to produce a mild case of stimulation it crops out in the annual shows, and it will crop out in the 1921 Detroit Automotive Show. Not all of the few radical departures from conventional design and construction will be in the Detroit show, but the majority of them will be there.

In their Sunday-best in or out of the show, the motor cars of 1921 will show a general improvement in service—accessibility, a movement in car building started by the development of better service attention which immediately revealed the weaknesses in motor and chassis design from the standpoint of repairing and replacements. There will be evidences of changes in the make or type of units, numerous new body styles and improvements in body and hood design.

When the usual legion of prospective buyers get to that point in their research work which is the verge of despair at not finding anything new to discuss enthusiastically, they are likely to bump up against such eye-openers as the new Duesenberg car with eight cylinders all in a row, instead of in the conventional V formation. They may stumble over the Kelsey friction drive car described by engineers as the only successful car of that type ever constructed.

Then there is the departure of the Pierce-Arrow designers from the right-hand to the left-hand drive, and other changes that are more than commonplace. The Guy disc valve motor in the Ace automobile will give them something to think over. C. H. Wills' new car, the Wills Sainte Claire, being manufactured at Marysville, Mich., may not be at the show, but it is something new and is not likely to hide its headlights nor its tail light under a bushel.

At the Detroit show, however, there are 11 cars quite new to local motor car exhibits, if not new to the New York and Chicago shows. They are the Roamer; Daniels; Handley-Knight; H. C. S., a Harry C. Stutz product; Kessler, a Detroit-made car; the LaFayette; Lincoln, Detroit-made and a new creation of H. M. Leland; the Sheridan; Dixie Flyer; Moon and Gardner.

While experimentation is not dead by any means, standardization is casting its influence on the modern motor car with increasing strength. A survey made by Motor Age shows this fact, the average car having these general features:

Wheelbase, 122 inches; motor, six-cylinder, L-head, 3.42-4.97 bore and stroke, 256.35 piston displacement, 26.53 N. A. C. C. horsepower, splash-pressure oiling system with gear pump, pump cooling system, helical timing gears, three-speed transmission, 4.49 gear ratio, semi-floating axle, semi-elliptic rear springs, spiral bevel drive and 32x4 tires. The average price of five and seven-passenger touring cars is given as $2,794 and that of all body types, $3,583.

Only two makers have designed a 12-cylinder car, the Haynes and Packard companies; 11 are manufacturing eight-cylinder models, while 72 are producing six-cylinder, and 47 four-cylinder models.

So far, manufacturers of the eight-cylinder motors have held close to the V-type arrangement, which makes the new Duesenberg straight-line eight-cylinder motor a novelty.

This new motor is the product of years of experimenting by the Duesenberg brothers, designers of racing cars, one of which has broken the world's speed record. In their Elizabeth, N. J., plant they set out to build an every-day car with the flexible features required in a racing car. Besides the single-block, eight-cylinder motor, they have introduced a hydraulically-operated, four-wheel brake system.

All eight cylinders and the top part of the crankcase are cast in a single block, the cylinder head being a separate iron casting

Digitized by Google

and the lower half of the crankcase an aluminum casting. The motor has inclined valves in the head, operated from an overhead camshaft—a type of construction which has been very satisfactory in racing-car design. This design also makes it possible completely to machine the compression chambers, making all of equal volume and giving a full load compression of 80 pounds to the square inch.

The bore is two and seven-eights, with a stroke of five inches, and the overall length of the cylinder block is thirty inches. The piston displacement is 250 cubic inches.

The braking system is particularly interesting. There is a 15-inch brake drum on every wheel, each expanding service brake shoe being controlled by pedal in the customary way, but through an ingenious hydraulic arrangement instead of the conventional linkage. The difficulty with front wheel braking systems has always been that of designing a simple and efficient mechanism for conveying the power to the front wheel brakes.

Duesenberg has surmounted this difficulty by operating them hydraulically. These brakes are foot-actuated, in accordance with regular practice, but the motion of the brake pedal, instead of being transmitted to the brakes by a direct mechanical linkage, is transmitted by columns of oil under pressure. The brakes, which are of the expanding type, are fully enclosed. The brake drums have an effective width of face of 2¼ inches, and are provided with cooling ribs on the outside in accordance with racing practice.

Ever since the motor car became a practical vehicle inventors have been trying to eliminate the gear-shifting process. The effort to devise a friction-drive system has been the most popular. Cars of this character have been put on the market, but their success has been indifferent. Judging from technical reports, the Kelsey car has the first practical friction drive. This car is made by the Kelsey Motor Company, Newark, N. J., and is touted as the only friction-drive car made in America.

The transmission and clutch are located in the rear axle housing. The rear axle is internal gear driven from a straight-line drive shaft. The contact between the wheel and disc is said to be positive and the wheel can be stopped at the center of the disc. High speed is obtained by contact of the wheel with the outer edge of the disc, the speed gradations being obtained by moving the wheel toward the center of the disc.

There is no neutral position. The clutch can be released by the foot brake, or the friction members may be engaged and the brake applied. The wheel is held in its place on the disc by a ratchet, which can be disengaged by a slight pressure of the foot pedal. It is said that this friction device eliminates 123 parts necessary to the ordinary car. Wheel and disc are made of analite, a light, but tough metal, which reduces wear. In other types of friction-drives the complaint was that the disc was rapidly worn down, with the result that the life of the disc and wheel were too short to make the car economical or efficient. In the Kelsey car this has been overcome by the method of applying the wheel to the disc, and the material used in wheel and disc construction.

The Ace, made by the Apex Motor Corporation, Ypsilanti, has a six-cylinder motor with the disc valves in the cylinder heads, operating at one-eighth crankshaft speed. These valves are the shape of a Maltese cross and are keyed to the shaft, as is the driving gear. This car is offered in touring and roadster models.

Briefly, the Wills Sainte Claire is an eight-cylinder, V-type motored car, the cylinders set at an angle of 60 degrees. Valves and camshaft are of overhead construction and driven by spiral bevel gears. The makers have made use of molybdenum, a light steel that has enabled them to build a car weighing 3,000 pounds.

The wheelbase is 121 inches, ball bearings are used throughout and the headlights are magnetically controlled with a rear light to illuminate the back of the car when operating in reverse. Metal disc wheels are standard equipment, with 32x4½ tires. The car embodies 12 basic patents held by Mr. Wills.

While the changes made in well-known makes of cars are comparatively small and belong more to the realm of refinements, yet they will be of much importance to those who are frequently in the market for cars and know what constitutes the best and most valuable in automobile construction.

For instance, the Pierce-Arrow, made in Buffalo by the Pierce-Arrow Motor Car Company, is almost traditional, but its adoption of the left-hand drive will be important, for it is one of the few American makes which had refused to "follow the pack" in this particular. Two years ago the Pierce-Arrow appeared with the dual-valve motor and it is continued, also the dual ignition which provides two firing points and cleans the motor at every explosion.

This dual-valve motor was adopted because it promised greater economy and apparently the company is satisfied with results. This year's models have larger bearing surfaces, more rigid construction, three-speed transmission, an over-running intermediate gear which makes gear-shifting easy, a new type of foot accelerator so placed as to eliminate fatigue and facilitate indefinite control. The chassis is lower and a change in spring suspension has improved riding quality while making a lower body hang. The company has 10 new body models for 1921, all of them made of cast and plate aluminum, eliminating joints and mouldings and furnishing a better surface for painting and finishing.

The Haynes Automobile Company's new Model 50, in a five-passenger touring car and on a 121-inch wheelbase, is an addition to the 1921 ranks. Steel instead of aluminum is used for the body, the wheels are the same size as on other models, but the tires are smaller. The six-cylinder motor is the same as in other models and the magnetic switch, button-controlled, and electric starter are the same. This car puts a Haynes in the $2,000 class.

Columbia has a new model, a five-passenger, permanent top car with disc wheels, larger rear door and a flowmeter which measures the fuel used and gives you the result on a gauge on the dash.

Besides the new light eight-cylinder car, Oldsmobile has a four-cylinder chassis with touring, roadster, coupe and sedan bodies. The eight-cylinder car has a lower suspension, higher rear panel, a 115-inch wheelbase and two water pumps.

Dort has changed the shape of the radiator and increased the wheelbase from 105½ to 108 inches.

The Franklin designers have changed the hood only, largely because they have got the rest of the car so far out of the experimental class for air-cooled cars that there is not much that can be done. It now has a sort of dummy radiator, and a hood that is a near relation of the Italian Fiat, technical writers say. The new hood is interchangeable with the old one.

What was the Crow-Elkhart is now the Elk-Hart, a new car with a Herschell-Spillman motor, disc wheels and a new radiator design.

Air-cooled cars are few and far between. One of the few is the Holmes, appearing this year with a more conventional hood and radiator, and what is more important, a device called an aerodnct, built around the fan in such a manner that it directs the air currents from the fan and doubles the cooling efficiency.

The Romon automatic chassis lubricator, which provides centralized lubrication and displaces grease cups, has been taken up by the Saxon makers. Circulation of oil is obtained by copper piping, both flexible and rigid, which carries the oil under pressure to every part of the motor and chassis.

Apperson engineers have decided to make the head of the old "Jack Rabbit" removable. In other words, the new models have detachable cylinder heads, in no way altering the appearance of the cars.

The spiral bevel gear has replaced the bevel in Maxwell cars, and Lynite pistons and tubular propeller shaft are used, all of which is for easier maintenance.

Digitized by Google

Daniels cars appear with the thoroughbreds at the Detroit show, for the first time, this year. This company is building its own eight-cylinder engine with 12 body styles, including the new submarine speedster and a coupe. The bore and stroke are 3½x5¼.

Among the newcomers at the Show having marked evidences of a desire to increase accessibility is the H. C. S. Grease cups have been eliminated, the ignition head, starting motor and generator are on the right side of the motor, the wheelbase is 120 inches, the motor is a Weidely, four-cylinder, valves-in-the-head unit, with bore and stroke of 3⅜x5½. This car has a Lanchester vibration dampner. Delco three-unit system, aluminum steps instead of a running board, 32x4½ tires and a cellular radiator with German-silver shell are other features. Two extra wheels and tires are furnished.

Handley-Knight builders have their cars in the show. The motor is four cylinders, 4¼x4½ bore and stroke. The clutch is a Borg & Beck, the transmission a Grant-Lees, the oil feed is pressure and the cooling thermo-syphon.

In the Lexington laboratories the Ansted motor has been developed for Lexington cars. It is a six-cylinder, overhead valve type, developing 70 horsepower.

LaFayette cars have a lighter chassis this year, a re-designed frame of lower suspension, and harder cylinder castings in the eight-cylinder, V-type motor. The crankshaft is hollow and the adoption of a brake-equalizing differential on the transmission case eliminates side-skidding.

Another new car in the show is the R. & V. Knight, in six and four-cylinder jobs. These cars have Wagner electric equipment, Brown-Lipe transmissions, Borg & Beck clutch, thermo-syphon cooling and tubular radiators. The large car has 127-inch wheelbase and Timken axles. The smaller one has a 116-inch wheelbase and Salisbury axles. The four-cylinder car is marketed in a five-passenger touring and five-passenger sedan.

Motor trucks for 1921 show little change over 1920. An increased use of pneumatic tires on light trucks and electric starting and lighting equipment are in evidence.

The General Motors Truck Company 1921 line comprises five models, three-quarter, one, two, three and a half and five ton. The smallest car is a new addition.

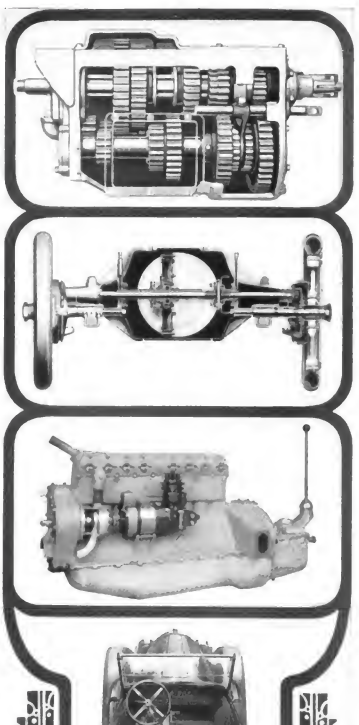
Solution of the most vexing problem that has confronted motor truck designers since the beginning of the industry is found in the new transmission used on all models above the one-ton. The transmission, accurately named the GMC two-range transmission, provides both speed in direct drive as well as pulling power in the lower gears and does not necessitate the use of an engine of excessive size, making the truck's operation economical.

The increase in speed is made possible by the use of a higher geared rear axle than has been used heretofore in GMC trucks; while the requirements of pulling power are furnished by giving the countershaft of the transmission an extra gear reduction.

The transmission countershaft has two sets of constant mesh gears of different ratios, instead of one as in the regular type four-speed motor truck transmission. These sets are controlled by an extra lever, giving the truck two distinct power ranges, each with three speeds forward and a reverse, direct drive remaining the same regardless of the range.

Approximately 50 per cent more speed, in direct drive, has been added by this two-range transmission and at the same time 30 per cent more pulling power has been furnished through the low range of the transmission. And only five major parts are added to those used in a regular type four speed transmission.

The same dual-valve motor in Pierce-Arrow passenger cars is applied to this company's trucks, with such variations as are necessary in a truck engine. The company has found that the dual-valve motor with a bore and stroke of 4½x5 gives 25 per cent more horsepower than the single valve engine, with an increase in mileage per gallon of fuel. Included in the line are three and a half, two and five-ton cars and a tractor unit. The dump body has a horizontal hydraulic hoist with pump mounted on the transmission.



SOME NEW MECHANICAL FEATURES ILLUSTRATED

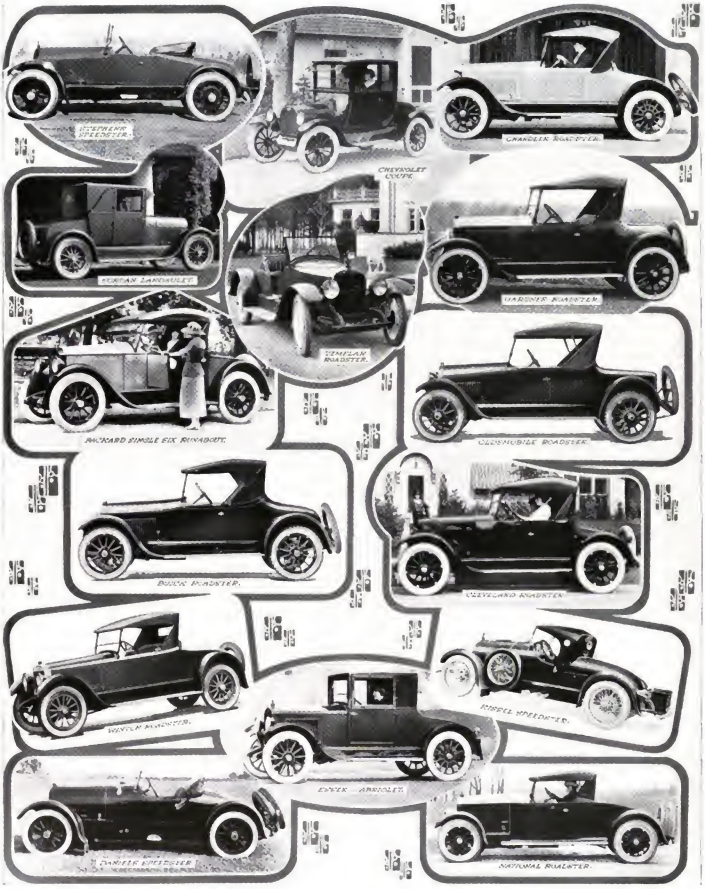
The drawing at the top shows a sectional view of the new GMC truck two-range transmission. The next drawing is a sectional view showing the mounting of the Kelsey friction wheel, in the new Kelsey friction drive car, on the jackshaft. Note the compact differential and emergency brake drum at the right and the internal gear drive connection with the road wheels. A large filler plug makes replenishing the oil in the reservoir of the internal gear units simple. Below this picture is a photograph of the Duesenberg Straight Eight engine, showing the mounting of the generator and ignition distributor unit with water pump. The engine has the side valve construction, with long vertical rocker arms. It is fitted with valves inclined in the cylinder head operated by an overhead camshaft. At the bottom is an airplane view of the 1921 Pierce-Arrow car, showing the steering gear on the left side, instead of the right, as heretofore.

Digitized by Google

Some Two and Three-Passenger 1921 Motor Cars



Digitized by Google



Digitized by Google



Digitized by Google

"How Much Time May I Have?"

Some of the Things the Dealer Has to Think About When You Ask for Credit on a Motor Car Purchase

By PHIL S. HANNA

TO BEGIN WITH, the question of whether an automobile is a necessity or not will be omitted. This, dear reader, will no doubt warm you up to the subject, for, whatever classification given the automobile, each and every one of us who hasn't a car intends to own one some day, irrespective of Federal Reserve Bank edicts, or taxes. This healthy desire, in fact, is one of the strongest elements in the retail credit situation. There is considerable similarity between the craving of a shop girl for a diamond and that of a shop boy for an automobile; and that which is most desired has proved, both in diamond purchases and in the automobile partial payment plan, to be the object quickest and surest paid for.

"Square Deal" Miller will tell you that he is giving back less money now on his proposition to refund 90 per cent of the purchase price of diamonds than he has for several months past, although in many cases the wearers of those same diamonds are going without extra food and clothing. And a large acceptance corporation has given out significant figures regarding its experience with partial payment automobile paper during the last six months. The same tendency to hold on regardless is shown. Eighty per cent of the paper is paid when due, fifteen per cent is paid within thirty days after maturity and four per cent is met within sixty days after due, which leaves a remainder of exactly one per cent on which losses have occurred. And it is further stated that one-half of this one per cent is made up of disputed accounts, which often are adjusted without loss; so that an experience table would show somewhere between one-half of one per cent and one per cent as the usual loss on automobile paper. The concern which gave out these figures set aside $350,000 as a reserve against losses, but the actual losses at the end of the period totaled about $240,000—one-fifth of expectations.

Over in Chicago recently a wholesale grocer bewailed the fact that he was engaged in a so-called staple business, or what might be classified as a necessary industry, and he went on to bemoan his ill-luck at not being in the automobile "game." His expression came as somewhat of a surprise, for Chicago is a city of wide diversity of industry, an enviable transportation center and so on—all necessary and staple lines of business, and the average man who reads the daily reams of business advice and assorted interviews might be expected to wish that he were engaged in driving a milk wagon or running a grocery. But not so with our friend, the grocer. He says precisely: "You people of Detroit are lucky because your main commodity is something that the average man puts ahead of most everything else. Lots of people will go on short rations and wear old clothes rather than give up their cars."

What, therefore, could be a better basis of credit than this persistent willingness to pay in spite of depression and all other drawbacks? In the final judgment of things, value is fixed only by what the other fellow will pay, and where the other fellow insists on having the commodity put up as security, that commodity becomes first-class collateral.

For comparison take a first mortgage on real estate. Beyond all doubt, from the standpoint of safety, a first mortgage, say, for $10,000 on property worth $20,000 and bringing in rents of, say, $2,500 annually, is security good and ample, but in times of depression where there are 10 people with cash means enough to swing the purchase of land worth $20,000, there are perhaps 1,000 people with means enough to buy a used automobile; and consequently, from the standpoint of controvertibility, any given amount of paper secured by automobile property notes, where the purchasers are honest and the loans conservative compared with re-sale values, is much more liquid than a like amount of money secured by mortgages. But, of course, this does not mean that the banks are going to give entire preference to automobile paper. But it may mean, as each class of business bids for the available credit of the country, that other lines of endeavor may have to bid up for their proportionate share.

Competition plays strange pranks as any new business evolves from year to year. Look at the mail order houses, for example. At first nothing was sold but for cash with order; later on it was found expedient to grant credit, and the latest is that retail stores are to be opened by Sears, Roebuck & Company in order that this huge merchandiser may compete with chain stores and otherwise hold on to its customers; and it would not be surprising to find, before many years, a large fleet of Sears-Roebuck retail wagons covering the entire rural United States. Nothing seems to stand still in merchandising and selling methods nowadays. When one new scheme gets nicely under way and begins to return profits that are satisfactory, along comes some ingenious fellow with a checkmating scheme, and to stay in the game it is necessary to invent something still more serviceable in the way of getting business.

Some ten years ago the International Harvester Company gave one and two years to farmers to pay for machinery, but along about 1916 it began to tighten up and extended credit only to the dealer, with a later attempt to require the dealer to finance himself something after the fashion that Ford agents are required to follow. Just how far the change went is not known, but it was clear when money was easy during 1919 and early 1920 that the farmers had little difficulty in financing themselves at their home banks. In fact, much of the load that the country banks are now carrying can be traced back to that easy period when there were lots of deposits and very little farmers' paper got very far from the point of origin.

So far as the automobile manufacturer is concerned, there seems to be little likelihood that he will go into the business of extending credit to purchasers directly. In the first place, the manufacturer is being financed on the rock ribbed foundation principle that his commodity sells for cash and change toward time sale policy would require many millions of capital that he hasn't now and cannot get. Perhaps after a few years, when some of the stronger companies become opulent, there may be a change. In fact there some indications now that the manufacturers may form their own financing companies by which they hope to control rates and encourage sales. The financing companies now in operation, however, have sprung up because neither dealer nor banker has been in position to handle the enormous volume of part payment paper for which the public has demanded a market. There was a breach between manufacturer and ultimate purchaser that needed a new design of financial machine as a connecting link; and in order to keep the manufacturer on a strictly cash basis in his selling policy and to avoid requiring the banks to set up elaborate collection machinery, these finance companies were created.

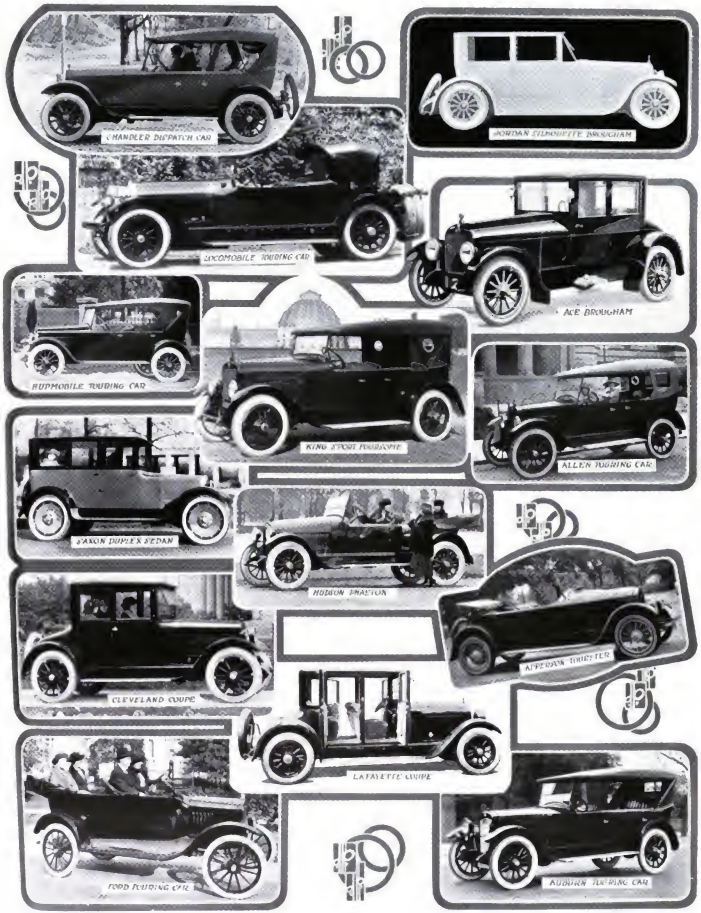
That the field for their services and endeavors was virgin is demonstrated by the rapid increase the last eighteen months in the number of new concerns of this type. Hardly a city of any size but is now served by some sort of finance company. And the aggregate capital invested is no small amount. Likewise many dealers testify to the efficiency of the collection methods of the better grade acceptance and finance corporations. Many like the arrangement because after the sale has been made the finance company comes into the transaction, in a sense, like an

(*Continued on Page 38*)

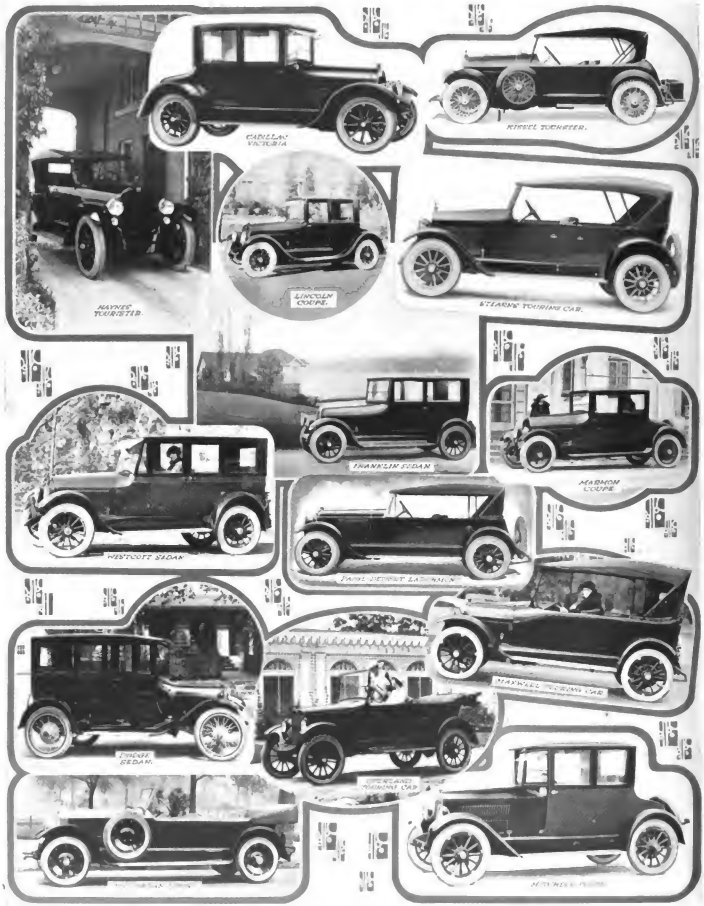
Digitized by Google



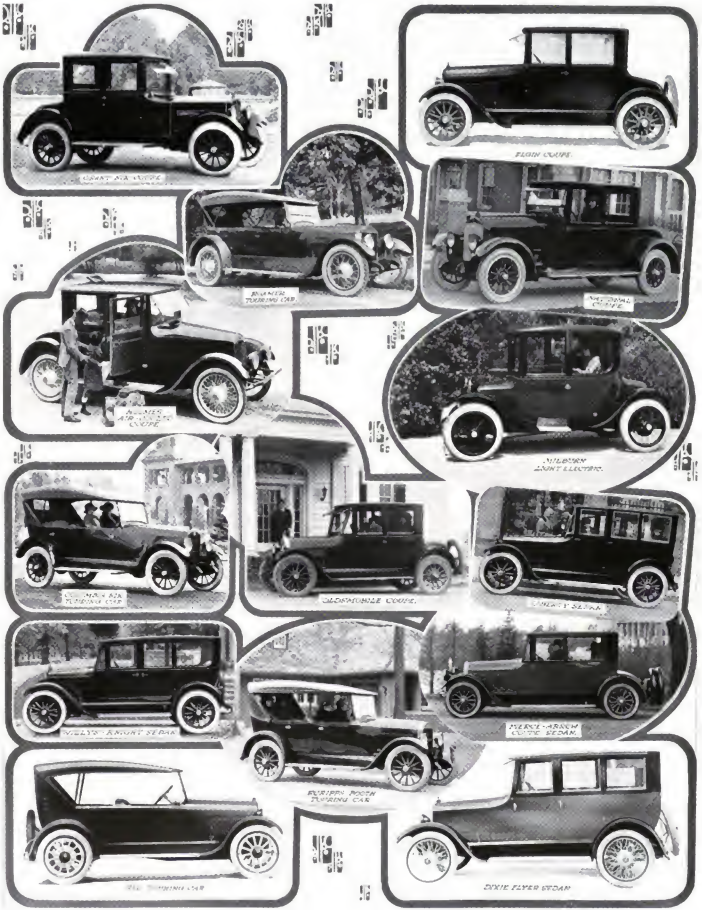
Digitized by Google



Digitized by Google



Digitized by Google



Digitized by Google



Digitized by Google

How Far Should Service Go?

The Dealer's Obligation to the Purchaser And the Purchaser's Obligation to His Car

By F. W. HERSEY

IN THE DAYS before a gasoline engine was strapped to a four-wheeled vehicle—in the days when a man bought a horse—the dealer did not throw in a bottle of colic medicine. He did not guarantee the animal against a broken leg, nor did he promise to keep the horse in good condition. The buyer did not expect it. Selling tickets on a railroad train is selling service, not the whole train. Selling an automobile is selling the train. It is selling transportation, with all the joys and sorrows that go with transportation.

There was a time, and not so many years ago, when the buyer of an automobile (motor car had not been generally adopted as correct then) took a mortgage on the factory that made the car, of if the factory was too far away, he accepted a tentative lease on the nearest machine shop. The man who bought a car did not get it primarily to ride in, but to see if the darn thing would go. He bought it to scare horses, amuse youngsters and wake up the town generally. Also he expected that the shop that made the car (they were shops then, not plants) would help him keep the machinery in order, join him in clinics on the various mechanical ailments that attacked the vehicle, and—well, rebuild the contraption if necessary.

Usually the plant, or if the make of car was of sufficient importance to claim a dealer, the dealer was only too glad to tinker with the automobile because there was a wholesome pleasure in studying the various diseases to which the new kind of vehicle seemed to be heir. Sometimes the buyer not only stayed up nights with the thing, but also chipped in on the cost of treatment, or the funeral services, as the case might be.

These delightful days are over. Men and all the women who buy and drive cars today do not buy them to experiment with. They are completely sold on this mode of at-your-convenience transportation because breakdowns are the exception, not the rule; because they know that for every punctured tire, carbon-mussed spark plug, or battered bearing they will obtain many miles of smooth, unhampered transportation, up hill and down, in fair weather and foul. All cars that can be sold are made that way. The differences existing between various makes of cars which can be used for the basis of criticism as to efficiency are minor.

The prospective buyer who does not believe this will save money by hiring an engineer to pick his car for him and pay the customary fee for expert counsel. There is coming a day when the dealer who, in order to sell a car, has to talk a blue streak about service will come into the market weak and go out with flowers. There are buyers today who, when a salesman dismisses the merits of the car in half a page and talks a book about service, begin to get suspicious of the car. Why arrange for the doctor before the patient has a fever?

Machinery will not run forever. The length of its life depends on the use it is put to, the care that is taken of it and the nature of the machine. The buyer of a motor car, in these days when knowledge of this piece of machinery is gained by using or dodging one, knows that at some time, usually when it is most inconvenient, something will happen to it. It will develop a cough or a limp. But he is confident that whatever the ailment, someone somewhere knows what to give it, or do to it, and at this moment the element of service in its truest aspect begins.

On the other hand, there is a service which begins when the car is designed. We know some service managers, men with technical training, who, if they ever went into the draughting room of a motor car plant with authority to do so, would ruin the plans of some motor car designers. They would view the whole works from the angle of inevitable mechanical service and do a lot of re-designing. This kind of service, "cast integral" with the car, is nothing more than so building the unit that when mechanical service is called for, it can be accomplished with the least inconvenience and disturbance of the rest of the vitals of the car. Simplicity in design is the first principle of this kind of service.

The next step is production service—the production of the car in quantities sufficient to supply the demand; in other words, give somebody what he wants as near when he wants it as possible. The third step is putting the product in the hands of the right kind of a middleman, whether distributor or dealer. The right kind of man is not one who believes selling motor cars is a "pipe" with free joy rides thrown in, but one who takes life and business seriously; who wants to sell because he likes to sell and is out to make money selling transportation.

That kind of a man will maintain a salesroom with some service facilities, but the best service he will render the buyer will begin before the car turns a wheel. He will pick his assistants carefully; he will be courteous by studious effort, if not by nature; he will try to find out what his prospect wants in a car, and fill the need. If the customer is "green," this dealer will spend some time with him so that he will know as much about the general principles of an automobile as his capacity will assimilate and retain.

This dealer will not conduct an exhibition of the various instruments used to save the car from a lingering death, nor will he promise to put the machine together in case the buyer's son takes it apart to see what makes it go. He will not guarantee to mend its broken ribs for nothing if it is kissed by a trolley car, nor provide a new set of wheels if the car skids into a hydrant or climbs a telegraph pole. The dealer is not selling accident or life insurance, but a product complete in every detail, practicable and useful by the best known standards of practice and utility.

Strange as it may seem, there are lots of owners, and a lot of buyers-to-come, who do not or will not enjoy this viewpoint. Therefore, and wherefore, the contention that service is "the monkey knot of motordom." A sailor will tell you that a "monkey knot" is a length of cord or rope of any size, so tied into a knot that there is no apparent beginning, and no end, and its construction in general defies analysis. Yet it is conceived by human brain and executed by human hand.

Service is so conceived and so executed, but the patterns used and the workmanship have differed so radically that much effort has been made to establish a standard for service. However, the standard attempted refers to after-sale service rather than before-sale service. The dealer can safely be trusted to have as nice a show room and salesroom as his capital will permit. Human pride will dictate that if the rigors of competition do not force it. As to courtesy, only natural refinement or business intelligence can regulate that.

The service that constitutes the monkey knot is the after-sale service, or mechanical attentions following unexpected flaw development, accidents,or tinkering by owners whose self-reliance exceeds their mechanical knowledge. When should this service begin; how much should be free; how much should be paid for, and where should free service end? These seem to be the questions pertinent to the subject.

Any dealer worthy of the name and supported by any business experience at all, knows how much free mechanical service he should give and can give and make this business pay. And there are enough of these men to establish and popularize a

Digitized by Google

standard. But in nine cases out of ten the dealer succumbs to some human appeal. Much of the service outside the pale of legitimate assumption of expense is "policy" service. The desire to obtain and hold patronage, to make a sales influence out of every customer often is so strong as to lead the dealer to yield a point here and there, which is contrary to the principle of standard service, but may be good business in the end.

It sounds well to say that man buying a motor car has no more legitimate claim upon the dealer for free service over and above that pledged in the guarantee than he would have upon the store that sold him a suit of clothes. It is true that the buyer of a suit cannot expect the first to replace all buttons or replace the trousers because the coat is still good. But there is the element of price-consciousness in the purchase of an automobile that does not appear in the sale of merchandise of the price classification of a suit of clothes. The buyer of a motor car pays considerable money for it and often expects to get a "bonus" for spending so much in one place. When his expectations exceed the bounds of business reason he is more likely to become a liability than an asset.

In the sale of a motor car there are four parties concerned in the service phase of the transaction—the manufacturer, the salesman, the service manager and the buyer. General service policies—what the manufacturer of the car expects the dealer to do for the purchaser—are usually framed at the factory. In brief, the manufacturer expects the dealer to maintain as good a salesroom as possible, a mechanical department, a stock of parts, and instruct the buyer how to operate the car, if he or she does not know how. The factory agrees to make good parts that develop flaws within a certain time, usually 90 days. The dealer is expected to furnish the parts, make the replacements and look to the factory for his discount.

Service outside of this provision is entirely a concern of the dealer. We make the salesman a party to the service factor, although it is the dealer who finally is responsible. But we mention the salesman prominently for the reason that, as Fred Slader, manager of a service station connected with the branch of a well-known Detroit-made car, says: "The rash promises made direct or by suggestion by salesmen often lead buyers to expect service which the service manager cannot or should not extend."

"The eagerness of salesmen to make sales often leads them to make service promises to prospects which are not legitimate expenses to be borne by the service department," Mr. Slader said. "Either the salesman makes these promises direct, hoping or believing there will be no necessity of making good, or, by adroitly handling the conversation, leaves the impression with the customer. At the time of the negotiations the service department is remote from the scene, and 'out of sight, out of mind' is the salesman's attitude. The salesman may even forget that he made or suggested any promises not easily kept, but the customer does not."

By way of explanation it is mentioned parenthetically that Mr. Slader is connected with a concern manufacturing and marketing a car selling for from $3,000 to $6,000. His station receives and clears approximately 80 cars daily. The charge for service against the sale price of the car averages about $25 per car, but this is not the cost of parts and repairs, but of all the elements entering into service for high class trade. This station has a personnel of nearly 200, including a floor manager in the works department and courtesy man, who receives all visitors, ascertains their wants and sees that they are attended to. The floor manager, besides having general supervision over the works department, is the first court of appeal where disagreements arise, while the general manager is the final court.

This is service de luxe and costs money, so that the statement that $25 is the charge for service against the sales price of the car is not an insinuation that the car is a questionable product, for it is far from that. Generally speaking, there are two classes of car buyers and they represent the two general classes of service-seekers. Mr. Slader deals with the first class. As a majority they are not price-conscious. They have the money to buy a higher-priced product and are inclined to expect less than many who buy low-priced products.

"My experience with the kind of customers I deal with leads me to say that service is largely an individual matter, and one that is hard to standardize within specified limitations," Mr. Slader said. "The regular fellow does not come in here looking for something for nothing. There are exceptions, but I refer to the majority. The regular fellow and most of the women I have had dealings with will demand that imperfections be made good, which is just and proper, but they rarely try to misrepresent or impose upon us.

"Complaints of poor workmanship, failure to finish a job at the time specified, or other conditions for which we are responsible are bound to arise and are easily settled. But when a buyer comes in here and tries to hold me to some agreement which he claims the salesman made when he sold the car, then I have my work cut out for me. Most of the users of this make of car are business men. When a promise has been made to them they expect it to be kept. Occasionally such a man will hold us to the mark and then we make a 'policy' decision and take the loss. More often, however, if the matter is properly explained the patron will go away satisfied.

"Really, when all is said and done, the basic principles of service are courteous attention, sympathy and an earnest desire to meet the customer more than half way. More than once, after going over the whole problem with the conviction that the customer was wrong, I have offered to yield a point and then had the customer say 'No, you need not do that. I understand now and there is no reason why you should pay my bills.' The method of approach probably, more than any argument, won the point."

Rendering after-sales service to owners of medium and low-priced cars is much more of a problem than with the higher priced makes. In the latter case you have a different psychology to deal with. In the first place you have price-consciousness as an ever-present factor. You have a larger percentage of buyers only superficially familiar with the motor car as a mechanical unit, and at the same time, more concerned with the upkeep cost of the car. Also there is a larger percentage of persons who will fight for a dollar and use any tactics or subterfuge that come to mind.

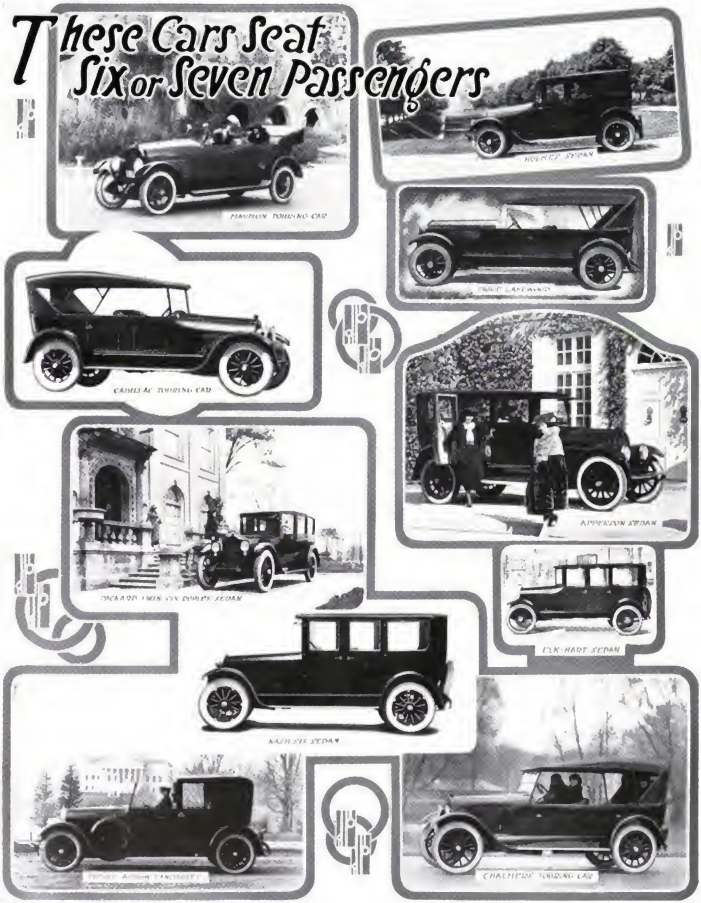
The majority of cars are sold on a service agreement which provides for adjustments and at least one inspection for a 30-day period; instructions in the use and care of the cars, and replacement of parts where defects are discovered. While some buyers will accept this agreement at is face value, others will give it interpretations to suit their needs. There is one concern which has established an arbitrary policy, made possible because of the ready demand for the car and its low price. This policy is replacements where factory responsibility is clearly established, the customary 30-day adjustments service, but not a jot or tittle of other service unless paid for.

There are few concerns that have been able to adopt such a policy, even if they wanted to. Most dealers are using the standard service policy as a basis, but extending it upon occasion and under various circumstances. Harry Moock, secretary of the National Automobile Dealers' Association, said in an address in Detroit some time ago: "When 75 per cent of the cars are sold out of the back door, the motor car business will be more of a success than it has so far." Moock had in mind the service station and the sale of service with the car. Moock did not, however, say that the service station was to be sold with the car.

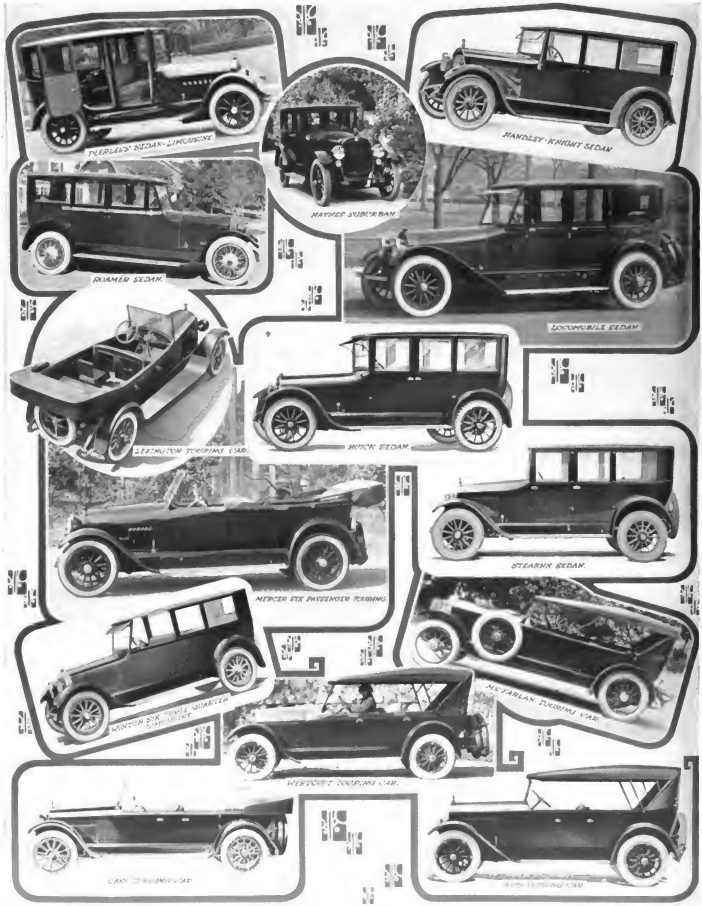
No better illustration of service to the Nth degree could be offered than that of a local dealer who sent a taxicab to a hotel for a customer who could not get his car started because the motor was cold. It was about 2 o'clock in the morning. The dealer was routed out of bed by the customer who wanted something done about his car. The easiest thing the dealer could do

(Continued on Page 42

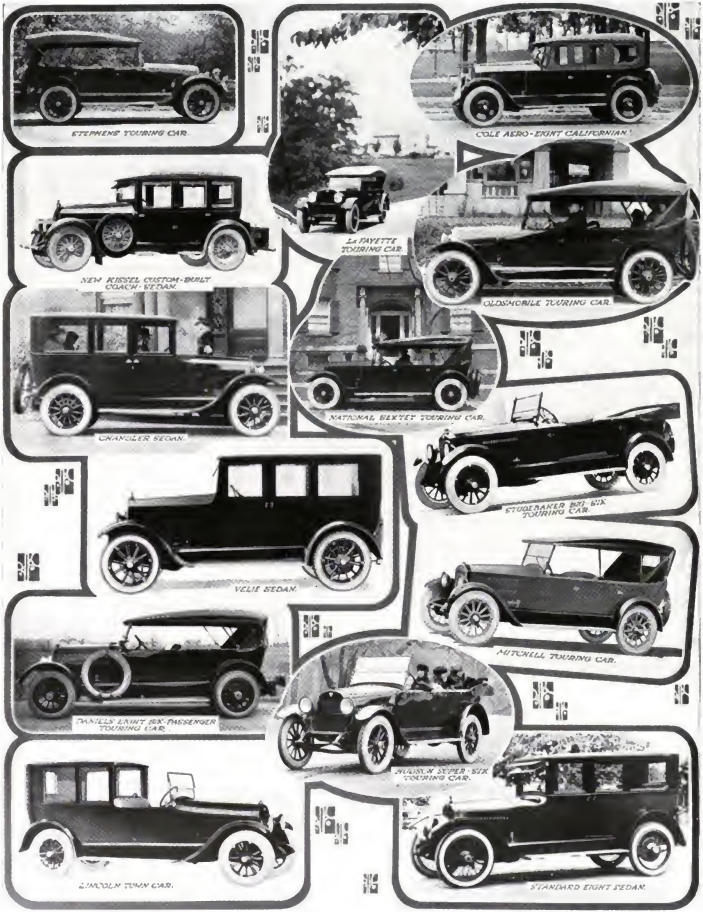
Digitized by Google



Digitized by Google



Digitized by Google



Digitized by Google

Chassis Specifications of

MAKE	BODY STYLES	Wheelbase	Number of Cylinders	Bore and Stroke	Piston Displacement	Make of Engine	Placed	Cast	Com-shaft Drive	Water Circulation	LUBRICATION System	LUBRICATION Type of Pump	CARBURETION Make of Carburetor	CARBURETION Fuel Feed	IGNITION System	IGNITION Make	IGNITION Con-tacts	ELECTRIC SYSTEM Generator Make	
Ace	5T	116	6	3½x5		H.-S.				Pump	Spl.-Pr		Stromberg	Vacuum	Single	At.-Kent		Auto-Lite.	6
Ace	3R-4Pass-8S	116	6	3½x5	268 8	D.-D.V.				Pump	Spl.-Pr	Gear		Vacuum	Single	At.-Kent		Auto-Lite.	6
Allen	3R-5T-8S	140	4	3½x5	192 4	Own		L.	Helical	Thermo	Spl.-Pr.	Gear	Stromberg	Vacuum	Single	Conn	Hand	Westinghouse	6
Apperson	AT4-A3T-5T-5S4-5S2-5A2S; 4-5A4-S8T-S8E4	130	8	3½x5	231 8	Own		L.	Helical	Thermo	Pressure.	Gear	Johnson	Vacuum	Dual	Remy	Hand	Bijur	6
Auburn	3R-T3-4R-4C-S8	126	8	3½x4½	231 8	Continental		L.	Helical	Thermo	Pressure.	Gear	Rayfield	Vacuum	Single	Remy	Hand	Delco	6
Briscoe	2R-5T-8S	109	4	3½x5	178 9	Own		L.	Helical	Thermo	Splash-Pr.	Piston	Own	Gravity	Single	Conn.	Hand	Auto-Lite.	6
Buick	3R-5T-8S	118	6	3½x4½	241	Own		L.	Helical	Thermo	Circ.-Spl.	Gear	Marvel	Vacuum	Single	Delco	H. & A.	Delco	6
Buick	7T-4C-7P	130	6	3½x4½	241	Own		I.	Helical	Pump	Circ.-Spl.	Gear	Marvel	Vacuum	Single	Delco	H. & A.	Delco	6
Cadillac	5R-3R4Pass-T4V-8S-7R-8S-3R1-5T-8S-T7	132	8	3½x5½	314 4	Own		L.	Chain	Pump	Pressure.	Gear	Own	Pressure.	Single	Delco	H. & A.	Delco	6
Case	4R-7T-4C-8S	126	6	3½x5½	303 1	Continental		L.	Helical	Pump	Splash-Pr.	Piston	Rayfield	Vacuum	Single	Delco	H. & A.	Westinghouse	6
Chalmers	2R-5T-4-5A-8S	117	6	3½x5	224	Own		L.	Chain	Thermo	Splash-Pr.	Gear	Own	Vacuum	Single	Own	Hand		6
Chalmers	7T	122	6	3½x4½	224	Own		L.	Chain	Thermo	Splash-Pr.	Gear	Own	Vacuum	Single	Own	Hand		6
Chandler	2R-4R-4T-4C-7S-7L	123	6	3½x5	268 6	Own		L.	Chain	Pump	Circ.-Spl.	Piston	Rayfield	Vacuum	Single	Remy	Hand	G & D.	6
Chevrolet	4-90 2R-5T-3C-8S	102	4	3¾x4	176 9	Own		I.	Helical	Pump	Circ.-Spl	Gear	Zenith	Gravity	Single	Remy	Hand	Auto-Lite.	6
Chevrolet	F. B. 2R-4T-4C-8S	106	4	3¾x4½	206 4	Own		I.	Helical	Pump	Circ.-Spl	Gear	Zenith	Vacuum	Single	Remy	Hand	Auto-Lite.	6
Cleveland	3R-5T-4C-8S	112	6	3x4½	190 8	Own		I.	Chain	Pump	Splash-Pr.	Gear	Stromberg	Vacuum	Single			G. & D.	6
Cole	7T-3R-4R-4-5B-6S8-8S-4C	127	8	3½x4½	346 4	Northway		L.	Helical	Thermo	Pressure.	Gear	Cole-John	Vacuum	Single	Delco	Hand	Delco	6
Columbia	2R-5T-4Pass-4C-8S	115	6	3½x4½	224 0	Cont.		L.	Helical	Pump	Spl.-Prsh	Piston.	Stromberg	Vacuum	Single	At-Kent.	Hand	Auto-Lite.	6
Daniels	4T-7TB-3R-4S-4T-4C-2Stm Spd 7L10B-4R-3R-5B-4Lsh-4TB-7L-4M4C-7sh-sh	132	8	3½x5½	404	Own		L.	Helical	Pump	Pressure.	Gear	Zenith	Pressure	Single	Delco	Hand	Delco	6
Dixie Flyer	5T-2R-4C-8S	112	8	3½x5	263 0	Herschell-Spill		L.	Helical	Thermo	Splash-Pr.	Gear	Stromberg	Vacuum	Single	Eise	Hand	Dyneto	6
Dodge	2R-5T-3R-8S	114	4	3½x5	212 2	Own		L.	Helical	Pump	Circ-Spl.	Eccentric	Stewart	Vacuum	Single	N. E.	Atmos	N. E.	12
Dort	2R-5T-3R-8S	108	4	3½x5	192 4	Own		L.	Helical	Thermo	Splash-Pr.	Piston.	Carter	Vacuum	Single	Conn	Hand	Wrst	6
Elgin	5T-4A3-2A-4A4T	118	4	3½x5	193 6	Falls		L.	Helical	Thermo	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	Remy	Hand	Wagner	6
Elk-Hart 4-Cylinder	3R-5T-3R-7S	117	4	3½x5	192 4	Lycoming		L.	Helical	Thermo	Splash-Pr.	Piston.	Zenith	Vacuum	Single	Conn	Hand	Dyneto	6
Elk-Hart 6-Cylinder	3R-5T-3R-7S	117	6	3x5		Marsh-Spill		L.	Helical	Thermo	Splash-Pr.	Piston.		Gravity	Single	Conn	Hand	Dyneto	6
Essex	2R-5T-3R-4A-8S	109½	4	3½x5	178 9	Own		F.	Helical	Thermo	Circ-Sp.	Piston.	Own	Vacuum	Single	Delco	Hand	Delco	6
Ford	2R-5T-2C-3R	100	4	3¾x4	176 7	Own		F.	Helical	Thermo	Pressure.	Gear	Holley	Gravity	Single	Ford	Hand	Ford	6
Franklin	2R-4R-5T-3R-4Bro-4DC-3Dr	133	6	3½x4	191 1	Own		L.	Helical	Air	Pressure.	Gear	Own	Pressure	Single	At-Kent	H. & A.	Dyneto.	12
Gardner	2R-5T-4C-8S	116	4	3½x4½	267 1	Own		L.	Helical	Thermo	Splash-Pr.	Gear	Stromberg	Vacuum	Single	At-Kent.	Hand	Bijur	6
Hendley-Knight	7T	125	4	4½x4½	240	Knight	K.	L.	Helical	Thermo	Splash-Pr.	Gear	Tillotson	Vacuum	Single	Conn	Hand	Auto-Lite.	6
Haynes (47)	2R-4T-4C-4Bro-2Sph	132	8	3½x5	295 6	Own		L.	Helical	Thermo	Pressure.	Piston.	Rayfield	Vacuum	Single	Kingston	Hand	Delco	6
Haynes (48)	2R-4T-7T-3Bro-2Sph-2S	132	12	2¾x5	356 4	Own		L.	Chain	Pump	Pressure.	Gear	Rayfield	Vacuum	Single	Delco	Hand	Leece-N	6
Haynes (50)	5T	121	6	3½x4½				L.	Helical	Pump	Splash-Pr.	Piston	Rayfield	Vacuum	Single			Leece-N	6
Holmes	4R-7T-4C-8S	126	6	3½x4½	245 3	Own		L.	Helical	Air	Pressure.	Gear	Newcomb	Vacuum	Dual	Eisemann.	Atmo.	Dyneto	12
Hudson	4T-7T-2L-4C-7S-4Adj.	125½	4	3½x5½	240	Own		L.	Helical	Pump	Pressure.	Gear	Own	Vacuum	Single	Hudson	Atmo.	Delco	6
Hupmobile	2R-5T-4C-8S	112	4	3½x5½	193	Own		L.	Chain	Thermo	Pressure.	Gear	Stromberg	Vacuum	Single	At-Kent.	Hand	Westinghouse	6
Jordan	2R-5T-3Pass-3Land	120	6	3½x5½	225	Continental		L.	Helical	Thermo	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	Delco	Hand	Delco	6
Jordan	7T	127	6	3½x5½	303 1	Continental		L.	Helical	Thermo	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	Delco	Hand	Delco	6
King	3R-5T-4T-7L	120	8	3x5	282 8	Own		V.	Chain	Thermo	Pressure.	Gear	Ball	Vacuum	Single	At-Kent	Hand	Westinghouse	6
Kissel	2R-4T-7T-4C-8S-7L	124	8	3½x5½	254 4	Own		V.	Chain	Thermo	Splash-Pr.	Gear	Stromberg	Vacuum	Single	Remy	Hand	Remy	6
La Fayette	7T-4T-or-7L-4C-7S	132	8	3½x5½	348	Own		L.	Helical	Pump	Pressure.	Piston.	Own	Pressure	Dual	Delco	H. & A.	Delco	6
Lexington	7T-7R-3R-4Sw-4Cm	4 122	8	3½x5	268	Own		L.	Helical	Pump	Pressure.	Gear	Own	Vacuum	Single	Own	Hand	Own	6
Lexington	Les. 8S-4T-8S	T 128	6	3½x4½	224	Ansted		L.	Helical	Pump	Pressure.	Gear	Own	Vacuum	Single	Own	Hand	Own	6
Liberty	2R-5T-4T-3R-8S	120	6	3½x5	270	Own		L.	Helical	Pump	Pressure.	Gear	Stromberg	Vacuum	Single	Wagner	Hand	Wagner	6
Lincoln	7T-3R-5Phn-4T-3R-5TB-2Sub-L	136	8	3½x5	358	Own		L.	Chain	Pump	Pressure.	Gear	Own	Gravity	Single				6
Locomobile	7T	142	6	4½x5½	524	Own		T.	Helical	Pump	Splash-Pr.	Gear	Own	Pressure.	Dual	Berling	Hand	Westinghouse	6
Marmon	4T-5Pass-4T-7L-4C-8S	136	8	3½x5½	376	Own		L.	Helical	Pump	Splash-Pr.	Gear	Stromberg	Gravity	Dual	Delco	Hand	Delco	6
Maxwell	2R-5T-3R-8S	109	4	3½x4½	183	Own		L.	Helical	Thermo	Splash-Pr.	Piston.	Own	Vacuum	Single	Own	Hand	Auto-Lite.	12
McFarlan	4Spd-4T-4C-7L-7T-7S-2Sh-S-	140	6	4½x6	572	Own		T.	Helical	Pump	Splash-Pr.	Piston.	Rayfield	Vacuum	Dual	Own	Hand	Westinghouse	6
Mercer	3C-3sh-4S-3L-5TC	130	4	3¾x5	248	Own		L.	Helical	Thermo	Splash-Pr.	Gear	Ball	Vacuum	Single	Berling	Hand	Westinghouse	6
Mercer	2R-2Spd-5T-4C	132	4	3¾x6	296	Own		L.	Chain	Pump	Splash-Pr.	Gear	Ball	Vacuum	Single	Berling	Hand	Westinghouse	6
Mercer	7T-7L	132	4	3¾x6	296	Own		L.	Chain	Pump	Splash-Pr.	Piston.	Rayfield	Vacuum	Single	Remy	Hand	Remy	6
Mitchell	7T	127	6	3½x5	268	Own		L.	Chain	Pump	Splash-Pr.	Piston.	Rayfield	Vacuum	Single	Remy	Hand	Remy	6
Mitchell	3R-4T-5T-4C-8S	126	6	3½x5	240	Own		L.	Chain	Pump	Splash-Pr.	Piston.	Rayfield	Vacuum	Single	Remy	Hand	Remy	6
Nash (Six)	2R-4T-4T-7T-4C-8S	121-7	6	3½x5	261 3	Own		L.	Helical	Thermo	Circ-Sp.	Gear	Marvel	Vacuum	Single	Wagner	H. & A.	Wagner	6
Nash (Four)	2R-4T-4C-8S	112	4	3½x5				L.	Helical	Thermo	Circ-Sp.	Gear							6
National	2R-7T-4C-4Pas-7S	130	6	3½x5½	301 1	Own		L.	Chain	Pump	Pressure.	Gear	Rayfield	Vacuum	Single	Delco	Hand	Westinghouse	6
Oakland	2R-5T-4C-8S	115	6	3½x5	270	Own		L.	Helical	Thermo	Pressure.	Gear	Marvel	Vacuum	Single	Delco	Hand	Delco	6
Oldsmobile (45-B)	7T	125	8	3½x4½	346 7	Own		L.	Helical	Pump	Pressure.	Gear	Ball	Vacuum	Single	Delco	Hand	Delco	6
Oldsmobile (37-A)	5T	112	6	3½x4½	237 0	Own		L.	Helical	Pump	Pressure.	Gear	Johnson	Vacuum	Single		Hand		6
Oldsmobile (43-A	4R-5T-4C-8S	115	6	3½x4½	224 3	Own		L.	Helical	Pump	Splash-Pr	Gear	Zenith	Vacuum	Single	Remy	Hand	Auto-Lite.	6
Overland	3R-5T-4C-8S	104	4	3½x5	241 3	Own		L.	Helical	Thermo	Splash-Pr.	Flywheel	Tillotson	Gravity	Single	Delco	Hand	Auto-Lite.	6
Packard Twin Six	2R8-4Phn-T-DX7-4-DX5-7L	136	12	3x5	424	Own		L.	Chain	Pump	Pressure.	Gear	Own	Pressure.	Single	Delco	H. & A.	Bijur	6
Packard Single Six	2R8-5T-4C-8S	116	6	3x5				L.	Chain	Pump	Pressure.	Gear	Own	Pressure.	Single	Delco	H. & A.	Auto-Lite	6
Paige-Detroit (6-66	4R-7T-3C-8S	131	6	3½x5	331 4	Continental		L.	Helical	Pump	Pressure.	Gear	Rayfield	Vacuum	Single	At-Kent.	H. & A.	G. & D.	6
Paige-Detroit (6-42	2R-4T-4Spd-4C-8S	119	6	3½x5	245 9	Own		L.	Helical	Pump	Pressure.	Gear	Rayfield	Vacuum	Single	At-Kent.	H. & A.	G. & D.	6
Paterson	5T-4Bro-3S-7L	120	6	3½x4½		Continental		L.	Helical	Pump	Pressure.	Gear	Stromberg	Vacuum	Single	Delco	H. & A.	Delco	6
Peerless	4R-7T-4C-8S	125	8	3½x5	331 6	Own		L.	Helical	Pump	Pressure.	Gear	Ball	Vacuum	Single	Auto-Lite.	H. & A.	Auto-Lite.	6
Pierce-Arrow	2R-4T-4T-7T-4Bro-4Land-4C-8S-4A-8S-7L	136	6	4x5½	414 7	Own		T.	Helical	Pump	Pressure.	Gear	Stromberg	Vacuum	Single	Delco	H. & A.	Delco	6
R. & V. Knight (4-Cyl.	3R-4T-4C-8S	116	4	3¾x5	220 9	Own	K.	L.	Chain	Thermo	Pressure	Gear	Stromberg	Vacuum	Single	Wagner	H. & A.	Delco	6
R. & V. Knight (6 Cyl.	3R-4Spd-7T-4C-7S	127	6	3½x5	230 6	Own	K.	L.	Chain	Thermo	Pressure	Gear	Stromberg	Vacuum	Single	Wagner	H. & A.	Wagner	6
Reo	3R-5T-4C-8S	120	6	3½x5	230 4	Own		L.	Helical	Pump	Splash-Pr.	Gear	Rayfield	Vacuum	Dual	N. E.	Atmo.	N. E.	6
Reomar	2Spd-4R-4Spd-4T-4T-7T-3R-4C-8S	130	6	3½x5½	393 1	Continental		L.	Helical	Pump	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	Bosch	Hand	Bijur	6
Saxon	5T-4C-8S	102	4	3¾x4½	278 4	Own		L.	Helical	Thermo	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	Carter	Hand	Remy	6
Scripps-Booth	3R-5T-4C-8S	115	6	2 11-16x5	177 0	Northway		L.	Helical	Pump	Splash-Pr.	Gear	Marvel	Vacuum	Single	Remy	Hand	Remy	6
Sheridan (4	2R-5T-4C-8S	106	4	3½x4½				L.	Helical	Pump	Splash-Pr.	Gear	Zenith	Vacuum	Single	Remy	Hand	Remy	6
Sheridan (6	2R-7T-4C-7S	132	6	3½x4½				L.	Helical	Pump	Splash-Pr.	Gear	Zenith	Vacuum	Single	Delco	Hand	Delco	6
Standard	7AR-7S-4C-4T-7T-4R	127	12	3½x5	331 8	Own		L.	Chain	Pump	Pressure.	Gear	Zenith	Vacuum	Single	Delco	Hand	Delco	6
Stearns	3R-4M-5T-7T-4C-3M-7Bro	125	8	3½x5½	385 5	Knight	K.	L.	Chain	Pump	Splash-Pr.	Gear	Schebler	Vacuum	Single	At-Kent.	Hand	Westinghouse	6
Stephens	3R-4T-4T-4C-8S	115	6	3½x5	224	Own		L.	Helical	Pump	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	At-Kent.	Hand	Auto-Lite.	6
Studebaker (Special 6	2R-4R-5T-4C-8S	119	6	3½x5	268 6	Own		L.	Helical	Pump	Splash-Pr.	Gear	Stromberg	Vacuum	Single	Wagner	Hand	Wagner	6
Studebaker (Big 6	7T	126	6	3½x5	345 6	Own		L.	Helical	Pump	Splash-Pr.	Gear	Ball	Vacuum	Single	Wagner	Hand	Wagner	6
Studebaker (Light 6	3Land 3R-5T-8S	112	6	3½x4½	307 1	Own		L.	Helical	Pump	Splash-Pr.	Gear	Stromberg	Vacuum	Single	Wagner	H. & A.	Wagner	6
Templar	2R3-5T-4Spd-4C-8S	118	4	3½x5½	192	Own		L.	Chain	Pump	Splash-Pr.	Gear	Stromberg	Vacuum	Single	Simms	Hand	Bijur	6
Velie	4R-3R-4Spd-5T-7T-4T-4S	118	4	3½x5	228	Continental		L.	Helical	Pump	Splash-Pr.	Gear	Rayfield	Vacuum	Single	Bosch	Hand	Bijur	6
Velie	3M-3R-5T-4C-8S	112	6	3½x4½	195 6	Own		L.	Helical	Thermo	Splash-Pr.	Piston.	Stromberg	Vacuum	Single	At-Kent.	H. & A.	Westinghouse	6
Westcott	4R-7T-7S-2L-8S	125	6	3½x5½	404	Continental		L.	Helical	Pump	Splash-Pr.	Piston.	Rayfield	Vacuum	Single	Delco	Hand	Delco	6
Westcott	3R-5T-4T-4C-8S	118	6	3½x4½	224	Continental		L.	Helical	Pump	Splash-Pr	Gear	Rayfield	Vacuum	Single	Delco	Hand	Delco	6
Wilys-Knight	3R-5T-4C-8S	118	4	3¾x5	220	Own	K.	L.	Chain	Thermo	Pressure	Gear	Tillotson	Pressure	Single	Auto-Lite.	Hand	Auto-Lite.	6
Winton	R2-4Spd-T-4Y-4R-8S	132	6	3½x5½	347 9	Own		L.	Chain	Pump	Pressure	Gear	Stromberg	Vacuum	Single	Bosch	Hand	Bijur	6
	7L-7TY-7TL																		

ABBREVIATIONS

5T—5-Passenger Touring Car
7R—7-Passenger Roadster
4Bro—4-Passenger Brougham
6S—5-Passenger Sedan
3R—3-Passenger Roadster
* —Wire Wheels
AT4—4-Passenger Universal Touring
AT5—5-Passenger Universal Touring Car
5T7—7-Passenger Standard Touring Car
5S6—6-Passenger Standard Sport-ster
5R2—2-Passenger Standard Roadster
A5T—5-Passenger Anniversary Sedan
5SE4—4-Passenger Standard Sedanette
4R—4-Passenger Roadster
5S1 L—5-Passenger Standard Limousine
9L—5-Passenger Imperial Limousine
3C—3-Passenger Coupe
7T8—7-Passenger Touring
4SR—4-Passenger Sportster
4SS—4-Passenger Speedster
6SOS—6-Passenger Sportsmot
4SC—4-Passenger Sportcoupe
7TOS—7-Passenger Touringsor
7TS—7-Passenger Touredan
4SPT—4-Passenger Sport Model
7TR—7-Passenger Town Broughan
7Sbm5ed—7-Passenger Submarine Speedster
7L4B—7-Passenger Landau-Brougham
7Sub Ld—7-Passenger Sub-urban Limousined
4TB—4-Passenger Touring Brougham
7Sub—7-Passenger Suburban
4V5—4-Passenger Vestibule Sedan
7D-C—7-Passenger Demi-Coupe
5D-S—5-Passenger Demi-Sedan
Cab—Cabriolet
Land—Landau
Lands—Landolet
4 Tor—4-Passenger Torpedo
7S 4—4-Passenger Thirdseat
Les 5 S—5-Passenger Les-Sedan
Phn 5—5-Passenger Phaeton
7 Sub L—7-Passenger Suburban-Limousine
7TC—7-Passenger Town Car
4CL—4-Passenger Coupe-Limousine
2 Spd—2-Passenger Speedster
7TS—7-Passenger Touring Sedan

Digitized by Google

1921 Passenger Automobiles

CLUTCH	TRANSMISSION							RUNNING GEAR														
	GEARSET							Gear Ratio in Direct	TIRES				Make of Steering Gear	Make of Speed-ometer	Crank-shaft Bear-ings and No.	BEARINGS					MAKE
Make	Type	Make	Loca-tion	Speeds	Final Drive	Torque Taken By	Make of Rear Axle	Rear Axle Type		Front	Rear	Whee's	Rear Springs				Gear Set	Rear Axle	Front Wheel		
Warner	Disc	Warner		3	Sp.B.	Spring	Salisbury	F.-F.		32x4	33x4½	Wood	Cant.		Stewart	Plain 3	B. & R.	R.	B.		Ace
Warner	Disc	Warner		3	Sp.B.	Tor.-A.	Timken	F.-F.		32x4	32x4	Wood	Cant.		Stewart	Plain 3	B. & R.	R.	B.		Ace
Borg & Beck	Plate.	Own.	Unit E	3	Sp.B.	Springs.	Columbia	¾ F.	1.63	32x4	32x4	Wood.	Semi-E.	Ditweiler	Stewart	Plain 3.	B. & R.	R.	B.		Allen
Own	Disc	Own.	Amid	3	Sp.B.	Springs.	Own.	F.-F.		4 35	34x4½	34x6½	Wood.	¾ F.	Own.	Van's	Plain 3.	R.	R.	B.	Apperson
Borg & Beck	Disc	Grant-Lees.	Unit E	3	Sp.B.	Springs.	Columbia	F.-F.		4 45	34x4½	34x6½	Wood.	S.-E.	Jarvis	Stewart	Plain 3.	B. & R.	R.	B.	Auburn
Own	Cone.	Own.	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		4 18	31x4	31x6	Wood.	S.-E.	Own.	Stewart	Plain 3.	B. & F.	R.	B.	Briscoe
Own	Cone.	Own.	Unit E	3	Sp.B.	Tor.-T.	Own.	F.-F.		4 07	33x4	33x6	Wood.	S.-E.	Own.	Allied-Thim.	Plain 4	B. & R.	R.	B.	Buick
Own	Disc	Own.	Unit E	3	Sp.B.	Tor.-T.	Own.	F.-F.		4 61	34x4½	34x6½	Wood.	Cant.	Own.	Allis-Chalm.	Plain 4	B.	R.	B.	Buick
Own	Disc	Own.	Unit E	3	Sp.B.	Springs.	Timken	F.		4 43	35x5	35x5	Wood.	¾ F.	Own.	Van's	Plain 3.	B. & R.	R.	B.	Cadillac
Borg & Beck	Plate.	Grand-Lees	Unit E	3	Sp.B.	Springs.	Columbia	F.-F		4 45	34x4½	34x6½	Wood.	S.-E.	Jarvis	Van's	Plain 3.	B. & R.	R.	B.	Case
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		4 25	32x4	32x4	Wood.	S.-E.	Own.	Stewart	Plain 3.	B. & R.	R.	B.	Chalmers
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		5 12	33x4½	33x4½	Wood.	S.-E.	Own.	Stewart	Plain 3.	B. & R.	R.	B.	Chalmers
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	F.-F.		4 35	33x4	33x4	Wood.	S.-E.	Opt.	Stewart	Plain 3.	B.	R.	B.	Chandler
Own	Cone.	Own	Unit E	3	Sp.B.	Springs.	Own.	¾ F.		4 63	30x3½	30x3½	Wood.	Cant.		Stewart	Plain 3.	B.	R.	B.	Chevrolet 4-20
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	¾ F.		4 23	33x4	33x4	Wood.	S.-E.	Own.	Stewart	Plain 3.	B. & F.	R.	B.	Chevrolet FB
Borg & Beck	Disc	Mechanics	Unit E	3	Sp.B.	Springs.	Own.	F.-F.		4 45	32x4	32x4	Wood.	S.-E.	Ditweiler	Van's	Plain 3.	B.	R.	B.	Cleveland
North	Cone	North	Unit E	3	Bevel	Springs.	Own.	F.-F.		4 46	32x5	33x5	Wood.	S.-E.	Gemmer	Stewart	Plain 3.	B.	R.	B.	Cole
Borg & Beck	Plate.	Dutton	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 78	32x4	32x4	Opt.	Cant.	Gemmer	Stewart	Plain 3.	B. & F.	R.	B.	Columbia
Own	Disc	Own	Unit E	3	Sp.B.	Tor. A.	Timken	F.-F.		4 60	34x4½	34x6½	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B.	R.	B.	Daniels
Borg & Beck	Plate.	Grant-Lees	Unit E	3	Bevel	Springs.	Own.	¾ F.		4 72	32x4	32x4	Wood.	¾ F.	C. A. S.	Van's	Plain 3.	B.	R.	B.	Dixie Flyer
Own	Cone.	Mechanics	Unit E	3	Bevel	Springs.	Flint.	¾ F.		4 07	30x3½	30x3½	Wood.	Cant.	Jarvis	Stewart	Plain 3	B. & F.	R.	B.	Dodge
Own	Cone.	Mechanics	Unit E	3	Sp.B.	Tor. T.	Flint.	¾ F.		4 07	31x4	31x4	Wood.	Cant.	Jarvis	Stewart	Plain 2	B.	R. & F.	R.	Dort
Borg & Beck	Disc	Mechanics	Unit E	3	Sp.B.	T. A.	Columbia	¾ F.		5 00	33x4	33x4	Wood.	Cant.	C. A. S.	Van's	Plain 2	R.	R.	B.	Elgin
Borg & Beck	Disc	Covert	Unit E	3	Sp.B.	Springs.	Perc.	F.-F.		4 25	32x3½	32x3½	Wood.	S.-E.	Ditweiler	Stewart	Plain 3	B.	R.	B.	Elk-Hart 4-cylinder
Borg & Beck	Disc	Covert	Unit E	3	Sp.B.	Springs.	Perc.	F.-F.		4 25	32x3½	32x3½	Wood.	S.-E.	Ditweiler	Stewart	Plain 3	B.	R.	B.	Elk-Hart 6-cylinder
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Timken	F.-F.		4 25	33x4	33x4	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B.	R.	B.	Essex
Own	Tur.	Own	Unit E	3	Bevel	Tor. A.	Own.	F.-F.		4 23	33x4	33x4	Wood.	S.-E.	Own.		Plain.	B.	R. & B.		Ford
Borg & Beck	Plate.	Own	Amid	3	Sp.B.	Springs.	Own.	Semi-F		4 33	32x4	32x4	Wood.	Ell.	Own.	Stewart	Plain 7	B.	R.	B.	Franklin
Borg & Beck	Plate.	Dutton	Unit E	3	Sp.B.	Springs.	Columbia	¾ F.		4 63	32x4	32x4	Wood.	S.-E.	Jarvis	Van's	Plain 3.	B. & F.	R.	B.	Gramm
Borg & Beck	Disc	Own	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 50	32x4½	32x4½	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B. & R.	R.	B.	Handley-Knight
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	F.-F.		4 50	34x4½	34x6½	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B.	R.	B.	Haynes (47
Borg & Beck	Plate.	Own.	Unit E	3	Sp.B.	Springs.	Own.	¾ F.		4 07	34x4½	36x6½	Wire	S.-E.	Jarvis	Stewart	Plain 3	B.	R.	B.	Haynes (48
Borg & Beck	Plate.	Own.	Unit E	3	Sp.B.	Springs.	Own.	Semi-F			33x4	33x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	B.	R.	B.	Haynes (50
Brown-Lipe	Disc	Brown-Lipe.	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 90	34x4½	34x6½	Wood.	Ell.	Gemmer	Van's	Plain 7	R.	R.	B.	Holmes
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 50	34x4½	34x6½	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B.	R.	B.	Hudson
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	¾ F.		4 87	33x4	32x4	Wood.	S.-E.	Jarvis	Van's	Plain 3.	B. & F.	R. & B.	B.	Hupmobile
Own	Disc	Detroit	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 60	32x4	32x4	Wood.	S.-E.	Gemmer	Van's	Plain 4.	B. & F.	R.	B.	Jordan
Borg & Beck	Plate.	Detroit	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 08	32x4	32x4	Wood.	S.-E.	Gemmer	Van's	Plain 3.	B. & F.	R.	B.	Jordan
Warner	Disc	Warner	Unit E	3	Sp.B.	Springs.	Columbia	F.-F.		4 62	32x4	32x4	Wood.	S. & W.	Cant.	Jarvis	Plain 3	B.	R.	B.	King
Warner	Disc	Warner	Unit E	3	Sp.B.	Springs.	Own.	F.-F.		4 62	32x4	32x4½	Wire	S.-E.	Jarvis	Plain	Plain 3	B.	R.	B.	Kissel
Own	Disc	Own	Unit E	3	Sp.B.	Tor. T.	Own.	F.-F.		5 1	33x5	33x5	Wood.	S.-E.	Own.	Waltham	Plain 3	B.	R.	B.	Lafayette
Borg & Beck	Disc	Warner	Unit E	3	Sp.B.	Springs.	Own.	F.-F.		4 62	32x4	32x4	Wood.	S.-E.	C. A. S.		Plain 4	B. & R.	R.	B.	Lexington
Borg & Beck	Disc	Detroit	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 66	32x4	32x4	Wood.	S.-E.	C. A. S.		Plain 4	B. & R.	R.	B.	Lexington
Borg & Beck	Disc	Detroit	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 66	32x4	32x4	Wood.	S.-E.	Gemmer	Stewart	Plain 4	B. & R.	R.	B.	Liberty
Own	Disc	Own	Unit E	3	Sp.B.	Tor. T.	Own.	F.-F.		5	32x5	32x5	Wood.	S.-E.	Own.	Waltham	Plain 5	R.	R.	B.	Lincoln
Own	Disc	Own	Amid	4	Sp.B.	R.R.T.	A. Own.	F.		3 87	33x5	33x5	Wood.	¾ F.	Own.	Stewart	Plain 7	B.	R.	B.	Locomobile
Own	Disc	Own	Unit T	3	Sp.B.	Tor.	Own.	¾ F.		4 50	32x4	32x4	Wood.	Cant.	Own.	Van's	Plain 3.	B.	R.	B.	Marmon
Own	Cone	Own	Unit E	3	Bevel	Springs.	Own.	¾ F.		3 58	30x3½	30x3½	Wood.	S.-E.	Own.		Plain 2	R.	R.	B.	Maxwell
Own	Disc	Brown-Lipe	Amid	3	Sp.B.	Springs.	Timken	F.-F.		3 38	35x5	35x5	Opt.	Cradle	Warner	Stewart	Plain 4	R.	R.	B.	McFarlan
Own	Disc	Own	Amid	4	Sp.B.	Springs.	Own.	F.-F.		4 25	32x4	32x4½	Opt.	S.-E.	Gemmer	Stewart	Plain 3	B. & R.	R.	B.	Mercer
Own	Disc	Own	Amid	3	Sp.B.	Springs.	Own.	F.-F.		4 22	32x4½	32x4½	Opt.	S.-E.	Gemmer	Stewart	Plain 3	B. & R.	R.	B.	Mercer
Borg & Beck	Plate.	Own	Amid	3	Sp.B.	T. T.	Own.	F.-F.		4 41	33x4½	33x4½	Wood.	S.-E.	Own.	Stewart	Plain 3	B. & R.	R. & B.	B.	Mitchell
Borg & Beck	Plate.	Own	Amid	3	Sp.B.	T. T.	Own.	F.-F.		4 41	33x4	33x4	Wood.	Cant.	Own.	Stewart	Plain 3	B. & R.	R. & B.	B.	Mitchell
Borg & Beck	Plate.	Own	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		4 5	34x4½	34x4½	Wood.	S.-E.	Gemmer.	Stewart	Plain 3	B. & R.	R.	B.	Nash (Six
		Ilse																			Nash (Four
Borg & Beck	Plate.	Brown-Lipe	Unit E	3	Bevel	Springs.	Columbia	F.-F.		4 09	32x4	32x4½	Wood.	S.-E.	Warner	Stewart	Plain 3	B. & R.	R.	B.	Oakland
Own	Cone	Munrie	Unit E	3	Sp.B.	Springs.	West.-M	F.-F.		4 32	32x4	32x4	Wood.	S.-E.	Layne	Stewart	Plain 3	B. & F.	R. & B.	B.	Oakland
Own	Cone	Warner	Unit E	3	Sp.B.	Springs.	West.-M	F.-F.		4 91	33x4½	33x4½	Wood.	S.-E.	Jarvis	Stewart	Plain 2	B.	R. & B.	B.	Oldsmobile (6-B
Own	Cone	North	Unit E	3	Sp.B.	Springs.	West.-M	F.-F.		4 32	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	B.	R. & B.	B.	Oldsmobile (37-A
Hassler	Plate.	Warner	Unit E	3	Sp.B.	Tor. T.	Own.	S.-F.		4 66	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	B.	R.	B.	Oldsmobile (43-A
Borg & Beck	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	¾ F.		4 50	31x4	31x4	Wood.	S.-E.	Own.	Stewart	Plain 3	B.	R.	B.	Overland
Own	Plate.	Own	Amid	3	Sp.B.	Springs.	Own.	Semi-F		4 36	35x5	35x5	Wood.	S.-E.	Own.	Waltham	Plain 7	B.	R.	B.	Packard Twin Six
Own	Plate.	Own	Amid	3	Sp.B.	Springs.	Own.	Semi-F			35x5	35x5	Wood.	S.-E.	Own.	Waltham	Plain 7	B.	R.	B.	Packard Single Six
Borg & Beck	Plate.	Own	Unit E	3	Sp.B.	Springs.	Salisbury	F.-F.		4 55	33x4½	33x4½	Wood.	S.-E.	Jarvis	Stewart	Plain 4	B. & R.	R. & B.	B.	Paige-Detroit 6-55
Borg & Beck	Plate.	Own	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		4 32	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 4	B. & R.	R. & B.	B.	Paige-Detroit 6-42
Borg & Beck	Plate.	Dutton	Unit E	3	Sp.B.	Springs.	Stanpar	S.-F.		4 50	33x4	33x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	B.	R.	B.	Paterson
Brown-Lipe	Disc	Brown-Lipe	Unit E	3	Sp.B.	Springs.	Timken	S.-F.		4 34	33x4½	33x4½	Wood.	S.-E.	Gemmer	Stewart	Plain 3	B. & R.	R.	B.	Peerless
Own	Disc	Own	Amid	3	Sp.B.	Tor. A.	Own.	S.-F.		4 28	35x5	35x5	Wood.	S.-E.	Own.	Waltham	Plain 7	B. & F.	R. & B.	B.	Pierce-Arrow
Borg & Beck	Disc	Brown-Lipe	Unit E	3	Sp.B.	Springs.	Salisbury	F.-F.		4 75	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	B. & F.	Plain.	R.	R. & V. Knight (4-cyl
Borg & Beck	Disc	Brown-Lipe	Unit E	3	Sp.B.	Springs.	Timken	F.-F.		4 90	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 4	B.	R.	B.	R. & V. Knight (6-cyl
Own	Disc	Own	Amid	3	Sp.B.	Springs.	Own.	Semi-F		4 66	33x4	33x4	Wood.	S.-E.	Own.		Plain 4	B.	R.	B.	Rex
Own	Disc	Grant-Lees	Unit E	3	Sp.B.	Tor. A.	Hi-Lipe	¾ F.		3 87	32x4½	32x4½	Wire	Cant.	Jarvis	Stewart	Plain 2	B.	R.	B.	Roamer
Own	Disc		Unit E	3	Sp.B.	Springs.	Timken	S.-F.			33x4	33x4	Wood.	S.-E.	Own.		Plain 3	B. & R.	R. & B.	B.	Saxon
North	Cone	Warner	Unit E	3	Bevel	Springs.	West.-M	F.-F.		4 50	32x4	32x4	Wood.	S.-E.	Jarvis	Stewart	Plain 3	F.	B. & R.	B.	Scripps-Booth
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Timken	S.-F.			33x5	33x5	Wood.	S.-E.	Own.		Plain	B.	R.	B.	Sheridan (4
				3	Sp.B.	Tor. A.	Timken	F.-F.			33x5	33x5	Wood.	S.-E.	Warner						Sheridan (8
Borg & Beck	Plate.	Grant-Lees	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		4 45	34x4½	34x6½	Wire	S.-E.	Gemmer	Stewart	Plain 3	B. & R.	R.	B.	Standard (1
Own	Disc	Own	Unit E	3	Sp.B.	Springs.	Own.	Semi-F		4 50	34x4½	34x4½	Wood.	Cant.	Own.	Van's	Plain 3	B. & R.	R. & B.	B.	Stearns
Borg & Beck	Disc	Mechanics	Unit E	3	Sp.B.	Springs.	Timken	Semi-F	4 73	33x4½	33x4½	Wood.	S.-E.	Own.	Stewart	Plain 3	B.	R.	B.	B.	Stephens
Own	Cone	Own	Amid	3	Sp.B.	Springs.	Timken	Semi-F		4 33	32x4	32x4	Wood.	S.-E.	Own.	Van's	Plain 4	B.	R.	B.	Studebaker Spec. F
Own	Cone	Own	Amid	3	Sp.B.	Springs.	Timken	Semi-F		4 71	33x4½	33x4½	Wood.	S.-E.	Own.	Van's	Plain 4	B.	R.	B.	Studebaker Big 6
Own	Plate.	Own	Amid	3	Sp.B.	Springs.	Own.	Semi-F		4 55	32x4	32x4	Wood.	S.-E.	Own.	Stewart	Plain 4	B.	R.	B.	Studebaker Light 6
Borg & Beck	Plate.	Detroit	Unit E	3	Sp.B.	Springs.	Columbia	Semi-F	4 80	32x4	32x4	Wood.	S.-E.	C. A. S.	Stewart	Plain 3	B. & R.	R.	B.	B.	Templar
Borg & Beck	Plate.	Dutton	Unit E	3	Sp.B.	Springs.	Timken	F.-F.		4 60	32x4	32x4	Wood.	S.-E.	Gemmer	Van's	Plain 3	B.	R.	B.	Velie (2
Borg & Beck	Plate.	Dutton	Unit E	3	Sp.B.	Springs.	Timken	¾ F.		4 60	32x4	32x4	Wood.	S.-E.	Gemmer	Van's	Plain 3	B.	R.	B.	Velie (41
Borg & Beck	Plate.	Warner	Unit E	3	Sp.B.	Springs.	Timken	Semi-F		5 09	32x4½	32x4½	Wood.	S.-E.	Gemmer	Van's	Plain 4	B. & R.	R.	B.	Westcott (43
Borg & Beck	Plate.	Warner	Unit E	3	Sp.B.	Springs.	Timken	Semi-F	5 09	32x4	32x4	Wood.	S.-E.	Gemmer	Van's	Plain 4	B. & R.	R.	B.	B.	Westcott (38
Own	Plate.	Own	Unit E	3	Sp.B.	Springs.	Own.	F.-F.	5	33x4½	33x4½	Wood.	S.-E.	Gemmer	Marmon	Plain 3	B. & R.	R.	B.		Willys-Knight
Own	Plate.	Own	Unit E	3	Sp.B.	Springs.	Own.	F.-F.	4 9	35x5	35x5	Wood.	S.-E.	Own.	Stewart	Plain 4	B. & R.	R.	B.		Winton

7 Sed S—7-Passenger Suburban Sedan
2 Rbt—2-Passenger Runabout
DsCd—2-Passenger Duplex Coupe
DsSr—7-Passenger Duplex Sedan
7SL—7-Passenger Sedan-Limousine
4CS—4-Passenger Coupe-Sedan
SVS—5-Passenger Vestibule Sedan
4M—4-Passenger Military
7LL—7-Passenger Limousine-Landaulet
4Vic—4-Passenger Victoria
7t-S—7-Berth-Sedan
Spt.-Pr—Splash-Pressure
AL-Kent—Atwater-Kent

Sp.B.—Spiral Bevel
F.-F.—Full Floating
Cant.—Cantilever
B. & R.—Ball and Roller
B.—Ball
R.—Roller
P.—Plain
G-D-V—Gray Dee Valve
Tor. A.—Torque Arm
Tor. T.—Torque Tube
Thermo.—Thermo-Syphon
Cone.—Connecticut
West.—Westinghouse

Unit E.—Unit with Engine
3-4 F.—3-4 Floating
Semi-E.—Semi-Elliptical
Amid.—Amidships
F.—Floating
3-4 E.—3-4 Elliptical
Van S.—Van Sicklen
Cont.—Continental
Semi-F.—Semi-Floating
Circ. Spl.—Circulating Splash
V. & A.—Vim and Automatic
Allis-Chalm.—Allis-Chalmers
G. & D.—Gray & Davis

Opt.—Optional
S. Cant.—Semi-Cantilever
Cdn-John.—Cadwallader-Johnson
North.—Northway
Cne.—Lorraine
N.-E.—North-East
Frig.—Frigidaire
R. R. T. A.—Radius Rods and Torsion Arm
Less-R.—Less Reville
Ell.—Elliptical
W. & D.—Weed or Wire
Unit T.—Unit with Torque Tube
West.-Mott.—Weston-Mott

Digitized by Google

Tabulation of Prices of

MAKE	MODEL	No. of Pas-sengers	Price	Color
Ace	Rd.	2	$2,975	Var.
	T.	5	2,975	
	Bro. (C),	5	3,500	
	Sed.	5	3,600	
Allen	Rd (43)	2	1,295	Bl. (b)
	T. (42)	5	1,395	Cr. (w)
	T. (Spl.)	2	1,495	Tu.
	T. (Spl.)	5	1,495	Gu.
	Sed. (Spl.)	5	2,195	Dup.
	T. (A7).	5	1,945	Am.
Ansercen	Tr. (An.)	4	4,250	Silh. Op.
	T. (An.)	7	4,250	Cm. Gl. Op.
	Rd. (An.)	4	6,000	Wi. Op.
	Sed. (An.)	7	6,000	" "
	Rd. (S.)	2	4,250	" "
	Spr. (S.)	4	3,500	" "
	T. (S.)	7	3,500	Gbd.
	Sedc. (S.)	4	4,500	Gre.
	Sed. (S.)	7	4,500	" "
Auburn	Rd.	2	1,745	" "
	T.	4	1,945	Bl.
	T.	5	1,695	P.L.
	Cou.	4	2,745	A.G.
	Cab.	3	2,945	R.R.B.
	Sed.	5	2,745	" "
Briscoe	Rd.	2	1,295	" "
	T.	3	1,295	" "
	Sed.	5	1,885	Bl.
Buick	Rd(21-44)	3	1,795	" "
	T. (21-45)	5	1,795	" "
	Cp.(21-46)	4	2,965	" "
	Se.(21-47)	5	2,985	Bla.
	Cv.(21-48)	4	2,985	" "
	T. (21-49)	7	2,065	" "
	Se.(21-50)	7	2,295	" "
Cadillac	Rd.	2		B. & B.
	Phae. (c)	4		B. & B.
	T.	7		B. & G.
	Vic. (c).	4	(On	
	Sed.	5	Appli-	
	Sub.	7	cation)	Gre
	Lim.	7		and Bla
	T.B.	5		
	Imp.L.	5		
Case	Rd.	4	2,650	Bl
	T.	7	2,650	Gray
	Cou.	4	3,400	Mar
	Sed.	5	3,750	Gre.

MAKE	MODEL	No. of Pas-sengers	Price	Color
Chalmers	Rd.	3	1,795	
	T.	5	1,795	
	Cou.	4	2,595	Bl. and
	Sed.	5	2,745	Bla.
	T.	7	1,870	
	Spt.	5	1,995	
Chandler	Rd.	2	1,895	
	Tou.	5	1,895	
	Cou.	4	1,975	Bl. and
	Sed.	5	2,995	Bla.
	T.	7	2,995	
	Lim.	7	3,045	
Chevrolet	Rd. (4-90)	2	795	
	T. (4-90)	5	820	
	Cp. (4-90)	2	1,325	
	Sed.(4-90)	5	1,375	Bla.
	Rd. (F.B.)	3	1,120	
	T. (F.B.)	5	1,345	
	Cp. (F.B.)	4	2,075	
	Sed.(F.B.)	5	2,075	
Cleveland	Rd.	3	1,485	
	T.	5	1,435	C.B.
	Cou.	4	2,745	and Bla.
	Sed.	5	2,445	
Cole	Rd.	2	3,250	G. or B.
	Spr.	4	3,250	G. or B.
	Tr.	7	3,250	Bl.
	Sedan	5	4,450	G. or B.
	Sedcr.	6	4,450	G. or G.
	Sed.	4	4,250	Mar., Bl. Gr.
	Tou.	7	4,450	Bl.
	Turd.	7	4,450	Bl.
	Cpd.	7	4,500	Bl.
Columbia	Rd.	2	1,945	Gra.
	Spr.	2	1,745	Gra.
	T.	5	1,795	Bl., Mar
	Cou.	4	2,895	Bl., Mar
	Sed	5	2,895	Bl., Mar
Daniels	T.	4	3,350	
	T.B.	7	3,750	
	Rd.	3	3,350	
	Sed	4	7,000	
	T.	7	4,350	
	Cou.	4	4,250	
	Spr.	2	3,350	
	Ld.B.	7	7,250	Opt.
	W.Rd.	4	8,500	
	Fish La.	4	7,000	
	T.B.	4	6,250	
	Lim.	7	4,750	
	Mr. Rd.	4	8,350	
	Sub.	7	7,075	
	Rd.	4	3,250	

MAKE	MODEL	No. of Pas-sengers	Price	Color
Detroit Electric	Mod. 88.	5	4,000	Bl.
Dixie Flyer	Rd.	2	1,595	Bl.-Gre.
	T.	5	1,595	Bl.-Gre.
	Sed.	5	2,370	Bl.-Gre.
	Sed.	5	2,870	Bl.-Gre.
	Fly. (o).	2	1,895	Or.
Dodge	Rd.	2	1,235	" "
	T.	5	1,285	Bl. and
	Cou.	5	1,940	Bla.
	Sed.	5	2,130	" "
Dort	Rd.	2	1,245	" "
	T.	3	1,245	D.G.
	Cou.	3	1,865	" "
	Sed.	5	1,895	" "
Elgin	T.	5	1,775	" "
	Var.S.	4	1,895	Bl.
	Sed.	5	2,685	" "
	Cou.	4	2,595	" "
Elk-Hart	Rd. (L.)	3	1,295	" "
	Spt. (L.)	4	1,745	" "
	T. (L.)	5	1,295	" "
	Sed. (L.)	7	2,195	Opt.
	Rd. (S.)	3	1,345	" "
	Spt. (S.)	4	1,395	" "
	T. (S.)	5	1,345	" "
	Sed. (S.)	7	2,395	" "
Essex	T.	2	$1,895	" "
	T.	5	1,595	Gre.
	Cab.	3	2,100	" "
	Sed.	5	2,100	" "
Ford	Rbt.	2	395	" "
	T.	5	440	Bla.
	Cou.	2	745	" "
	Sed.	5	785	" "
Franklin	Rbt.	2	2,700	Gre.
	Rd.	4	2,750	Gra.
	T.	5	2,800	Gre.
	Sed.	5	3,850	Gre.
	Bro.	4	3,800	Gre.
	De.C.	4	2,900	Gre.
	De.S.	5	3,150	Gre.
Gardner	Rd.	3	1,195	" "
	T.	5	1,195	Bla.
	Sed	5	2,145	" "
Grant	Rd.	2	1,550	" "
	T.	5	1,550	Bl. and
	Cou.	4	2,450	Bla.
	Sed.	5	2,450	" "
Hamilfer-Knight	T.	7	2,595	Bl. or
	Sed.	7	4,185	Wi.

MAKE	MODEL	No. of Pas-sengers	Price	Color
Haynes	Tr. (47).	4	2,935	
	T. (47).	7	2,935	
	Spor.(47)	2	3,090	
	Rds. (47)	3	3,090	
	Pub. (47)	5	3,250	
	Sed (47)	7	4,390	Gre.
	Spor.(48)	4	3,200	Red
	Tr.	4	2,615	and Bla.
	T. (48)	7	2,615	
	Rds. (48)	5	4,800	
	Sub. (48)	7	4,950	
	Sed. (48)	7	4,940	
	T. (60)	5	2,100	
Holmes	Rd.	4	3,350	Chan.
	T.	4	3,350	Bl.
	Cou.	4	4,250	Bl.
	Sed.	5	4,250	Bl.
	T. (AT)	7	3,900	Bl.
Hudson	Phae. (o).	4	2,490	Opt.
	T.	7	2,490	Opt.
	Lim.	7	4,090	Opt.
	Cou.	4	2,770	Opt.
	Sed.	7	2,690	Bl.
	Cab.	3	3,090	Opt.
	T. L.	9	3,665	Opt.
Hupp	Rd.	2	1,845	" "
	T.	4	1,985	Bl. and
	Cou.	4	2,725	Bla.
	Sed.	5	2,840	" "
Jordan	Flk. (o).	2	2,650	" "
	T.	2	2,650	" "
	T.	7	2,875	" "
	Est.	5	3,150	Bl.
	Bro.	4	3,700	" "
	Sed.	5	3,700	" "
King	R.K.	2	2,850	" "
	Tour.	4	2,850	Bl. or
	T.	7	2,850	Gre.
	Lel.	7	4,175	" "
Kissel	Spor	2	3,475	" "
	Tr.	4	3,475	" "
	T.	7	3,475	Opt.
	Cou.	4	4,275	" "
	Sed.	4	4,275	" "
	Lim.	7	4,050	" "
LaFayette	Tou.	4	1,435	Gre.
	T.	4	1,625	Bl.
	Cou.	4	1,890	Bl.
	T.S.	7	2,440	Gre.
	Lim.	7	2,090	Gre.

ABBREVIATIONS

(c)—Closed
(b)—Body
w—Wheels
(AT—Artcraft Top
(AN—Anniversary
(S—Standard
Opt.—Optional
(o)—Open
Bro.—Brougham
*—Approximately
4d—4 door
Var.—Varies
†—Prices, delivered

Bl.—Blue
Gr.—Cream
Tq.—Turquoise
Ga.—Garnet
Sap.—Sapphire
Am.—Amethyst
Gm.—Gunmetal
Wi.—Wine
Silh.—Silver Blue
Gre.—Green
P.L.—Purple Lake
A.G.—Auburn Gray
R.R.B.—Rolls-Royce Blue
Bla.—Black

B. & B.—Blue and Black
B.-R.—Blue-Black
Mar.—Maroon
C.B.—Cleveland Blue
Or.—Orange
D.G.—Dort Green
B. & G.—Black and Green
Midn.—Midnight Blue
P.B.—Pierlane Blue
Ch.B.—Champagne Blue
O.D.—Olive Drab
S.R.—Saginaw Red
S.B.—Stephens Blue
Glid.—Glidden

G. or G.—Gray or Blue
Gra.—Gray
Rd—Roadster
T—Touring
Bro—Brougham
Sed—Sedan
Tr—Tourster
Spr—Sportster
Sedc—Sedanette
Co or Coup—Coupe
Cab—Cabriolet
Phae—Phaeton
Vic—Victoria
Sub—Suburban

The Average Passenger Car of 1921

A COMPOSITE of the 1921 specifications of 459 body models mounted on 119 chassis as made by 107 manufacturers of passenger cars reveals the extent to which standardization has progressed. The average five- and seven-passenger car of 1921, as shown by this comparison, has a wheelbase of 122 inches; a six cylinder, L-head engine, bore 3.42 inches and stroke of 4.97 inches; piston displacement of 256.35 inches; N. A. C. C. horsepower rating of 26.33, and a splash pressure oiling system with gear pump. The price is $2,794.

Digitized by Google

1921 Model Automobiles

MAKE	MODEL	No. of Pass-engers	Price	Color
Lexington	Thd. (6)	4	2,285	
	T. . . .	5	2,785	
	T. . . .	7	2,985	
	Sedc	4	4,150	Bl. and
	Std'R.	7	4,250	Bro.
	Lex.S	5	2,785	
	Cou.	4	3,250	
	Sed.	5	3,350	
Liberty	Rd.	2	1,785	
	T.	5	1,785	Bl.
	Cou.	4	2,650	and
	Sed.	5	2,680	Bla.
	Spar	4	1,885	
Lincoln	Rd.	3	6,000	
	Phae. (o)	5	4,600	
	T. . . .	7	4,900	Bl.
	Cou.	4	5,750	and
	Sed.	5	6,000	Bla.
	T.B.	5	6,050	
	Sub. Le.	7	9,600	
	T.B.	7	6,000	
Locomobile	St (o)	4	17,850	
	D.C.(o)	4		
	T.	7	7,850	
	Lim.	7	9,150	Opt.
	Limo.(o)	4		
	C.L.	4		
	Lib.	7	9,150	
	Sed.	7		
Marmon	Spor.	2	15,300	
	Rd. . .	4	5,000	
	T. . . .	4	5,000	
	T. . . .	7	5,000	Bl. or
	Cou.	4	6,150	Mar.
	Sed.	5	6,600	
	Lim.	7	6,800	
	T.C.	5	6,000	
Maxwell	Rd. . .	2	995	
	T. . . .	5	995	Blu.
	Cou. .	3	1,595	
	Sed. .	5	1,695	
McFarlan	Rd. . .	2	6,200	
	Sport	4	6,100	
	T. . . .	7	6,200	
	T.C.	5	7,500	
	Cou. .	2	7,500	
	Cab. .	7	9,000	Opt.
	Sed. .	4	7,500	
	T.B.	7	7,500	
	Sub.B.	7	7,500	
	Lim.	5	7,500	
	C.Lo.	6	8,500	
Mercer	Rbt.	2	2,850	Mar.
	Raby	2	3,675	Lt. Bl.
	T. . . .	7	3,950	Gre.
	Spt. .	5	3,950	Bl.-Gra.
	Cou.	4	5,150	Gm
	T.L.	7	5,950	Bl.
Milburn Electric	(2-1)	3	2,645	Opt.

MAKE	MODEL	No. of Pass-engers	Price	Color
Mitchell	Rd. . .	2	41,750	
	T. . . .	5	1,750	
	Spd. (o)	4		Bl. and
	T. . . .	7		Bla.
	Cou. . .	4	2,800	
	Sed. . .	5	2,980	
Nash	Rd. (6).	2	1,695	Bl.
	Spt. (6).	4	1,850	Gre.
	T. (6) .	5	1,695	Bl.
	T. (6) .	7	1,825	Bl.
	Cou. (6).	4	2,650	Bl.
	Sed. (6)	7	2,945	Bl.
	Rd. (4) .	2	1,295	
	T. (4) .	5	1,295	Mdh.
	Cou. (4).	3	1,985	
	Sed. (4)	5	2,185	
National	Rd. . .	2	3,250	
	T. . . .	7	2,750	Bl., Gra.
	Phae. (o)	4	3,750	or Gre.
	Cou. . .	4	4,000	
	Sed. . .	7	4,950	
Oakland	Rd. . .	2	1,295	
	T. . . .	5	1,295	Gre.
	Cou. . .	4	2,065	
	Sed. . .	5	2,065	
Oldsmobile	T. (4) .	5	1,445	
	Rd. (4) .	4	1,445	Bl
	Sed. (4)	8	2,145	
	Cou. (4)	4	2,145	
	Rd. (6) .	2	1,450	Bl.
	T. (6) .	5	1,450	Bl.
	T. (8) .	7	2,190	Mar
Overland	Rd. . .	2	895	Bl
	T. . . .	5	895	
	Cou. . .	3	1,425	
	Sed. . .	5	1,475	
Packard	Rbt. . .	2	6,000	
Twin Six	Phae. (o)	4	6,000	
	T. . . .	7	6,000	Bl., Bla.
	Du.C. .	4	9,200	& Cr.
	Du.S . .	7	9,450	
	Lim. . .	7	9,250	
Packard	Rbt. . .	2	2,975	
Single Six	Cou. . .	4	4,150	Gre.
	Sed. . .	5	4,250	
Paige	Rd. (6G6)	4	3,115	
	T. (6G6)	7	3,015	Bl.
	Cou. (6G6)	3	3,915	
	Sed. (6G6)	7	3,990	
	Rd. (6-42)	3	1,865	Bl.
	T. (6-42)	5	1,865	Gre.
	Cou. (6-42)	4	2,665	Bl.
	Spt. (6-42)	4	2,690	Gra.
	Sed. (6-42)	5	2,830	Bl
Paterson	Rbt. . .	4	2,995	Bl.
	T. . . .	5	1,895	Bl., Mar
	T. . . .	7	1,925	or Gre.
	Sed. . .	5	2,995	Bl

MAKE	MODEL	No. of Pass-engers	Price	Color
Peerless	Rd. . .	4	2,890	
	T. . . .	7	2,960	
	Cou. . .	4	3,690	P. B.
	Sed. . .	7	3,850	
	Sed.Lim	7	4,210	
Pierce-Arrow	Rbt. . .	2	8,000	
	T. . . .	7	7,900	
	T. . . .	6	7,500	
	T. . . .	7	7,900	
	Bro. . .	6	8,500	Opt.
	Cou. . .	6	9,000	
	Cou.Sed.	4	8,400	
	Sed. . .	6	9,000	
	Ya.S . .	6	9,000	
	Lim. . .	7	9,750	
Rauch & Lang Electric . .	Bro. . .	4	5,150	Bl.
	Cou . . .	5	5,150	
R. & V. Knight	T. (4) .	5	2,150	Bl.
	Cou. (4)	4	2,550	Bl. and
	Sed. (4)	5	2,650	Mar.
	Rd. (6) .	2	2,550	
	Spt. (6)	4	2,250	
	T. (6) .	7	2,250	Bl.
	Cou. (6).	4	2,965	
	Sed. (6)	7	2,965	
Reo	Rd. . .	3	1,850	
	T. . . .	5	1,850	Bl.
	Cou. . .	4	2,700	
	Sed. . .	5	2,750	
Roamer	Sport	2		
	Rd. . .	4		
	Spt. . .	4	Un-	
	T. . . .	5	Appli-	Opt.
	T. . . .	7	cation	
	Cab. . .	3		
	Cou. . .	5		
Saxon	T. . . .	5	1,675	
	Cou . . .	3	2,475	Bl.
	Sed. . .	5	2,475	
	B.T. . .	5	1,725	
Scripps-Booth	Rd. . .	3	1,545	
	T. . . .	5	1,545	Bl. or
	Cou. . .	4	2,215	Mar.
	Sed. . .	8	2,295	
Sheridan	Rd. (4) .	2	81,685	
	T. (4) .	5	1,685	
	Cou. (4)	4	2,575	
	Sed. (4)	5	2,765	B.-B.
	T. (6) .	7	2,290	
	Cou. (4)	4	3,195	
	Sed. (8)	7	3,490	
Standard Eight	Rd. . .	4	3,100	
	Sede . .	4	4,500	Bl.
	Cou . . .	4	4,500	
	Sed. . .	5	4,900	
	Ve S . .	7	5,600	

MAKE	MODEL	No. of Pass-engers	P. L. e	Color
Stearns-Knight	Rd. . .	3	2,900	
	Mdl. (o).	4	2,800	
	T. . . .	5	2,800	
	T. . . .	7	3,000	Mar., Bl
	Cou. . .	4	3,700	or Gra.
	Cou. . .	5	3,945	
	Bro. . .	7	4,100	
Stephens	Rd. (92).	2	2,400	
	T. . . .	4	2,400	
	T. . . .	6	2,450	O.D.,
	Sed. . .	5	*2,945	E.K. or
	Sed. . .	5		S.B.
	T. (A')	6	*2,560	
Studebaker	Rd. (88)	2	1,750	Bl.
	Rd. (80)	4	1,750	Bl.
	T. (88) .	5	1,750	Bl.
	Cou. (8S)	4	2,650	Bl.
	Sed. (8S)	5	2,750	Bl
	T. (B3) .	5	2,150	Gre.
	Rd. (LR).	2	1,650	
	T. (Le.	5	1,845	Bla.
	Sed. (LR)	5	2,150	Bla.
Templar	Rd. . .	2	2,885	
	T. . . .	5	2,885	
	Spke	4	2,885	Opt.
	Cou. . .	3	3,285	
	Sed. . .	5	3,285	
Velie	Rd. (48)	3	1,985	
	Spar. (48	2	2,090	
	T. (48) .	5	1,985	
	T. (48) .	7	2,050	
	Cou. (48)	4	2,950	Bl. or
	Sed. (48)	5	2,985	Bur. W.
	Rd. (34) .	3	1,285	
	T. (34) .	4	1,285	
	Cou. (34)	3	2,445	
	Sed. (34)	5	2,485	
Wescott	T. (C-48)	7	2,950	
	Sd. (C-48)	7	4,000	
	L-S.(C-48)	7	4,000	
	Rd. (C-38)	2	2,250	
	T. (C-38)	5	2,250	
	Cou.(C-48)	4	3,000	
	Sed. (C-48)	5	3,000	
Willys-Knight	Rd. . .	3	2,195	
	T. . . .	5	2,195	Bl.
	Cou. . .	4	2,915	Bla.
	Sed. . .	5	2,945	
Winton	Rd. . .	2	4,600	
	Spt. . .	4	4,475	
	T. . . .	7	4,600	
	Var. (e).	4	5,050	
	Spdar. .	4	5,850	Opt.
	Sed. . .	5	6,270	
	Lim. . .	7	5,550	
	Lim. (4D)	7	6,200	
	L.L. . .	7	6,350	

Lim—Limousine
T.B—Town Brougham
Imp.L—Imperial Limousine
Spt—Sport Model
Dis—Dispatch
Sptsn—Sportsedan
Sptns—Sportsine
Spte—Sportcoupe
Tou—Touroine
Tand—Tourndan
Cal—California
Lal.B—Landau Brougham
†—These prices are F. O. B. Detroit and include war tax

Sed.La—Suburban Landaulet
Mr.R—Martin Roadster
Fly—Firefly
Vic.S—Victory Sport
Rbt—Runabout
Ds.C—Demi-Coupe
Ds.S—Demi-Sedan
Tr—Tourister
Spor—Sporeder
T.L—Touring Limousine
Phb—Playbay
L.S—Enclosed Special
R.K—Road King
Fsm—Foursome

Ldl—Limoulan
Tor—Torpedo
T.S—Touring Sedan
Thd—Thorobred
Sal.S—Salon Sedan
Les.S—Les-Sedan
Sub.Ll—Suburban Limousine
Sf—Sperief
D.C—Double Cowl
C.L—Coupe-Limousine
Ldl—Landaulet
Sub.S—Suburban Sedan
C.La—Continental Landaulet
Rab—Racreabout

Spl—Special
Ds.C—Duplex Coupe
Ds.S—Duplex Sedan
Vs.S—Vestibule Sedan
Cou—Couch
Trr—Tourer
B.T—Blackstone Touring
Mkt—Milebuire
T.C—Town Car
Spte—Sportette
L.S—Limousine-Sedan
L.L—Limousine Landaulet
W.Rd—Winter Roadster

Straight Line Design Accentuated

A COMPARISON with the average car of last year and the year preceding shows that radiator heights have increased and cowl heights have decreased, giving an almost horizontal hood line. The straight line design seems to be more pronounced this year than last, and, accordingly, the body line is carried forward to the radiator. The tire size is 32 by 4 inches and wood wheels are used as standard, an optional choice of wire or steel being offered by 18 per cent of the makers.

Digitized by Google

Selling Truck Satisfaction

Some of Most Successful Manufacturers, Realizing Each Vehicle Must "Fit the Job," Act Accordingly

SALESMANSHIP methods which create as well as supply a demand for any product are considered essential to good merchandising. When the wares are backed by manufacturing and sales policies which include market analysis and customer analysis, the development of any business is marked for success—capital, labor and materials of course being in sufficient quantity. Market analysis gives manufacturer and dealer details of probable demand and character of products in general use, while customer analysis brings into relief the needs and problems of the individual buyer.

Perhaps in the merchandising of the majority of products a well conducted market analysis which considers the buyers en masse rather than individually provides a satisfactory barometer for the control of product character and volume, but there are some which call for customer analysis. One of these products is the commercial motor vehicle. No piece of machinery on the market today is more dependent for success upon the correct gauging of buyers' needs and problems than the commercial vehicle.

Selling motor trucks and delivery wagons is selling the mediums of transportation. There is a fine line between selling vehicles to a company or an individual whose intention it is to sell transportation, and selling vehicles to a company which intends to do its own transportation work, but one set of principles covers both cases. Costs enter into both cases; profits must be reckoned in one case, but may or may not be figured in the other.

In both cases the value of the vehicles sold will be judged by the buyers in accordance with the cost of operation and the performance, but both costs and performance will be satisfactory only when the vehicles sold are properly fitted to the requirements of the business, and properly used. Consequently, successful merchandising of commercial cars presupposes careful gauging of the needs of each buyer, which is customer analysis. Those manufacturers of commercial vehicles who have attained recognition in their field, whose products are most often seen upon the streets and who are able best to withstand the fluctuations of the market, have relied upon market analysis for production control and customer analysis for service efficiency.

During 1919 and the first few months of 1920, for instance, the sale of motor vehicles for industrial and commercial purposes in Wayne county was phenomenal. Then the depression set in and it is estimated that since September more than 3000 trucks have been turned back to dealers, or seized by dealers for non-payment of obligations. Thus the remarkable distribution of trucks became a boomerang upon the motor vehicle industry. While the sudden cessation of every kind of business in which the motor vehicle is used was largely to blame, yet the harum-scarum sale of trucks without any evidence of customer or market analysis played no small part and should not be overlooked.

During the boom period commercial vehicles were sold in many cases for the sake of the commission to the salesmen, for the sake of reporting great business back to the factory sales manager, and in some cases with the honest belief that every sale, regardless of its permanency, was good business and an impetus for the industry. Few dealers had the time or the facilities for making a thorough customer analysis. Too few considered that it was one thing to sell a truck, but another to keep the truck sold, and further, that every turn-back for any reason was one more stumbling block in the path of motor transportation success.

The creative type of salesmanship spoken of in the first paragraph entered strongly into the unwise merchandising of motor trucks in this territory as well as everywhere else in the country. Some of the methods used in selling trucks would invite commendation if the product was not transportation. Instead they were disastrous and every commercial vehicle manufacturer in the country is revising his sales conceptions as a result. Many manufacturers now realize that they were as much in fault as were their dealers, because in the merchandising of the commercial vehicle the builder should not and cannot afford to relinquish control from production to final sale.

Every one of the 300 cars turned back by unsuccessful users is now a used car and can be sold only as such. The buyer lost his money and his faith in motor transportation. The dealer has lost money and the confidence of the customer and his friends. The manufacturer may or may not have lost money, but he has lost some prestige.

Before proceeding with some facts regarding what has proved to be successful merchandising of commercial vehicles, it might be well to mention two or three illustrations of the results of creative salesmanship without customer analysis. These illustrations are taken from the records of the Detroit Transportation Association, and while they may be extremes, they are warning signs.

When F. L. Henk, secretary of the Association, was a clerk in the Michigan Central detective bureau a country boy approached him with a request for a job. The boy explained that he had left his father's farm to seek work in Detroit, and had been unsuccessful in his effort to get a job as engineer or fireman on the railroad. Of course he was not qualified for either, but he did not realize it. He wanted to be a detective, a policeman or a city fireman. Mr. Henk advised the boy to go back to the farm.

Months later when Mr. Henk had become secretary of the D. T. A. the same boy appeared in his office very much in trouble. He said he had been urged to buy a 5-ton motor truck and take hauling contracts, but that he had been unable to make any profit from his jobs, the jobs were hard to get and the dealer who sold him the truck threatened to take the vehicle away from him unless he kept up his payments. He said he had borrowed money from his father to make the first payment but had fallen behind on the subsequent payments. The boy lost the truck.

Illustration No. 2 is the story of a watchman who was persuaded to leave the railroad for the career of a commercial hauler. He bought an $8,000 truck, paid $100 down and gave a string of notes covering a two-year period for the balance. He lasted four months. He knew nothing about the cartage business, did not know how to drive an automobile until taught and had no capital on which to rely.

Illustration No. 3.—A salesman for a truck dealer persuaded a foreigner, who was a successful hardware merchant, to try the inter-city hauling business. The salesman took the merchant over a route touching Mount Clemens, Richmond, Romeo and other inland towns. The prospect was persuaded to buy three trucks. He hired a man to handle the business. There was no business. The roads were almost impassable at times and the merchant milked his business dry trying to support the trucks.

Digitized by Google

He lost two of them and the money paid down, but has managed to hang on to one.

Illustration No. 4.—A moulder earning $1.50 an hour when business was booming was dragged into the commercial hauling business by an ambitious truck salesman, was able to pay two notes, but finally lost the truck.

This list could be trebled in length.

These are a few of the reasons why the truck business in this territory has shrunk 90 per cent. The fight to restore confidence in commercial vehicles has been made exceptionally hard by such sales methods. Misrepresentation of truck costs; selling trucks on the promise of contracts; providing a small contract with every truck sold, and numerous other practices have militated against truck manufacture and sale. Salesmen have knocked down a few dollars and gone their way. Dealers have started out well, but are or will be out of business. Manufacturers have learned a lesson.

Ethics have been conspicuous for their absence in the truck selling business. For instance a Detroit truck dealer has taken an excavation contract under the name of one of its officials and this contract is being sub-let to buyers of the truck sold by this concern. The company may sell a truck or two, but the commercial haulers in the city, contractors and square business men will shun that concern as they would the smallpox. The manufacturer of the truck will be the biggest sufferer.

Aside from the bad practices illustrated, there are the dealers who are square in their sales methods but who have not taken customer analysis seriously or who feel they cannot afford the expense. Some of these dealers wonder why they have complaints from buyers. An investigation would show probably that the buyer did not have the truck best suited to his job. If it is unfair to expect the dealer to assume the expense and labor necessary properly to analyze the customer's truck problem, then the factory should help in this work. Some of the leading manufacturers are doing it.

They assume that the payment of money does not insure the permanent sale of a truck. It merely divides responsibility. Wise manufacturers and dealers endeavor to make salesmen out of truck buyers, and to do that they must successfully solve the buyer's transportation problem.

They cannot do it by selling a one-ton truck for a five-ton job, or a two-ton truck for a three-quarter-ton delivery job. The best kind of creative salesmanship in the motor truck business is that which considers first the job the prospect wants to do and then recommends the truck for that job. It must not be assumed that every prospect knows what he wants or should have, even if he lays down what he considers his specifications. He may be right. He may be wrong. If he is wrong he will not take the blame always.

One of the most successful truck manufacturers in the country, located in Detroit, has based its manufacturing and sales policy upon the principle that good will and future sales are as important as immediate sales; that its trucks are made right and will succeed if used right. It has maintained a corps of transportation engineers who act as analysis men. They not only analyze the market as a whole, but they analyze every customer's problem for him and recommend the type of unit he needs.

Here is an example: A coal dealer in Baltimore believed he needed more trucks. He was besieged by dealers who recommended from three to ten more vehicles. Before buying he appealed to this concern, with which he had had previous dealings. The company sent an engineer to the dealer's coal yard to investigate. After analyzing the problem the engineer recommended that he revise his distribution system and add one trailer. The truck company lost a sale, perhaps, but the coal dealer was so pleased that in addressing a national convention of coal men he told the gathering the whole story. He proved to be a star salesman and the company cashed in on service.

This company and several others operating on much the same scale, though perhaps not so large, spend much money and time on service before sales. Their representatives study the prospect's financial resources, the character of his business and the nature of the materials or work his vehicles are called upon to do or carry.

The distances to be traveled, the character of the roads, facilities for care of the trucks or delivery cars, the prospect's previous experience with commercial transportation, loading and unloading conditions, the economic character of the business he is in or intends to take up, the permanency of it, possible substitute jobs or supplementary work, the revenue likely to be gained and the character of the labor to be utilized in connection with the trucks, all are considered. This is exhaustive analysis, but in possession of this information, the company knows how to proceed and the dealer has some basis for confidence that the product will stay enthusiastically sold.

Where the factory does not provide such service, the dealer can approach it to some extent by having, first, a desire to sell the truck for the job and not entirely for the commission; secondly, have on his truck staff at least one man who knows enough about transportation to be able to analyze a prospect's job, and who is willing to study every element that enters into motor truck and delivery car service. A glib tongue, fashionable attire and parlor manners may work well in the sale of passenger cars, but in merchandising trucks, overalls and jumper and a cartage education will sell more trucks and make more friends.

Referring once more to the truck company that has had success commensurate with its policies, this concern has gone so far as to maintain truck drivers' classes in cities and towns where its cars are used in an effort to help the owners get the largest return with the least maintenance cost possible. It has also made up a cost system for all owners of its trucks. It has standardized repair costs on more than 100 operations and is able to supply parts for the oldest truck of its own make in existence.

This is merchandising motor vehicles.

Road Building This Year

More than $1,000,000,000 is now available for highway building and maintenance in the United States. Of this sum, approximately half, or $550,000,000, may be expended during 1921, which would make the coming year the greatest in highway construction in the history of the nation.

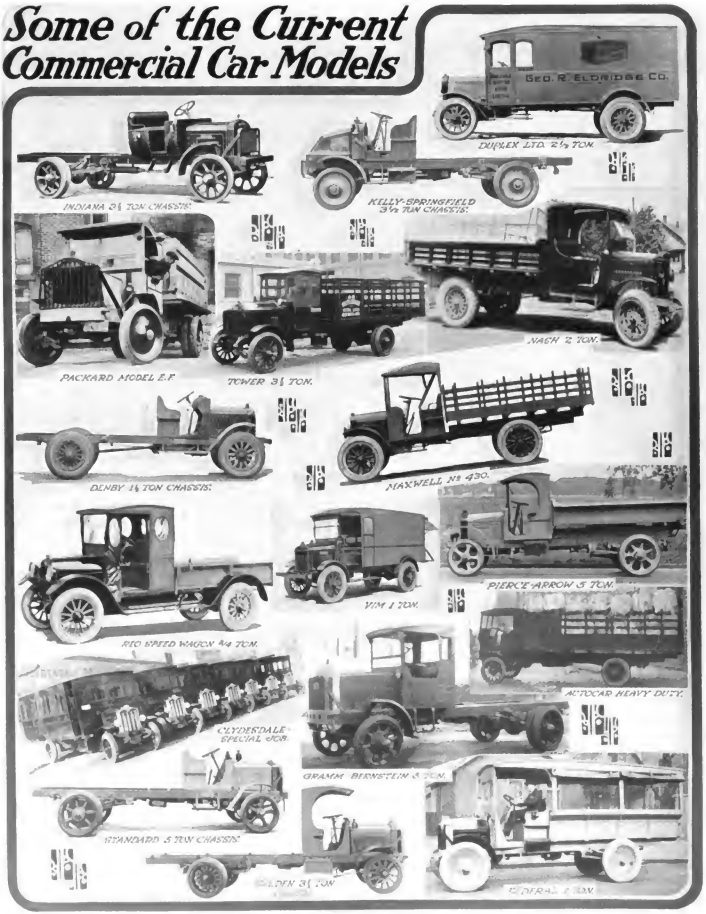
Of course, general business conditions will play a big part in the use of the funds now available. Last year on account of the shortage and high price of labor and materials, the lack of open top equipment on the railroads and the condition of the bond market, very little of the money appropriated by the Government and matched by state money raised through bond issues or otherwise was expended. It is expected that all of these conditions will be less stringent in 1921 than they were in 1920, and if this proves correct, 1921 may easily be the banner year in highway construction.

The fate of the proposed Federal Highway Commission to lay out and maintain a system of federal highways has been somewhat complicated by the agitation for a national or federal Bureau of Public Works, but it is almost certain that some forward step will be made in this direction before the end of 1921.

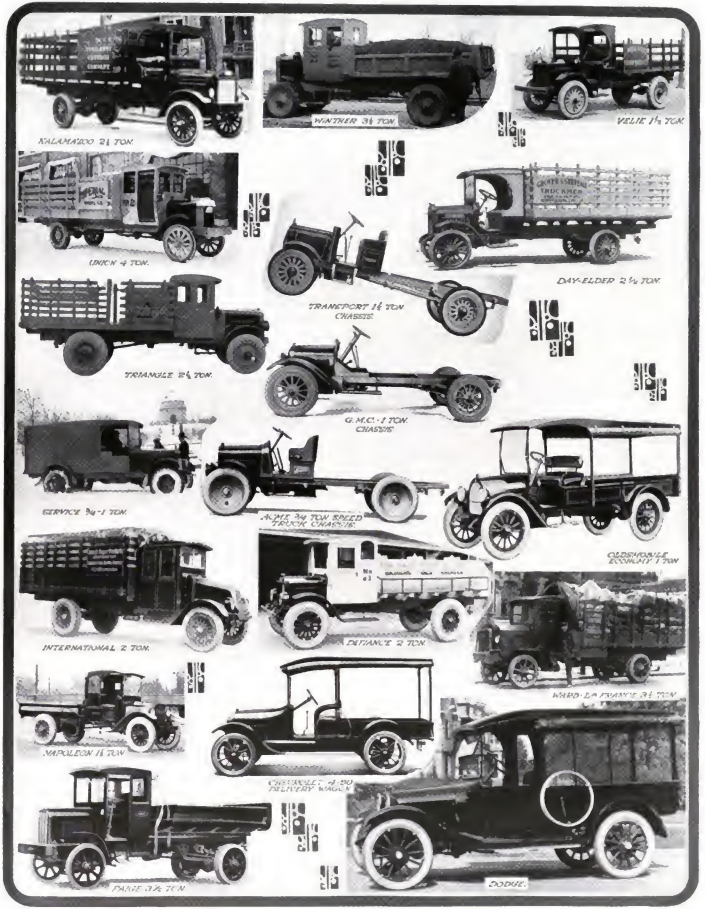
Dealers Would Revive Racing

Members of the New York trade who look back affectionately to the early days of the industry, and the big annual races which furnished so large a part of its history at the time, are advancing proposals to revive something of the kind. The Automobile Dealers' Assn., Inc., has recognized this sentiment to the extent of appointing an executive committee to take charge of a racing program.

Digitized by Google



Digitized by Google



Digitized by Google

Chassis Specifications of Some of

MAKE AND MODEL	Ton Capacity	Wheel-base	Chassis Price	Make	No. Cylinders	ENGINE Bore and Stroke	H. P.	COOLING Water Circulation	RADIATOR Case, Make	Core, Make	Ignition Make	Electric System, Make	GOVERNOR Type	SPEED Motor in R.P.M.	SPEED Truck in M.P.H.
Acason	1	130	$4500	Waukesha	4	3¾×5½	42.6	Cent	Nat'l	Nat'l	Elec	Cent'a	Cent	Motor	1200	14
Acme	½	130	1795	Continental	4	3¾×5½	22.5	Ther	G. & O.	G. & O.	Elec	G. & D.	None		1700	20
Apex	1	130	1745	Buda	4	3½×5½	19.6	Ther			A. L.	A. L.				
Atterbury	BL	168		Continental	4	4½×5½	36.1	Cent	Own	Long	Bos	Delco	Cent	Motor		
Autocar	2½-3	156	4500	Own	4	4¾×5½	28.9	Cent	Own	G. & O.	Bosch		Cent	Motor	1800	16
Brisbane	½	110	2250	Own	4	3½×5½	19.6	Ther	Own	Cage	Bosch	G. & D.	Cent	Motor	1200	16
Chevrolet	G		490	Own	4	3½×4	22.5	Cent	Har.	Har.	Remy	A. L.	None	None		
Cloudsdale	2½	167	2500	Own	4	4¼×5½	29.0	Cent	Own	Own	Remy	West.	Cent	Motor	1400	16
Commerce	EP	134	2200	Continental	4	3¾×5	22.5	Ther	Long	Long	Elec	Big	None	None	2200	30
Dep-Elder	C	138	2750	Buda	4	4¼×5	29.0	Cent	Buda	Buda	Elec	West.	Cent	Motor	1282	14
Defiance	C	2	3400	Herschmann	4	3¾×5	22.5	Cent	Pfi.	Pfi.	Elec	A. L.	None	None	1750	25
Dorris	1½	144	2900	Continental	4	3¾×5	22.5	Ther			Elec	Big				
Diamond-T	EL	180	4613	Hinkley	4	4½×5½	32.4	Cent	G. & O.	G. & O.	Bosch		Cent	Motor		
Dodge	A	114	1220	Own	4	3¾×4½	18.6	Cent	Mel.	Mel.	N. E.					
Duplex	A	2½	2775	Hinkley	4	4½×5½	25.6	Cent	Mod	Mod	West	West			1300	25
Federal Ohio	HD	3½	3250	Waukesha	4	4¾×5½	29.6	Cent	Own	Mod.	Gaut		Cent	Motor	1100	20
Federal	SD	1	1525	Continental	4	3¾×5	22.5	Cent	Own	Long	Elec	A. L.	Hyd	Motor	1447	25
Ford	T	1	345	Own	4	3¾×4	20.0	Ther	Own	Own	Own				1800	18
Four-Wheel-Drive	B	¾	1224	Waterous	4	4¼×5½	29.0	Cent	Mel.	Mel.	Elec	N. E.	Cent	Motor	1250	16
GMC	K-16	1	1325	Own	4	3¾×5½	32.5	P. & T	Mel.	Mel.	Elec	Own	Cent	Motor	1845	20
Garford	20M	2	3400	Buda	4	4½×5½	29.0	Cent	Own	Own	Elec	West.	Cent	Motor	1085	13
Gramm-Bernstein	50	5	3600	13275 Continental	4	4½×6	36.1	Cent	Own	Long	Elec	N. E.	Cent	Motor	1150	12
Hall		3½	3600	13400 Continental	4	4½×5½	32.4	Cent	Long	Long	Bosch	Bosch	Cent	Opls		
Higrade	B-20	1½	1950	2300 Continental	4	3¾×5½	22.5	Cent	Own	C. D	Elec					
Hurlburt		1½	1495	1750 Buda	4	4¼×5½	29.0	Pump			Elec					
Indiana	35	3½	3600	4250 Own	4	4¾×5½	36.6	Cent	Mel.	Mel.	Elec	West	Cent	Motor	1150	12
International	G	1	1695	2300 Own	4	4¼×5	29.0	Ther	Own	Own	Split		Cent	Motor	1150	15
Jackson	4-WD	3½	3950	4250 Continental	4	4¼×5½	32.4	Cent	Long	Long	A. L.	A. L.	Cent	Motor	1027	12
Juenke	80	1	1650	3300 Own	4	4¼×5	29.0	Cent	G. & O.	G. & O.	Elec	N. E.	Cent	Motor	1000	12
Kalamazoo	H-2	2½	3600	13700 Waukesha	4	4¼×5	25.6	Cent	Own	G. & O.	Bosch	D	Cent	Motor	1400	15
Kelly-Springfield	K-41	3½	3500	4250 Own	4	4½×5½	32.4	Cent	Long	Long	Elec	West	Cent	Motor	1700	14
Kissel	HD	3½	3650	4475 Own	4	4½×5½	32.4	Cent	Mel.	Mel.	Elec	Kiss	Cent	Motor	1215	12
Mack	AC	7½	5500	6500 Own	4	5×6	40	Cent	Own	Own	Split	L-N	Cent	Motor	1000	10
Maxwell	430	1½	1295	1501.50 Own	4	3¾×5½	22.5	Ther	Own	Own					1800	25
Menominee	J-3	1	1695	2450 Waterous	4	4¼×5½	29.0	Cent	Own	G. & O.	Elec	G. & D	Cent	Motor		
Napoleon	B	1½	1225	1450 Own	4	3¾×5½	22.5	Cent	G. & O.	G. & O.	Elec	G. & D			1800	31
Nash	3017	1	1495	2300 Own	4	3¾×5½	22.5	Cent	Long	Long	Elec	A. L.	Cent	Motor	1500	22
Oldt-Economy	T	1	1295	1500 Own	4	3¾×5½	22.5	Cent	Own	Own	A. L.	A. L.			2000	35
Packard	E-F	6	7250	8550 Own	12	4¼×5½	28.9	Cent	Red.	Red.	Split	Dy	Cent	Motor	1000	11
Paige	51-15	3½	3495	4495 Hinkley	4	4½×5½	32.4	Cent	Nat'l	Nat'l	Bosch	N. E.	Cent	Motor	1200	17
Pierce Arrow	R-10	3	4685	5200 Own	4	4½×6½	37.8	Cent			Delco	Delco	Cent	Motor	1700	14
Reo	F	1	1295	1585 Own	4	4¼×5½	29.0	Cent	Own	Own						
Republic	19	2½	1495	2795 Continental	4	4¼×5½	25.2	Cent	Own	G. & O.	Bosch	West	Cent	Motor	1125	15
Blake	B	1	1750	2000 Own	4	4¼×5½	29.0	Cent	Own	Mel.	Bos	Dort	Cent	Motor	1150	14
Selden	3½-A	3½	4625	5175 Continental	4	4½×5½	32.4	Cent	Long	Long	Elec	N. E.	Cent	Motor	1125	14
Service	20G	1	1575	2415 Buda	4	3¾×5½	29.6	Ther	Long	Long	Elec	West.			1700	18
Signal	M	1½	1695	4275 Continental	4	4½×5½	32.4	Cent	Mel.	Mel.	Elec		Cent	Motor	1700	12
Standard	S-K	3	4000	4350 Own	4	4½×6	36.1	Cent	Long	Long	Elec		Cent	Motor	1700	10
Transit	J	1½	1425	3000 Continental	4	4¼×5½	27.2	Cent	Own	Brass	Elec				1862	28
Transport	70	2½	3750	4150 Buda	4	4¼×5½	32.4	Cent			Elec		Cent	Motor	1200	12
Triumph	B	1½	1950	2950 Waukesha	4	4¼×5	25.6	Pump	Mel.	Mel.	Elec		Cent	Motor	1800	16
Union	H	4	5174	5975 Waterous	6	5×6	60	Cent	Own	G. & O.	Elec	L-N	Cent	Motor	1000	12
Velie	W	1½	2395	2595 Own	6	3¾×5½	30.6	Ther	Own	Mel.	Bos		Cent	Motor	1550	18
Vim	F	1	1095	1595	4	3¾×4½	33.6	Ther	Own		West	West				
Ward-La France	4-A	3½	3675	5200 Waukesha	4	4¼×6	32.5	Cent	Own	Low	Bosch	West	Cent	Motor	1060	14
White	20	2½	3571	3450 Own	4	3¾×5½	22.5	Pump								
Wichita	M	1½	1400	2850 Waterous	4	3¾×5½	22.5	Cent	Own	Brass	Elec	West			1060	
Wilcox	H	5	900	5175 Continental	4	4¼×5½	32.4	Pump			Elec					
Wolverine	C	1½	1400	2700 Continental	4	3¾×5	27.5	Therm			Elec	G. & D				

Note.—As the reader will at once notice, the accompanying table of commercial vehicle specifications covers only one model of vehicle made by each manufacturer represented. Lack of space precluded a listing of every model. Nor was it found possible to list every producer. Letters were addressed to the representative manufacturers, each of whose products is sold in the Michigan territory, requesting him to furnish complete mechanical data on the model of his truck which has had the largest sale or which he expects to feature during 1921. In cases where the manufacturer did not comply with the request, the figures were obtained from what were considered the most reliable sources. In this case the models were chosen with a view to preserving in the completed table as wide a range of capacity as possible.

ABBREVIATIONS

Waa.—Waukesha
Cent.—Centrifugal
Natl.—National
Else.—Eisemann
Schab.—Schebler
V.—Vacuum
Dort.—Detail
Timk.—Timken
Detr.—Detroit
Iw.—Internal Bear Wheel
L.—Left
Met.—Metal
S.—Skid
D.—Dual
Cont.—Continental
Ther.—Thermod
G. & D.—Gray & Davis
B. & B.—Berg & Beck
P.—Pneumatic
Stron.—Stromberg
Int. G.—Internal Gear
Torb.—Torbensen
Ber.—Berling
Zen.—Zenith
B.-L.—Brown-Lipe
Sp. P.—Spring Perch
Gen.—Gemmer
Stand.—Standard Spring Co.
Stn.—Standard Wheel Co.
Sn. Pr.—Standard Parts Co.
G.—Gravity
Dret.—Double Reduction
Rowl.—Wm. H. Rowland
*****—Optional
H. & D.—Hoope Bros. & Darlington
Lygn.—Livingston
Math.—Mather
Erw.—External Bear Wheel
Lave.—Lavine
Har.—Harrison

43,000 More Trucks Made in 1920 Than in 1919

CONTRARY to expectations resulting from the more or less depressed business situation, 1920 motor truck production not only equalled that of 1919 but exceeded it by 43,000 vehicles. This gives a total 1920 production of 348,000 trucks. Production during the first three quarters of the year held up remarkably well and the gains made over 1919 in the first nine months of 1920 more than offset the lessened production of the last quarter. As to this year, present business conditions do not permit of a prediction of production with any degree of accuracy.

Digitized by Google

the 1921 Commercial Vehicles

Fuel Feed		ENGINE						BRAKES		STEERING GEAR		WHEELS		TIRES			MAKE AND MODEL
Make of Carburetor	Fuel Feed	Make of Clutch	Make	Location	Speeds	Type	Rear Axle Make	Make of Springs	Foot	Hand	Make	Placed	Make	Type	Type	Front Size	Rear Size	
Schebl.	V.	Detl	Cotta	Amid	4	Worm.	Timk	Deer	Bw	Iw	Ross	L.	Smith	Met	S.	36x8	36x 8D	Acason
Ray	V.	B. & B	Cotta	Mtr	3	Worm.	Timk	Deer	Bw	Iw	Ross	L.		Met	P.	34x8	34x 8	Acme
Strom.				Amid	1	Int. G.	Foto								P. & S.	32x3½	38x 4	Apex
Zen	V.	B. L.	B. L.	Amid	4	Worm.	Timk	Sp. Pr.	Rw.	Iw	Gem.	L.	Sm	Met	S.	30x4	40x 6D	Atterbury
Strom.	G.	Own	Own	Amid	4	Bevel	Own	Ford Sp.	Rw	Iw	Ross	L.	et al.	Wood	S.	34x5	36x10	Auburn
Zen.	G.	Fuller.	Fuller	Mtr	3	Int. G.	Russel	Math	Rw	Iw	Lavin.	L.	Smith	Met	S.	36x4	38x 8	Bethlehem
Zen.	G.			Mtr	4	Bevel		Own	Rw	Iw	Gem.	L.	Gem.	Wood	S.	31x4	34x 4½	Chevrolet
Strom.	V.	B. L.	B. L.	Amid	4	Worm.	Timk.	Sp. Pr	Rw	Iw	Ross	L.	Smith	Met	S.	36x4	36x 7	Clydesdale
Zen	V.	Detr	Acme	Mtr.	4	Int. G.	Torb	Deir	Rw	Iw	Saz.	L.	Jon.	Wood	P.	36x 4	36x 6	Commerce
Zen.	G.	Covert	Covert	Mtr.	4	Worm.	Shel	Iron	Rw	Iw	Gem	L.	Jones	Wood	S.	36x 4	36x 6	Day-Elder
Strom.	V.	B. & B	G.-L.	Mtr.	3	Int. G.	Torb	Deir	Rw	Iw	B. M	L.	Cra.	Wood.	P.	35x 5	35x 7	Defiance
Strom.	G.			Mtr	4	Int. G.	Gasel								S.	36x3½	36x 6	Denby
Strom.	V.	Covert	Covert	Amid	4	Worm.	Timk	Math	Rw	Iw	Gem	L.		Wood	S.	36x6	40x 6D	Diamond-T
Zen.	V.	Own	Own	Mtr.	3	Bevel	Own	Own	Rw	Iw	Own	L.	Kel	Wood	P.	33x4	40x 6	Dodge
Strom.	G.	Covert	Covert	Mtr.	3	Worm.	Shel	Penn.	Rw	Iw	Ross	L.	Prud.	Wood	P.	33x5	38x 7	Duplex
Zen.	V.	Detr	Own	Amid	3	Worm.	Timk	Math	Rw	Iw	Ross	L.	Sm	Met	S.	36x5	40x 8D	Fageol Ohio
Zen.	V.	B. & B	Own	Amid	3	Worm.	Timk	Math	Rw	Iw	Gem	L.	Detr	Met	P.	34x5	38x 8	Federal
Clark	G.	Own	Own	Own	3	Worm.	Own	Own	Rw	Iw	Own	L.	Flan.	Wood	S.	30x3½	32x 4½	Ford
Strom.	G.	M. & E	Cotta	Amid	3	Bevel	Own	Torb	Rw	Iw	Ross	H.	Sch	Wood	S.	36x6	36x 8	F.-W.-D.
Marvel	G.	Own	Own	Intl. E.	3	Bevel	Own	Own	Rw	Iw	Ross	L.	Kel	Wood	P.	34x5	34x 5	GMC
Strom.	G.	B. L.	Own	Amid	4	Worm.	Timk	Sa. Pr.	Rw	Iw	Ross	L.		Wood.	S.	30x3	36x 7	Garford
Strom.	V.	Own	Own	Amid	4	Worm.	Sa. Pr.	Sa. Pr.	Rw	Iw	Ross	L.	Smith	Met	S.	36x8	40x 6D	Graham-Bormstein
Zen	G.	B. L.	B. L.	Amid	4	Worm.	Timk	Deer	Rw	Iw	Gem	L.	Smith	Met	S.	36x5	36x 8D	Hall
	V.	Fuller	Fuller	Mtr.	4	Worm.	Own	Own	Rw	Iw	Lavin.	L.	Detr.	Wood	P.	35x4	36x 6	Hayes
Fleeh	G.			Amid	4	Worm.	Own								S.	36x4	36x 4D	Hurlburt
Strom.	G.	B. & B	B. L.	Amid	4	Worm.	Shel	Shel	Rw	Iw	Wal.	L.	Smith	Met	S.	36x5	36x 8D	Indiana
Zen	G.	Own	Own	Amid	3	Int. G.	Own	Stand	Rw	Iw	Own	L.	Own	Wood	S.	36x4	36x 6	International
Strom.	V.	B. & B	Own	Amid	4	Bevel	Own	Sa. Pr.	Rw	Eds.	Ross	L.	Sm	Wood	S.	36x7	36x 7	Jackson
Zen.	G.	B. L.	B. L.	Motor.	4	Int. G.	Torb	Sa. Pr.	Rw	Iw	Ross	L.	Clark	Met	S.	36x7	40x 8D	Kalamazoo
Strom.	V.	Fuller.	Fuller	Amid	4	Worm.	Shel.	Shel.	Rw	Iw	Ross	L.	Smith	Met	S.	36x4	36x 8	Kissmazoo
Zen	V.	Own	Overt	Amid	3	Chain	Own	Own	Rw	Iw	Gem	L.	Cra.	Wood	S.	36x5	40x 8D	Knight-Springfield
Strom.	V.	War	War	Amid	4	Worm.	Shel	Shel	Rw	Iw	Ross	L.	Smith	Met	S.	36x5	36x 8	Kissel
Schebl.	G.	Own	Own	Int.	3	Chain	Sp.	Math.	Rw	Iw	Own	L.	Sch	Wood	S.	36x7	40x 12	Mack
Gum.	G.	Own	Own	Motor.	3	Int. G.	Torb	Sa. Pr.	Rw	Iw	Ross	L.		Wood.	S.	33x5	33x 8	Maxwell
Strom.	G.	Detl	Cotta	Amid	4	Worm.	Timk	Tuth	Rw	Iw	Gem	L.	Smith	Met	S.	36x6	36x 8	Menominee
Schebl.	G.	Fuller	Fuller	Motor.	3	Int. G.	Clark	Math	Rw	Eds.	Lavin.	L.	Roy.	Wood	S.	34x5	34x 5	Napoleon
Strom.	G.	B. & B	Detr	Motor.	3	Int. G.	Clark	Math	Rw	Eds.	Lavin.	L.		Wood	S.	34x4	34x 6	Nash
Zen	V.	Own	War	Motor.	3	Int. G.	Torb.	Sa. Pr.	Rw	Iw	Jarux	L.	Auto.	Wood.	P.	36x5	35x 5	Olds Economy
Zen	V.	Own	Own	Amid	4	Worm.	Own	Sa. Pr.	Rw	Iw	Ross	L.		Met	S.	36x6	40x 6D	Packard
Strom	V.	B. L.	B. L.	Amid	4	Worm.	Timk	Sa. Pr.	Rw	Iw	Ross	L.	Day	Met	S.	36x5	36x 8D	Paige
Strom.	V.		Own	Amid	4	Worm.	Own		Eds.	Iw				Met	S.	36x3	40x 6D	Pierce-Arrow
John	G.	Own	Own	Amid	3	Bevel	Own	Penn	Rw	Iw	Own	L.	Prud.	Wood	P.	34x4½	34x 4½	Reo
Strom.	G.	Fuller	Fuller	Motor.	4	Int. G.	Torb.	Math	Rw	Iw	Jarux	L.	M.W.C.	Wood	P.	36x4	36x 7	Republic
B. & B	G.	Own		Amid	4	Worm.	Own	Sp. P	Eds.	Iw	Ross	L.	Day.	Met	S.	36x5	36x 8D	Riker
Strom.	G.	B. L.	B. L.	Amid	4	Worm.	Timk	Sa. Pr.	Rw	Iw	Gem.	H.	Sm.	Met	S.	34x5	38x 10	Saldon
Strom.	V.	Fuller	Fuller	Motor.	4	Worm.	Timk	Sa. Pr.	Rw	Iw	Ross	L.	Bim.	Wood	S.	34x7½	34x 5	Service
Strom.	G.	B. L.	B. L.	Amid	4	Worm.	Timk	Deir	Rw	Iw	Ross	L.	Cra.	Wood	S.	36x5	40x 8D	Signal
Strom.	G.	B. L.	B. L.	Amid	4	Worm.	Timk	Sa.	Rw	Iw	Gem.	L.	Day.	Met	S.	36x6	40x 6D	Standard
Strom.	G.	Fuller	Fuller.	Motor	3	Worm.	Timk	Deir	Rw	Iw	Ross	L.	Rec.	Wood.	P.	33x5	38x 7	Tower
Strom.	G.	B. & B	Cotta	Motor.	4	Int. G.	Clark		Rw	Iw	Jarux	L.	Clark	Met	S.	36x5	36x 10	Transport
Strom.	G.	Fuller.	Fuller.	Motor.	4	Int. G.	Clark	Deir	Rw	Iw	Gem	L.	Ros.	Wood.	S.	36x4	36x 7	Triangle
Schebl.	G.	Fuller	Fuller	Motor.	3	Int. G.	Clark	Math	Rw	Eds.	Ross	L.	Smith	Met	S.	36x6	36x 8D	Union
Strom.	G.	B. & B	Detr.	Motor.	3	Int. G.	Torb.	Math	Rw	Iw	Ross	L.	Bim	Wood.	S.	36x5	36x 8	Valle
Strom.	G.			Motor.	3	Int. G.								Wood	P.	33x4	33x 4	Vim
Zen	G.	B. L.	B. L.	Amid	4	Worm.	Timk	Merl	Rw	Iw	Ross	L.	Smith	Met	S.	36x5	36x 8D	Ward-LaFrance
Zen	V.	Fuller	Fuller	Motor.	3	Int. G.	Clark	Deir	Rw	Eds.	Lavin.	L.	Own	Met	S.	34x5½	34x 5	Whitney
Own	G.			Amid	4	Int.	Own								S.	36x4	36x 7	White
Marvel	G.			Amid	3	Worm.	Own								S.	36x6	36x 6D	Wilson
Strom.	G.			Amid	3	Int. G.	Russel								S.	34x3½	34x 5	Wolverine

A. L.—Auto-Lite
West.—Westinghouse
Bij.—Bijur
Sag.—Saginaw
Bim.—Bimel
Shel.—Sheldon
Hghy.—Highway
Phi.—Perlex
G. L.—Grant-Lee
B. M.—Burgess
Cra.—Crane & MacMahon & Standard
Hink.—Hinkley
McC.—McCord
N.-E.—North-East
Stew.—Stewart
Kel.—Kelsey
Mod.—Modine
Penn.—Pennsylvania
Prud.—Prudden
Laur.—Lauraine
Hyd.—Hydraulic
Tuth.—Tuthill
Eds.—External Drive Shaft
Hay.—Hayes
Wis.—Waconsin
M. & E.—Merchants & Evans
Bevel 4—Bevel on Four Wheels
Sch.—Schwarz
Dist.—Disterd
Split.—Split-Jorf
Dale.—Motor & Drive Shaft
C.-D.—Curran-Detroit
Flech.—Flecher
Wal.—Wahlrab
Em.—Emmis
D.—Dyneto
War.—Warner
L.-N.—Leece-Neville
Jut.—Unit with Jackshaft
Ejk.—External Jackshaft
Fed.—Fedders
Pres.—Pressure
Day.—Dayton
M. W. C.—Motor Wheel Corp.
Brem.—Bremer
Dur.—Durable
Merr.—Merrill
†—Includes cab and extra equipment.

Smaller Models Show Greatest Increase During Year

THE one important factor which enabled the truck makers to increase 1920 production over that of 1919 was the great gain in the number of three-quarter and one-ton vehicles turned out. Whereas in other years trucks of one-ton capacity and under generally totaled from 50 to 60 per cent of the production, approximately 260,000, or 75 per cent of all the commercial vehicles manufactured in 1920, were of one-ton capacity and under. Of course, Ford, with his one-ton truck output of 153,000, dominated the one-ton total, but several others, notably Reo and Olds, made their influence felt.

Digitized by Google

"How Much Time May I Have?"

(Continued from Page 17)

innocent purchaser and is not influenced in pushing its collections by the same considerations that might move a dealer who usually has something to sell.

On the other hand, some of the manufacturers prefer to have the entire distributing machinery from factory to final consumer under their own control, and the theory advanced by these is that a third party to the transaction tends to tear down the work of the sales organizations. In the case of paper sold to finance companies it is true that the dealer must indorse the paper, but that operates to restrict sales more nearly to those than can pay for cars and it enables the finance companies to obtain a wider market for their securities. Often the paper itself is not sold, but is pledged with a trustee as security for debentures issued against it, the trustee holding the chattel mortgages. But regardless of the form, three-name paper looks good to investors who eventually absorb a large volume of notes given for automobiles, and the extent to which such paper is now negotiated runs into huge figures.

The statement has been made recently that more than half the paper taken by finance companies is by them resold or negotiated through debentures, and one therefore may easily imagine how the car purchasers in this community are obtaining credit far beyond what would be possible by depending on local sources.

One of the Detroit banks has estimated that fully 75 per cent of the car purchase paper now goes to the finance companies. Now there is no way of figuring the aggregate funds so invested, but it is clear that an enormous amount of credit is being absorbed for this purpose. The amount of paper sent East of course adds to the credit supply locally, but the amount of money invested locally in the capital of the finance companies naturally depletes the credit supply of our financial institutions to the extent of such investments, for the money comes out of the home banks. Thus, to the extent that car paper is taken and held by the finance companies locally, the effect is very much the same as if the banks took the paper direct. And the ultimate difference, as stated in the foregoing, is practically one of transferring the collection business to companies especially organized and equipped for that purpose.

A prominent Woodward avenue dealer, who happens to maintain his own financing company, says that the responsible dealer is having little trouble in selling paper given him by desirable car purchasers, but that the down payment has been raised from one-fourth to one-third and much greater inquiry is made into the character of the purchaser and his ability to pay than heretofore. Due to the depression, this dealer estimates that about 20 per cent more sales are made for cash than on time, but he explains that the change has been due more to the fact that the time-payment man has been hit worse than the man who always paid cash than to any other reason.

But a distinction must be made between the financing company managed by careful officers and the one that takes all the paper offered it, regardless. Detroit has been treated to a taste of both kinds and we are now witnessing the elimination process whereby the fit are surviving and the unfit are passing. The head of one of the fit finance companies, located up-state, says that the funds of his stockholders are going to be just as carefully invested as the funds of any good bank, and doubtless his company will survive and will be of service to the community; but if it were not for wasting your time one might relate the inside stories of numerous other finance companies that "listen differently." One of the latter agreed with a Detroit bank to take only conservative paper, but the bank became suspicious and looked into some of the debtors' circumstances, with the result that the bank had to charge up the notes to the company's bank balance, and the arrangement is no more.

The credit situation for the coming six months, so far as the banks are concerned, has another angle. We have been discussing thus far, very largely, the credit supply as furnished by the finance companies and have pointed out that the extent to which they are able to sell their paper outside of Michigan adds in effect to the supply of credit for local car purchases. But the banks in the main are well supplied, and then some, with loans, and at the time of the last published statements had borrowed some $60,000,000 to help Detroit business along. They can not be expected to increase their borrowings at the Federal Reserve Banks, but as present loans are paid they will endeavor to use the funds to cut down their own borrowed money obligations. And any new paper taken on will be looked at from the angle of whether it is eligible for rediscount with the federal banks, for the greater the amount of eligible paper a bank has, the better fortified it is to raise funds in an emergency.

But notes given for purchase for passenger cars are not eligible (unless perhaps the maker is entitled to credit on his property statement) and direct financing by the banks, therefore, may have to wait until the general credit situation rights itself. It should be pointed out that loans to manufacturers of automobiles, and loans to dealers for the purpose of distribution of cars, are eligible for rediscount, provided the statements show the proper ratios; and likewise loans to farmers for tractors or for purchase of cars used in the farming business are eligible, but the Federal Reserve laws and regulations, in effect, say to the passenger car purchaser that he should be financed privately or with the surplus funds of the banks. It will not please the dealer to say that this restriction has been a good thing during the last year or two, but there was much wisdom in the limitation, as the experience of some of the finance companies has demonstrated, and had the extra load of passenger car paper been passed on to the federal banks, the history of the depression of 1920 might have been different.

However, much has been learned by experience with time payment paper, and the good record that careful credit methods have made in this class of money lending perhaps may result in a change before many years that will furnish a wider market for passenger car paper. In the meantime the dealer who can furnish a purchaser who doesn't bite off more than he can chew and can show good character and reasonable ability to pay will get along pretty well in spite of depressions and credit restrictions, and in the end the industry will be better off than it possibly could have been had credit remained as available as pop corn on a Christmas tree.

Coast Dealers Fear "Dumping"

Pacific coast motor truck representatives are alarmed over the prospective effect on their business of the importation of war trucks from Europe and their sale in this country and the suggestion of Congressman Anthony that the War Department be compelled to release between 30,000 and 40,000 trucks it now holds.

Seventy-five trucks imported from Europe were unloaded in Los Angeles recently and similar cargoes are destined for San Francisco, Portland and Seattle. These trucks have been brought here by the Slough Trading Company, of England. Their local representative is quoted as saying that the trucks originally were sold abroad by agents of the American government.

Digitized by Google



MEN and women, the world over, are irresistibly attracted to the Cadillac, first, last, and most of all, because of its everlasting and unvarying dependability.

That is the determining Cadillac thought —the thought, which is likewise a certainty and a conviction—that there is nothing they can ever ask of the Cadillac which it will not render them.

CADILLAC MOTOR CAR COMPANY
DETROIT BRANCH
CADILLAC BUILDING CASS AVENUE AT YORK STREET

C A D I L L A C

Digitized by Google

Exhibitors at 1921 Detroit Show

Passenger Cars

Exhibit	*Booth No.*	*Exhibitor*	*Address*
Auburn	81	Harvey G. Wilson	5931 Woodward Ave.
Briscoe	46-47	Frank P. Gmelin Co	5022 Woodward Ave.
Buick	53-54	Buick Motor Co	3954 Woodward Ave.
Cadillac	56-57	Cadillac Motor Car Co	Cass and York
Case	35-36	Weisman Motor Sales Co	3639 Woodward Ave.
Chalmers	31-32-33	Thompson Auto Co	2927 Woodward Ave.
Chandler	37-38-39	M. A. Young	3646 Woodward Ave.
Chevrolet	13-14	Chevrolet Motor Co	5800 Woodward Ave.
Cleveland	51-52	Siegel-Zeckendorf Co	4234 Woodward Ave.
Cole	19	Siegel-Zeckendorf Co	4234 Woodward Ave.
Columbia	8-9	Stuber, Stone & Co	4221 Cass Ave.
Daniels	91-92	Crosstown Corp	5066 Woodward Ave.
Detroit Electric	58	Detroit Electric Car Co	5860 Cass Ave.
Dixie Flyer	252	Jordan-Cole Co	3000 East Canfield Ave.
Dodge Brothers	20-21	Thos. J. Doyle	4462 Woodward Ave.
Dort	28-29	Baker-Fisk-Hugill Co	3934 Woodward Ave.
Elcar	78-79	Breed-Speicher Co	5911 Woodward Ave.
Essex	48-49-50	Bemb-Robinson Co	444 East Jefferson Ave.
Ford	85	Ford Motor Co	Highland Park
Franklin	22-23	W. J. Doughty	3745 Cass Ave.
Gardner	94	Westerdale Motor Sales Co	5940 Woodward Ave.
Handley-Knight	41-42	Knight Motors, Inc	5513 Woodward Ave.
Haynes	71-72	Potts Motor Sales Co	Cass and Peterboro
H-C-S	35-36	Weisman Motor Sales Co	3639 Woodward Ave.
Holmes	93	Holmes Detroit Automobile Co	4130 Cass Ave.
Hudson	48-49-50	Bemb-Robinson Co	444 East Jefferson Ave.
Hupmobile	24-25	Williams & Hastings, Inc	5901 Woodward Ave.
Jackson	62	Metropolitan Auto Sales Co	1444 Michigan Ave.
Jordan	74	Hugh O'Donnell	40 East Alexandrine Ave.
King	91-92	Crosstown Corp	5066 Woodward Ave.
Kessler	69-70	Smith-Glines Sales Co	5757 Woodward Ave.
Lexington	73	W. D. Block Motor Co	5940 Cass Ave.
LaFayette	1-2	LaFayette Distributing Co	5939 Woodward Ave.
Liberty	64-65	Miller-Judd Co	4846 Woodward Ave.
Lincoln	95-96	Lincoln Motor Co	Woodward and Palmer Aves.
Locomobile	82-83	Sorg Motor Car & Truck Co	4116 Woodward Ave.
Maibohm	251	Love-O'Donnell Co	4630 Woodward Ave.
Marmon	34	W. D. Block Motor Co	5940 Cass Ave.
Maxwell	31-32-33	Thompson Auto Co	2927 Woodward Ave.
McFarlan	69-70	Smith-Glines Sales Co	5757 Woodward Ave.
Mercer	82-83	Sorg Motor Car & Truck Co	4116 Woodward Ave.
Milburn Electric	55	A. D. Moore Motor Car Co	3535 Cass Ave.
Mitchell	47	Frank P. Gmelin Co	5022 Woodward Ave.
Moon	253	Harrison-Rund Co	4647 Woodward Ave.
Nash	26-27	Nash Distributing Co	7345 Woodward Ave.
Oakland	88	Detroit Oakland Co	6540 Cass Ave.
Oldsmobile	43-44	Michigan Oldsmobile Co	2637 Woodward Ave.
Overland	49-59-75-76-77	Simons Sales Co	436 West Willis Ave.
Packard	4-5-6	Packard Motor Car Co	Jefferson and St. Antoine
Paige	66-89	Paige Sales & Service Co	5840 Woodward Ave.
Peerless	37-38-39	M. A. Young	3646 Woodward Ave.
Pierce-Arrow	16-17-18	Wm. F. V. Neumann & Sons	6022 Woodward Ave.
Rauch & Lang	55	A. D. Moore Motor Car Co	3535 Cass Ave.
Reo	67-68	Reo Motor Car Co	4104 Woodward Ave.
Roamer	91-92	Crosstown Corp	5066 Woodward Ave.
R. & V. Knight	41-42	Knight Motors, Inc	5513 Woodward Ave.

Digitized by Google

Exhibit	Booth No.	Exhibitor	Address
Saxon	86-87	Saxon Motor Car Corp.	5054 Woodward Ave.
Scripps-Booth	40	Scripps-Booth Corp.	8231 Woodward Ave.
Sheridan	63	Detroit Sheridan Co.	4208 Woodward Ave.
Stanley	72	Trask-Kennedy Co.	9430 Woodward Ave.
Stearns	61	Wagner Bros., Inc.	3169 Jefferson Ave.
Stephens	69-70	Smith-Glines Sales Co.	5757 Woodward Ave.
Studebaker	10-11	Studebaker Corp. of America	2965 Woodward Ave.
Stutz	94-B	Stutz-Detroit Motor Co.	4467 Woodward Ave.
Velie	84	Velie-Detroit Sales Co.	4116 Woodward Ave.
Willys-Knight	45-59-75-76-77	Simons Sales Co.	436 West Willis Ave.
Winton	3	Geo. H. Zuver Co.	4465 Cass Ave.

Commercial Vehicles

Acason	109	Acason Motor Truck Co.	2821 Brooklyn
Baker Industrial	101-102	Wm. F. V. Neumann & Sons	6022 Woodward Ave.
Bethlehem	110	Ralph F. Schneider Truck Co.	612 East Jefferson Ave.
Cletrac Tractor	201-202	Detwiler-Reed Co.	400 Penobscot Bldg.
Chevrolet	212	Chevrolet Motor Co.	5800 Woodward Ave.
Commerce	113-114	Frank M. Foster Truck Co.	3224 East Jefferson Ave.
Denby	115	Denby Motor Truck Co.	Holbrook and G. T. R. R.
Dodge Brothers	105-106	Thos. J. Doyle	4462 Woodward Ave.
Duplex	113-114	Frank M. Foster Truck Co.	3224 East Jefferson Ave.
Federal	119-120	Thompson Auto Co.	2927 Woodward Ave.
Ford	116	Ford Motor Co.	Highland Park
G. M. C.	99-100	Owen & Graham Co.	2845 East Grand Blvd.
Gramm-Bernstein	110	Ralph F. Schneider Truck Co.	612 East Jefferson Ave.
Kalamazoo	113-114	Frank M. Foster Truck Co.	3224 East Jefferson Ave.
Kelly-Springfield	97-98	Arthur H. Murray	1531 Brooklyn
Nash	118	Nash Distributing Co.	7345 Woodward Ave.
Packard	107-108	Packard Motor Car Co.	East Jefferson Ave.
Paige	213-214	Paige Sales & Service Co.	5840 Woodward Ave.
Pierce-Arrow	101-102	Wm. F. V. Neumann & Sons	6022 Woodward Ave.
Reo	103-104	Reo Motor Car Co.	4104 Woodward Ave.
Signal	111-112	L. F. Mullin Co.	5850 Cass Ave.

Accessories

Exhibitor	Booth No.	Address
Alemite Lubricating Co.	222-223	5750 Woodward Ave.
Axton-Cozine Mfg. Co.	258-259	
American Steel Bldg. Corp.	257	971 East Philadelphia
H. M. Barnes		
Ralph L. Baker	221	4011 Hazelwood Ave.
Geo. F. Balk Sales Co.	240-241	19 Selden Ave.
Bowman-Gould Co.	249-250	4446 Woodward Ave.
Caille Perfection Motor Co.	225	6210 Second Ave.
Class Journal Co.	242	239 W. 39th St., N. Y. C.
Coffield Tire Protector Co.	246	6107 West Fort St.
Cornfield Wheel Co.	203	Anna Place
Cummings Bros.	207-208	424 Elizabeth St. West
Curran-Detroit Radiator Co.	230	1984 W. Lafayette Blvd.
Dayton Automotive Wh. Co.	206	Dayton, Ohio
Detroit Automobile Club	215	Hotel Tuller
Detroit Automotive Corp.	216	1802 Real Est. Exch. Bldg.
Double Seal Ring Co.	243	4602 Grand River Ave.
Emerson Mfg. Co.	233	3572 Fremont Place
The Englander Co.	254-255-256	5940 Second Ave.
H. J. Furer Air Compressor	239	4475 Woodward Ave.
Gill Piston Ring Co.	226	4450 Woodward Ave.
Gilmore-Winans Co.	210	306 Owen Bldg.
G. C. Goode Co.	237	4612 Woodward Ave.
Hughes & Waldner	247	3736 Woodward Ave.
Ireland & Matthews Co.	220	Beard and Chatfield
Lareo Wrench & Mfg. Corp.	248	Chicago, Ill.
L. Lawrence & Co.	231-232	231 Meldrum
Locktite Patch Co.	228	7850 Morrow
McIntyre & Nelson	219	Grayling, Mich.
Mich. Malleable Iron Co.	204-205	Delray, Mich.
Mich. Mutual Liability Co.	217	Real Estate Exch. Bldg.
Mich. Rad. & Fend. Rep. Co.	244	4823 John R. St.
E. H. Murphy	245	4856 Woodward Ave.
Noble Piano Co.	229	4841 Woodward Ave.
Pell Piston Ring Co.		4450 Woodward Ave.
R. O. Olson Co.	224	1937 Dime Bank Bldg.
Penberthy Injector Co.	234	1242 Holden Ave.
Protex Signal Sales Co.	227	Forest and Bellevue
Permaseal Pis. Ring Dis. Co.	B	
Peter F. Schneider Co.	209	101 East Grand River
A. Sisman Co.	260-261-262-263	1221 Beaufait
Taylor Rubber Co.	218	838 Penobscot Bldg.
Tide Water Oil Sales Corp.	211	4612 Woodward Ave.
Tokheim Products Co.	238	4614 Woodward Ave.
Harry Williams	235	1827 East Larned St.
Wright Super Battery Co.	236	31 Temple Ave.
Westinghouse Air Spring Co.	A	3089 East Grand Blvd.

Digitized by Google

How Far Should Service Go?

(Continued from Page 21)

was to send a taxicab after the customer and his party. By the time the taxicab got to the hotel the customer had got his car started, so there was nothing wrong with the car. This dealer handles a high class car, but even at the margin he makes he could not render much of that kind of service and stay in business.

C. M. Moller, who manages a service station for a well known medium-priced car, declares that a definite service policy is an easy thing to prepare but a difficult thing to adhere to, because so many unlooked-for conditions confront the service manager. It is possible so to organize the service department that owners are properly received, their needs ascertained and the work laid out. It is possible to establish a uniform policy of courteous treatment, but it is impossible to establish a uniform efficiency standard for labor and hold to it. Labor bulks in the quality of service. The service manager can set out to provide 100 per cent service in repair and adjustment work, but it is the mechanic who does the work. He may be in fine fettle one day and at low ebb the next, with a consequent fluctuation in his quality of work.

"Some owners give us considerable trouble," Mr. Moller said "They imagine they hear a noise in the motor and in they come, all worked up. Often they put considerable importance upon noises which have no significance whatever, but their car must be carefully examined and their fears allayed.

"They do not expect to pay for this service, yet it costs us money. Then we have owners who make demands for free service long after the period allowed has expired. Sometimes they demand it outright, sometimes they will represent that the last time their car was in the station, certain work that should have been done was not attended to, or if given attention, was not properly done. We must then refer to our records to check up on the claims. If we find no record of such orders, then there follows the usual argument. More than once I have discovered that certain claims made for free service were out-and-out attempts to impose upon us. It is all a part of the day's work and we try to keep an even temper and render service to the best of our ability."

N. J. Crone, sales manager of a concern in Detroit which has achieved considerable credit for its success-ful merchandizing of a medium-priced car, considers helping the owner to keep his car out of the service station about the best service that can be rendered. That the owner who brings his car to the station shall get courteous and satis-factory treatment and his money's worth for very dollar spent on mechanical service Mr. Crone considers axiomatical. What the dealer can do for the owner toward keeping him out of trouble and making him self-reliant in minor emergencies, Mr. Crone considers service for which the owner does not pay, but can cash in on.

"True service to motor car owners is not giving something free with the car, nor giving away parts and mechanical labor just to be a good fellow," says Walter Judd. "Service is having facilities for serving the owners of the cars you are selling, giving their needs proper attention and being ready to advise and instruct them in the basic principles of construction and operation. The owner of any make of car should be able to go to a service station where the mechanics and supervisors are experts on that make of car.

"An owner may go to some small alley garage because he understands the prices charged are less than at a regular service station, but he is apt to find that the mechanics put to work on his car know little or nothing about his make of car and the work is largely experimental. This is expensive shopping in the long run.

"Manufacturers of cars are particular about the service station phase of selling because they want the overhanling and repair work on their product done by men who know the product and will not bring undeserved discredit upon it by poor workmanship and indifferent service. For this reason the man who contracts to sell cars must saddle himself with considerable overhead which is only an adjunct to his selling organization, although the most important one. There was a time when a buyer of a car had to wait days and sometimes weeks for certain parts to be shipped from the factory because stock-keeping was not developed to its present high degree.

"Present day service includes having on hand parts for every model car turned out by the concern represented by the dealer. It embodies the facilities for and the willingness to give the best possible service to every owner of that make of car, whether he bought the car of the dealer or not. Efficient salesmen and sales methods sell cars, but it is service that keeps them sold, the quality of the car being up to required standards."

Thus far we have considered only the dealer's side of the service problem. A happy thought led the writer to Capt. W. S. Gilbreath, of the Detroit Automobile Club, in search of a broad view of the owner's side of service. One of the first things Capt. Gilbreath did was to call our attention to a double row of automobiles of many makes and price classifications standing by the curbs of a nearby street.

"See those cars out there?" he asked. "Well, they are being abused. I know that several of them have been there all night. Hundreds of cars owned in this city never enjoy the shelter of a garage. What is the result? Rapid deterioration, of course. Is the maker to blame? Is the dealer to blame? Neither of them are. The blame lies with the user. How much free service has an owner a right to demand? Just as much as his treatment of the car entitles him to, and no more.

"I have been an automobile dealer. I have been a service manager for a retail concern. I have been a traveling service man for a manufacturer, and I have been the owner of several makes of cars. I believe I have some knowledge of the service problem. My conclusion is that no dealer who hopes to stay in business can take care of a car forever and a day because he is selling cars for a living. The human element enters so strongly into service that its standardization on a basis satisfactory to dealer and owner alike is nigh impossible. In this city I believe that the service policies of the majority of dealers are equal to the best in the country and far superior to what I have experienced in many other cities.

"Fortunately there are enough owners of cars who are reasonable and considerate to make selling motor cars profitable, but there are too many owners who seem to labor under the impression that an automobile is indestructible, and if it does go wrong the dealer or the manufacturer is entirely responsible. I dare say that, with few exceptions, the owners who handle their cars carefully have no complaints about the service they get. They cannot complain if they reckon service on the basis of attention to the needs of their cars and not on the basis of how much they can get for nothing.

"In the first place, the factory must turn out a product that will sell and stay sold. In the second place, the dealers try to handle such a product. Factories and dealers together place great stress on service, because no piece of machinery used and abused as the motor car is will last forever, and the object of all their service effort is to get the highest possible efficiency and utility out of the cars for the owners. Ignorance of the character of a motor car leads many owners to make unreasonable demands. The only preventative of this evil is education, and the dealer who strives hardest to educate his customers in the use and care of their cars will get the best results."

Digitized by Google



20 miles to the gallon of gasoline
12,500 miles to the set of tires
50% slower yearly depreciation
(National Averages)

The FRANKLIN

Why it Continues to Find An Active Market

Franklin sales during December were the biggest for that month in the history of the company. In January, demand ran 15% ahead of production. Sales are continuing at this rate for three good reasons.

First—The Franklin's performance is in accord with the times—it gives results above the average at a cost considerably below the average.

Second—The Franklin, being air-cooled, is just as dependable, just as trouble-free, just as much a pleasure to own in winter as in summer.

Third—The Franklin's price is right.

What we mean by "results above the average" will be shown any time by demonstration. Here is what we mean by "a cost considerably below the average."

W. J. DOUGHTY

3745 CASS AVE.

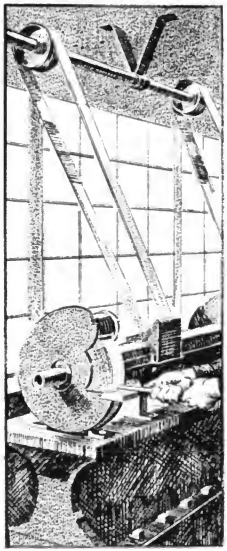
Glendale 4669 **DETROIT, MICH.**

Digitized by Google

Index to Advertisers

	Page
Ainsworth Mfg. Co.	70
Albion Malleable Iron Co.	58
American State Bank	52
Baker R. & L. Truck	82
Bassick Mfg. Co.	53
Bliss & Co., E. W.	73
Bowen Products Co.	68
Buick Motor Co.	51
Cadillac Motor Car Co.	39
Charcoal Iron Co. of America	74
Crosstown Corp.	50
D. A. D. A.	59
Detroit Seamless Steel Tubes Co.	66
Dime Savings Bank	52
Ditzler Color Co.	1
Dodge Bros.	Outside back cover
Douglas & Lomason Co.	66
Dort Motor Car Co.	5
Fisher Body Corp.	80
Franklin Automobile Co.	43
General Motors Truck	81
Geuder, Paeschke & Frey	69
Gill Piston Ring Co.	62
B. F. Goodrich Rubber Co.	79
Hayes Mfg. Co.	84
Haynes Automobile Co.	7
Hughes & Hatcher	62
Hupp Motor Car Corp.	49
Jordan Motor Car Co.	Inside back cover
Lexington	2
Link Belt Co.	71
Long Mfg. Co.	Inside front cover
Marmon	3
Mich. Copper & Brass Co.	77
Mich. State Auto School	56
Morse Chain Co.	75
Motors Metals Mfg. Co.	54
National Twist Drill Co.	72
Newton Steel Co.	65
Parsons Mfg. Co.	56
Pierce Arrow (Pass. Car)	8
Pierce Arrow (Truck)	83
Piston Ring Co.	64
Riverside Machinery Depot	67
Roberts Brass Mfg. Co.	61
Russel Wheel & Foundry Co.	78
Saxon Motor Car Corp.	4
Scripps-Booth Corp.	56
Seaman-Patrick Paper Co.	76
Sorg Motor Car & Truck Co.	47
Standard Screw Products Co.	55
Stearns Motor Car Co.	54
Victor Screw Works	63
Wheel Truing Tool Co.	45
Willete Road Construction Co.	60
Wilson Body Co.	57
Winton Motor Car Co.	6
Young Bros.	66

Digitized by Google



The above illustration is reproduced from our catalog. You should have this book. Learn all about Industrial Diamonds. Write for it today.

The Wheels are Turning

The Industrial diamond and diamond tool business of the Wheel Trueing Tool Company is on a consistent up-grade.

This is an indication of two things:

First—that industrial plants are tooling up in preparation for a sizeable manufacturing schedule.

Second—that our policy—maintained unflinchingly through twelve successful years of business—is recognized by the present-day buyer who has the opportunity to pick and choose to secure the best.

The Wheel Trueing Tool Company has proved to the indnstrial world that its diamonds, its tools and its service, guarantee minimum cost per dressing. When the demand was greater than the supply the Wheel Trueing Tool Company, though rushed to capacity, could not possibly meet the demand for its goods.

Now, however, with the resumption of buying, we are not only in a position to take care of all demands promptly, but we are gratified to be able to state, with confidence, that a great portion of the present day industrial diamond business is being awarded to us.

We deeply appreciate the confidence which the industry is placing in our product, our policy and our service.

BORTZ DIAMONDS CARBON

WHEEL TRUEING TOOL CO.

IMPORTERS OF BORTZ & CARBON DIAMONDS
MANUFACTURERS OF
DIAMOND TOOLS FOR EVERY MECHANICAL PURPOSE
2136 PENOBSCOT BUILDING
DETROIT

Eastern Office
527 Fifth Avenue
New York City
Western Office
120 Wisconsin St., Milwaukee, Wis.
Cleveland Office
Engineers Building
Canadian Branches
Windsor, Ont., St. Catherines, Ont.
Cable Address
"Wheeltrueo" Detroit

Digitized by Google

Can Automobile Body Weight Be Reduced?

BY CHARLES A. HEERGEIST

AUTOMOBILE body building derives its origin from carriage body building, which was highly developed before automobiles were thought of. The phaetons, curricles, cabriolets, landaus, broughams and coaches of two decades ago were at their highest development in style and construction. The quality of timber and all other materials entering into body building, as well as the degree of workmanship, were of the very best that could be produced. This has been proved by examining carriage bodies built 50 and 100 years ago, which are still in good condition. Such bodies as have been mentioned were built to withstand the punishment of bad roads, cobblestones and deep ruts common years ago on country roads. Buggies and two-passenger phaetons derived their lightness, combined with a remarkable carrying capacity, from the quality of timber and the perfect workmanship entering into them.

The landaus were the most troublesome bodies, considered with respect to lightness and carrying capacity, on account of the standing pillars being cut on fence rails. But this very difficulty gave the body builders exact knowledge relative to the dimensions of timber and the size of rocker-plates required to sustain the weight of the body and the six passengers, without a settling of the body on top of the fence rail between the standing pillars.

The introduction of automobile bodies fitted to a metal frame changed body builders' rules and calculations. The supposition was that the metal frame would carry the weight of the passengers and that the body rocker-plates could be dispensed with. This rule seemed to hold good for short metal frames and short wheelbases but, when the wheelbases and frames were lengthened and because of the lightness of the frames, the latter would settle, and with them the body naturally settled, too. On six-passenger closed bodies the standing pillars would bend as a result of the settling of the metal frame, and so would the body sills, carrying the standing pillars with them and, consequently, affecting the opening and closing of doors. In open bodies, the doors would bind on top.

With the lengthening of the metal frames the vertical depth increased and on many chassis this depth has been overdone. A middle course should be found so as to build the body according to the carrying capacity of the metal frame, or the metal frame should be designed in relation to the weight of the body and load which it is intended to support.

Another hindrance to lighter weight is in the introduction of proportional sizes for metal frames so that the same kind of metal frames is used on a two-passenger runabout as on a six-passenger sedan; in the first case the frame is too heavy, or, when fitting a six-passenger sedan body on the frame, it may be too light. In other words, the frame is frequently out of proportion to the weight of the body and passengers.

No doubt the weight of the automobile bodies can be reduced, but the stability of the body on the frame must be retained. If the metal frame sags, as the body is screwed to the metal frame, it carries the body with it at every downward movement; consequently the carrying capacity of the frame should be proportioned to the number and weight of the passengers, and the body built as light as is consistent with stability.

There are some members of body framework which must have certain sizes to provide strong and comfortable seats for the passengers. The width and the height of the body are most important. If the width is unduly restricted the passengers will be uncomfortable, and the body must be high enough to afford ample headroom. Both width and height add to the weight. This also applies to what is known in practice as the "knee room," which affects the length of body and adds considerably to the weight. The door and standing pillars must have a certain thickness when the windows move up and down, and a certain thickness to frame the doors and hold the door hinges and locks in their places.

If concealed door hinges are used, a certain thickness is required which cannot be overcome, and the same consideration applies to the dropping and raising of the window glasses. This holds good with all glasses that move in any direction. The sills on a body should not be less than 1½ inches in thickness and the width across must always be such that both sills rest on the frame. The top rails, cross-bars and curves must have a certain size below which the weight cannot be reduced. As for the covering of the framework, aluminum is generally used, because it is the lightest of metals, easily applied to any curved surface and readily worked. Plywood, another very light material, is used also.

According to the above observations it is seen that the weight of bodies can be reduced if the metal frame is designed so as to support the weight of the passengers and the body. The dead-weight also can be reduced if the frame is built in proportion to the amount of weight carried, the number of passengers and the style of bodies being considered. But in the construction of closed bodies, as in sedans, coaches and broughams, very little weight can be saved if stability, durability and lasting quality are to be retained.

Wills Sainte Claire Price $3,500

Formal disclosure of the Wills Sainte Claire car by distributors automatically released the statement that the price of the car has been set at $3,500 f. o. b. Marysville, Mich. When the car was first described the statement was made that its price would be not less than $3,000 and not more than $3,500. The check on preliminary estimates, made after production routine was established, indicated the upper limit. The car is sold fully equipped, including five tires.

Test the Brakes Daily

Brakes should be tested each day. Before going half a block from the garage, make a service test by throwing out the clutch and applying the brakes. If possible, select a dry spot for making this service test. Under no circumstances should the car be taken farther if the brakes are not operating properly. Drive back to the garage and see that the faults are corrected before driving out again. Automobile brakes have a definite relation to safety.

A Ruling on Car Confiscation

Federal Judge Sessions in a decision in Grand Rapids has ruled that the United States had no right to confiscate an automobile used in liquor transportation where the owner is innocent of the knowledge of the wrongful use of the car.

The verdict was in the case of Stevens Bros., Buick dealers, seeking recovery of a car which was confiscated when Arthur Volets was arrested charged with boot-legging and a small quantity of whisky was found in his car.

Volets was buying the car from the Stevens concern on installments and the latter contended that his action was without their knowledge or consent and, as they were the owners of the car, the officers had no right to confiscate and sell it at auction.

Judge Sessions ruled with the dealers and the car which had been released to them on bond pending the trial was turned over to them and the bond discharged.

Digitized by Google

The Locomobile

America's Finest Car



Four Passenger Locomobile Sportif

Mercer

Pride of America



Six Passenger Mercer Sedan

Sorg Motor Car & Truck Company

STATE DISTRIBUTORS

SALES AND SERVICE

3954 WOODWARD AVE. Glendale 2929 DETROIT

Digitized by Google

Trying to Get the Other 25 Per Cent

THE average automobile engine burns less than 75 per cent of the fuel entering the cylinders, says Motor Age. This is not only due to the fact that it is running throttled nearly all of the time, but because of the fact that the problem of really burning the fuel in the cylinders has not as yet been solved. This question of fuel economy, which was considered at the recent annual meeting of the Society of Automotive Engineers, is of primary importance. The attention of the most capable engineers in the country is now being directed to this problem and it is expected that important advances will be made toward the ultimate solution of the problem and the determination of a method of attack which will tend greatly to conserve the supply of fuel in this country.

It has been pointed out in connection with this waste of fuel that it is just as bad as if 25 out of each 100 gallons poured into the tank were allowed to leak, and, in fact, it is more harmful than if it is lost, for it results in a great many engine troubles, due to the dilution of the lubricating oil in the crankcase and the washing away of the lubricant on the cylinder walls, allowing greatly accelerated piston and cylinder wear.

As pointed out by A. L. Nelson, chief engineer of the Premier Motor Corporation, in discussing this subject at the meeting, it is possible by concentrated study on this problem to get some real results. The amount of power required to keep a car in motion at moderate speeds is very low and, consequently, the engine is required to operate at a very light throttle opening, once this speed is reached. Naturally, poor fuel economy is going to result because this is the most disadvantageous condition under which the engine is required to operate for economy. Mr. Nelson showed how economy and performance can be greatly increased by increasing the compression ratio, this being made feasible by very late closing of the inlet valve. The effect of gear ratio on economy is also brought out in a paper and some new designs of piston and inlet manifolds were described.

C. P. Grimes, development engineer of the Root & Van Dervoort Company, in discussing this subject, stated that he had recently made a number of tests which showed that greater economy resulted from carrying a much greater spark advance than is commonly employed under part throttled conditions. This economy can be gained by a method of interconnection between the throttle and spark advance mechanism when the latter is automatic, as it then must be set properly to function at full load when at the same speed and part load a greater advance can be used to advantage.

Just to show how inefficient the average car is, the Bureau of Mines has made a number of tests on cars selected at random for the purpose of determining the percentage of unburned products in the exhaust. These cars were selected at random and tested under normal operating conditions in precisely the same state of adjustment, or lack of adjustment, in which they run in normal use. This report showed that the exhaust contained only 9 per cent of carbon dioxide; that is, completely burned carbon, while the average percentage of carbon monoxide; that is, carbon only partly burned, was seven. The unburned hydrogen and hydrocarbons in the exhaust, which represent real fuel value, was more than 3 per cent. Not a single car was found in which more than 95 per cent of the fuel was burned, and the average percentage was under 75.

The thermostatic device designed for air temperature regulation and used on the buses of the Fifth Avenue Coach Company, New York, has made it possible to make an average saving of about 8 per cent in fuel. With this device, when it is considered that the company uses several million gallons of gasoline a year, the fuel bill has been greatly reduced.

While most of the papers presented at the S. A. E. meeting were highly theoretical in nature and not of direct interest to the user, they nevertheless are going to have an effect which will become a vital factor in his business as time goes on. For instance, Dr. Dickinson, of the Bureau of Standards, has been doing some research work on fuel which included some studies of conditions known to aggravate the tendency of an engine knock. In order to prove that the knock was due after all to an aggravated piston slap, a piston with excessive clearance was tried, and it was found possible readily to distinguish between the knock due to combustion phenomena and that due to piston slap.

Other tests involved the use of one or two spark plugs used separately or together, and it was found possible to bring about conditions in which firing from one plug would cause a knock, while firing from two plugs would not do so, and vice versa. The reason for this is not yet apparent, but it is thought possible that the knock can be controlled by accurate timing of the center of the explosion. It has been noted that pressures in excess of 1000 pounds per square inch may result from the knock and that the latter is invariably accompanied by a sudden rise in water temperature.

To Finance Truck Buyers

As a solution of the financing problem of the motor truck manufacturers on which David Thomas, general manager of the Motor Truck Manufacturers Association, has been working for some time, the Manufacturers' Trust, a $10,000,000 finance company, has been organized in Chicago with Col. C. R. Vincent, of the Vincent Trust, as president. Although the company has been formed largely through the instrumentality of Mr. Thomas as general manager of the association, his aim being to obtain "methods of financing those having to do with the motor truck business that would be sound and flexible enough to meet all the requirements of the motor truck manufacturer who is conducting his business on a sound safe basis" it is in no way connected with the Motor Truck Manufacturers Association itself. It is expected, however, that the members of the truck association will be given preference since the number of manufacturers that may obtain stock will of necessity be limited.

The methods by which the Manufacturers' Trust hopes to attain its purpose of meeting the reasonable financial requirements of the motor truck business from the manufacturer to the user are co-operative, but the amount of stock the manufacturer may purchase has been limited to $15,000 or 1,500 shares of a par value of $10. This has been due to the feeling that the manufacturer can well use his money in the manufacturing end of his business and that to require him to place a large amount in a finance company to finance his time sales would be like requiring him to "raise himself by his own boot straps."

1921 Truck Engines More Accessible

Greater accessibility and better balance have been the two outstanding features in the design of the 1921 motor truck engines. The trends toward detachable heads and some form of hot spot manifold for better vaporization of the incoming gases have been continued.

The detachable engine head is one characteristic of design which makes for greater accessibility in that the insides of the cylinders and the valve chambers may be easily examined without removing the cylinder blocks from the engine bed.

Another accessible feature included in one of the models of truck engines is a push rod assembly which may be removed in less than two minutes without the necessity of removing the cylinder from its base.

Digitized by Google

MAR 29 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

UNIV. OF MICH.



Fifteen Cents a Copy

Five Dollars a Year

Mixing Politics and Commerce

Those Federal Reserve Profits

A Motor Show to Be Proud Of

Fabricating Copper and Brass

(Financial Section Starts on Page 26)

DETROIT, MARCH 26, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 13*

Digitized by Google



Every Long Cooling System is scientifically adapted to the engine which it serves, thereby assuring maximum cooling efficiency. Illustration is a design recently created for The United States Motor Truck Co., Cincinnati.

THE system of automobile radiation that is recognized as paramount—supreme—in its vast field; the system that eliminates the hazards, the disappointments, the failures, by placing at the command of the producer, the skilled, experienced, *specialized services of engineers* who study the requirements of every motor for every purpose.

A Record of 19 Years

of unequalled accomplishments is assurance of valuable co-operation. Look to it then that your motor be permitted to realize its maximum of efficiency through the aid of a cooling system engineered to suit its requirements.

LONG MANUFACTURING CO., DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines.

ONG

The Recognized Standard for Tractor, Trucks and Motor Cars

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Mixing Politics and Commerce

Process Has Brought Small Satisfaction as Concerns U. S. and South America; Representation Inadequate

By SID A. ERWIN

Member of Detroit Board of Commerce

IN VIEW of the exchange situation and the general unsettled conditions throughout the world, any discussion of foreign trade seems as futile as whistling up a wind. Such reports of trade conditions as drift into the United States Bureau of Foreign and Domestic Commerce are far from satisfactory, and it is not unnatural that manufacturers should give little attention to the sale of their products abroad. Foreign trade never has been a popular subject with many Michigan industrial heads. The home market has been sufficiently large and steady to hold their entire interest. However, such is not the case now and it is not unlikely that the revival of domestic business on a new normal scale not quite large enough to require all present manufacturing facilities will develop a new and absorbing interest in foreign commerce.

While foreign trade is not a new subject to the average manufacturer, one gets the impression from the great amount of literature on this theme that selling goods in foreign countries is a problem of moment. Few manufacturers really understand, while other countries are so well drilled in it that the commercial progress of the United States is seriously threatened.

Admitting an element of truth in this assertion, is it not possible that some manufacturers in our own state know enough about foreign trade to be thoroughly disgusted and disheartened over the risks involved and the apparent imperfection of the government machinery for its promotion? After a sojourn in Central America, the northern part of South America and Cuba and Jamaica, I am inclined to think so. I cannot speak for Europe, Asia or any of the other countries, but I have learned some things about trade conditions in Central and South America which may be of interest.

Idle Ships and Congested Docks

While my trip was for pleasure largely, I started out with the desire to learn as much as possible about trade conditions as they affected my own country. To further this ambition I obtained credentials from a Detroit newspaper and, as a newspaper man, made such inquiries as time and opportunity permitted.

Before I left this country the low ebb of foreign trade movement stared me in the face. Out of New Orleans I saw hundreds of ships lying idle in the harbor for want of cargoes. Inquiries among shipmasters led me to believe they were ready to carry goods at ballast prices if they could get the cargoes.

Arriving in the harbor at Havana, Cuba, I saw more ships, a great fleet of them, the majority of them flying the American flag. They were loaded, but could not discharge because there was no dockage available. On the docks and in storehouses there were boxes, barrels, bales, crates and bags piled up. Most of these goods were from American sources. There were many reasons why they had not been moved. Lack of money to pay for them, the exchange situation, disputes over character or quality of the goods, or terms of sale were among the reasons. What struck me more forcibly than anything else was the absence of manufacturers' representatives and the apparent indifference towards the condition and ultimate fate of these products.

It was estimated that between $40,000,000 and $50,000,000 worth of American goods were stored in warehouses and on the docks. When I inquired if there were any representatives of the shippers in Cuba endeavoring to move the goods I was told that no effort had been made to do so and that there were no American representatives of the shippers in the country. The consular agents were indifferent and it was very plain that the buyers were not at all pleased with the situation. The drop in sugar and tobacco prices stopped buying and resulted in refusals to accept shipments of all kinds of commodities from the United States. While there was plenty of money the planters and business interests in Cuba were holding on to it.

If this Cuban situation is characteristic of general foreign trade conditions then American manufacturers are making a serious mistake in not having sufficient, competent personal representation in foreign markets. Energetic American agents of these exporting companies could move these goods. Conversations I had with Cuban buyers indicated this strongly. In one instance I proved it. I came across a cargoload of eggs shipped from Omaha by ferry from Key West to Havana. There was some dispute over the price, but as all bargaining had been done by letter, no satisfactory results had been attained. I wired the shippers for permission to act as their agent, explaining that unless something was done to dispose of the eggs they would remain where they were until they rotted.

Receiving permission to dispose of them I immediately opened negotiations and turned the entire carload, with the exception of 168 cases that were unfit for sale, over to the consignees. The shippers lost some money on the shipment, but nowhere near as much as they would have lost if I had not taken the case up.

I recognize that the heavy lightering charges from ship to dock are a serious obstacle to profitable trade with Cuba. It costs more to lighter goods from ship to dock than it does to ship from New Orleans or New York to Havana, but the fallacy of trying to sell goods in any foreign country without adequate American representation on the spot is a greater obstacle. Cuban buyers prefer American goods to those from any other country, but if their complaints to me are well founded, they are far from pleased with the selling service rendered. Compared to what buyers get from English, French, Spanish traders in the way of service, American manufacturers fall far short of what is demanded.

Dependence upon government trade representatives or upon native agents has been productive of much grief. The stories I heard during my travels convinced me that our trade representatives, consuls and trade commissioners, with exceptions of course, have been attending more assiduously to playing administration politics than they have to promoting American trade.

An Interview With Gomez

In fact, I believe the charge that under the recent administration the State Department's political activities hampered the work of the Department of Commerce is well founded. When I landed in Havana the U. S. S. Minnesota lay at anchor in the harbor and General Crowder was in Havana ostensibly to pave the way for the lifting of the moratorium. At that time the presidential election returns were being canvassed and former President Jose Miguel Gomez claimed to have been elected, although through a coalition between Zayes and Menocal, Zayes was declared the successful candidate. Soon after Secretary of State Colby left for his South American trip, Assistant Secretary of State Norman K. Davis sent General Crowder and the U. S. S. Minnesota to Cuba.

It was rumored on the island that the presence of General Crowder and the Minnesota had a political significance. If so, neither the man nor the ship affected the election results. I had an hour's interview with Gomez during which he told me that his re-election to the presidency meant much to him and certain American interests. He mentioned, among other things, that he had made Mr. Davis a high executive official in the Trust Company of Cuba, a $10,000,000 corporation, and he expected Mr. Davis to aid him in his campaign in every way possible.

The nature of the rumors and the character of the political talk left the impression with me that it would be easy to create a resentment against any country by too much political activity, and that this resentment would more or less affect trade relations. It occurs to me that manufacturers who wish to establish profitable commercial relations with any country can accomplish a lot of good by urging a divorcement of State Department activities from those of the Department of Commerce. While there may exist a distant relationship between the two, the more distant it is the better. Where the relationship is too marked

Digitized by Google

the temptation to use trade agents for political activities becomes too strong and trade promotion is bound to suffer.

When I was sailing out of Hanava I counted 128 ships, most of them flying the American flag. I was told that some of these ships had been waiting weeks for a chance to unload their cargoes, but that the congestion on the docks and in warehouses because of the enormous quantity of goods undelivered for one reason or another had prevented. In the meantime other countries were going to great lengths to establish their own trade relations on a firmer basis. They were making concessions right and left. They were not complaining about losses, but cheerfully accepting them with the conviction that losses now would be more than offset by profits of the future.

Proceeding on my journey to Costa Rica, the Canal zone, Columbia and Venezuela, I found much the same conditions as existed in Cuba. The feeling against the United States was far from cordial. Politics on one hand and exploitation by adventurers traveling under American protection on the other have caused our Central and South American neighbors to lose faith in us. The people of these countries do not like the character of some of the trade methods by which they have been victimized. The legitimate American shipper is suffering for the sins of others. The only remedy is better government supervision of foreign trade and more competent trade representatives.

The exchange situation in the Canal Zone, Columbia, Costa Rica and Venezuela is bad. The rate of exchange runs from 7 to 24 pesos to the American dollar, or from 7 to 24 of their dollars to one American dollar. This condition, combined with the depression in business and political unrest, has resulted in an accumulation of a great quantity of American goods at every port of entry. The absence of competent trade representatives and personal agents of American shippers is making the situation more acute. There never has been a time when honest, capable American trade agents were so needed in these countries. Other countries are well represented and they are meeting with considerable success as a result.

Land-Grabbing Resented

Panama has developed a feeling of bitterness against Americans because of meddling-grabbing without the diplomatic formalities prescribed by the Hay-Varilla treaty. The Government wanted some territory at Cristobel-Colon for military purposes and the purchase was consummated without diplomatic overtures. President Porraz told me that this kind of policy on the part of the American government was resented, but he professed the utmost friendship for the American people. Anti-American feeling had been increased, he said, by the fear that the United States government would seize the island of Taboga, in Panama Bay.

This island is a wonderfully fertile spot and highly valued by the people of Panama. It has no value for military purposes, but evidently some interest is beginning to rest upon possession of it. In December, 1920, General Pershing was in the Canal Zone. He was invited to dine with President Porraz, of Panama. Pershing crossed the Canal from Cristobel-Colon City and put up at the Tivoli hotel. When he left the hotel with his staff to keep the dinner appointment his car was surrounded by more than 1,000 natives who hurled imprecations at him. His chauffeur and members of his staff were were beaten and the general was saved from violence only by the intervention of the police and United States cavalry. The natives believed Pershing was there to take the island of Taboga away from them.

The former administration tried to buy land in Costa Rica for a recreation ground for American soldiers, sailors, marines and civilian employes in Panama and the Canal Zone, but the Costa Rican government blocked the move by passing legislation prohibiting the sale of land to the government. These are political incidents, but they are important for they show what consular and diplomatic forces have been doing. It is patent to me that the majority of them have been political agents sent into this territory, not to further trade relations, but to play politics on a peanut scale, the effect of which has been to estrange rather than cement the Americans in trade and amicable relationship.

In marked contrast to this kind of consular and trade service there is the European commercial service, well organized, efficient, well paid and so departmentalized that the diplomatic and trade promotion divisions do not cross wires. The difference between the treatment accorded traveling Americans by our consular agents and that tendered Europeans by their foreign representatives is most marked. They are more courteous and more accommodating. They are constantly on the alert to create good feeling for their own industrial and commercial interests. The are equally quick to take advantage of the slightest blunder of the American agents. It seems to me we have too many foreign agents making mistakes, but are singularly lacking in representatives competent to further the interchange done.

Trade commissioners and consular agents of other countries are encouraged to give their best efforts, not only by the remuneration they receive, but also by the concessions in prices, in exchange rates, in packing and manufacturing methods followed by the industrial and commercial organizations back home. They go great lengths to please, even though the concessions made are not based upon the soundest economical principles. We seem to have been selling on the absurd principle of take it or leave it, but pay for it. We have been view-

(*Continued on Page 36*)

Those Federal Reserve Profits

By PHIL S. HANNA

WHEN it was reported that the Chicago Federal Reserve Bank made gross profits of 195 per cent for 1920 there were plenty of critics who jumped to the conclusion that business was suffering under an unnecessary expense. Others thought that the member banks should receive larger dividends, and still others figured that the Reserve Banks should begin payment of interest on accounts. But few of the critics remember that back in 1916 and 1917 some of the Reserve Banks did so little discount business that they scarcely made expenses. The forget that the great bulk of discounting done by the Reserve Banks the last two years has been emergency business and the profits therefrom have been emergency profits. The main function of a Federal Reserve Bank is to hold reserves that are actual and liquid, and it is well known that there isn't a great deal of profit in running a bank where at least 40 per cent of the deposits must be kept in available gold.

The framers of the Reserve Bank act so created the system that an absence of liability to pay interest on deposits of the member banks would offset the lack of earning because of carrying large non-profit bearing reserves. With business functioning normally the Federal Reserve Bank's discount and open loans activities become secondary and of minor importance, but the discount and money issue feature is not service which the Reserve Banks can exercise alone. When the members begin to ask for currency in exchange for notes, the Reserve Banks have to borrow government money and for the use of currency so obtained the act requires the banks to pay over to the Government a certain part of net earnings.

During 1920 the Chicago Reserve Bank paid the Government $10,294,480. As a tax for the use of government currency averaging $531,074,275—which is less than 2 per cent. Had the law set a tax of even 5 per cent per annum on the average circulation, the tax resulting would have exceeded the entire profits of the Chicago bank.

During a pestilence or other calamity it is manifest that the doctors and undertakers are apt to enjoy abnormal incomes, and reversely, during years of low mortality an insurance company must build up sufficient reserves to care for losses during higher mortality years. As a result of 100 years experience we have the American Experience Table which tells closely what the average death rate will be. In the case of the Federal Reserve Banks there was no guide corresponding to the insurance experience to take us by and it was little expected that right off the bat there would come a peak demand for the discount, loaning and circulation services of the Reserve Banks. But the load came and during 1919 and 1920 profits naturally were large.

Now there is first an unwholesome conception of where these profits have gone. For the benefit of the layman it may be pointed out that the first profits above expenses go to pay a 6 per cent dividend to the member banks on the amount of their paid-in capital stock. Then the Government comes in for the entire remainder, except 10 per cent, which is carried to surplus until surplus equals 100 per cent of subscribed capital. This means, briefly, that after the stockholders receive 6 per cent and surplus fund is built up to an ample margin, the surplus gains of the system go right back to the people. The Government is obliged to use the profits turned over to it either by building up the gold reserves against United States notes or reducing the outstanding United States bonds. Inasmuch as the reserve against United States notes is ample, the latter is the more likely disposition of the funds.

Therefore, within a few years when the surplus accounts have all been built up to statutory limit, 90 per cent of the profits of the banks above the 6 per cent dividend to the member banks probably will be used in buying up outstanding government bonds and the people will be saved an equal amount of taxes thereby.

Taking the Chicago bank as an example, net earnings above expenses were $25,875,749. The 6 per cent dividend consumed $732,769; surplus received, $14,688,499, and the Government got $10,394,480. Had surplus account been previously built up, the Government would have received about $22,000,000.

There arises a feeling of security from the fact that so many of the Reserve Banks have built up comfortable surpluses. All the districts except Dallas show surplus equal to subscribed capital, or twice the paid-in capital. On March 4 combined capital and surplus of the 12 banks was $202,361,000, and, should occasion demand, an additional $100,865,000 (balance of subscribed capital) would be available.

But after all, why criticise? It is pitiable that we can't let well enough alone in this wonderful U. S. A. In trying to achieve 100 per cent perfection we may refine the mechanism so minutely that it won't work at all. The fact is, the country has a "good thing" and many people do not know it, including some well-intentioned statesmen.

Digitized by Google

A Motor Show to Be Proud Of

1921 D. A. D. A. Exhibit Largest, Most Attractive City Has Seen; Attendance Excels; Sales Encourage

By MARC BRAUN

WITHOUT a doubt, the Twentieth Annual Automotive Show of the Detroit Auto Dealers' Association, which opened in the new Morgan & Wright manufacturing unit, at Jefferson and Bellevue avenues, last Saturday evening, and will close this evening, is the most attractive exhibit ever staged in Detroit. Also it is the largest in number of exhibitors, and early in the week gave promise of exceeding the Association's fondest hopes in the way of attendance. Whether from the standpoint of business done it will break records cannot be foretold at this writing, for this is Tuesday and whatever the dealers and salesmen may say now cannot be accurate. However, sales started well Saturday night, 62 cars having passed into the hands of users, and reports for Sunday and Monday were even more encouraging.

Attendance marks for 1920 were passed easily Saturday, Sunday and Monday. The total for the opening evening was 8,079 paid admissions, as against 6,321 for 1920; for Sunday, 10,217, as compared with 7,533, and on Monday, 9,183, as against 8,177 last year. The crowd got out early Monday morning more than 6,000 persons passing through the turnstiles between 10 o'clock and noon. Monday night the booths were jammed, and reports of dealers to the show management showed a profitable day's sales, with increases over both Saturday and Sunday.

Cars began changing hands within a few minutes after the show started. The Frank P. Gmelin Company reported the sale of a five-passenger Briscoe touring car within half an hour after the doors were thrown open, and a little later in the evening disposed of a Mitchell sedan. Walter Judd reported the sale of five Liberty cars: the Paige Sales & Service Company, two Paiges; Knight Motors, one Handley-Knight and one R. & V. Knight; Smith-Glines, two Stephens Sixes; Harrison-Rund, one Moon; Frank-Kennedy, one Stutz; Steamer; Weisman Motor Sales, one H-C-S; Thompson Auto Company, two Maxwells; Cadillac Motor Car Company, one Cadillac, and the Potts Motor Sales Company, two Haynes. With the larger booths, possible by reason of the handsome space provided in the Morgan & Wright building, it was no uncommon sight to see four or five salesmen explaining one model to as many prospects.

Nor was the interest confined to the main building. Crowds have been surging in and out of the Annex, which houses passenger cars, trucks, trailers, tractors, accessories and the airplane exhibits. The latter are proving a drawing card of no mean pulling power. One accessories dealer reported that his sales the first three days of the show were 50 per cent greater than he had hoped.

Much credit is due H. H. Shuart, manager for the D. A. D. A., for the splendid decorative scheme and the arrangement of the exhibits. Mr. Shuart has shown an eye for real beauty combined with utility, and the crowds as well as the exhibitors are unstinting in his praises.

Automobile shows have become a fixture in the life of the people. In fact, there is plenty of evidence to show that these annual displays of the automotive industry are becoming more popular every year. Gradually every city and town in the country is falling into line with an exhibit, be its dimensions great or small. Where a dealer organization does not exist, the show is promoted by the individual dealers, and in a good many cases where some of the agents do not care to stage a show there is to be found at least one more enterprising who make it a personal affair, and generally does not regret his efforts. Reports from the scores of communities where shows have been held thus far this year indicate that while in some cases the business at the show has been nothing to brag about, the event was the means of calling to life the latent interest and buying power.

This year the shows—all the shows—have a greater importance than in former years. They are being held much more for the purpose of bringing about a buying revival than in this city. That seems quite logical inasmuch as Michigan is the automobile manufacturing center of the world. Some people think so only because of the fact that the largest producer of automobiles is located in Detroit. They forget, however, that it is not on account of Ford that Detroit is the premier city in the industry, but rather by reason of the fact that there are about twice as many automobile makers located in and about the city as in any other city in the world.

There are a number of reasons why the 1921 show of the Detroit Auto Dealers' Association is such an impressive affair. For one, for the first time it is housed in a building which is more appropriate for it than most any of the structures pressed into service in other years. The dealers all were able to obtain more space and thus could make a much more adequate display. At that, it is probable that if the show management had been able to measure in advance the big demand for exhibition space, an effort would have been made to obtain another floor in the main show building.

There are two cars which, strictly speaking, were brought out for first time in public at this show—the Kess-Line Eight, made by the Kessler Motor Company, Detroit, and featured by the Kessler Super-Charge engine, and the Friend Light Four, made by the Friend Motors Corporation, Pontiac.

Shown for the first time in Detroit are half a dozen fine cars, which, however, are already in regular production. In fact, there are many of them already in the hands of users. The list may be headed by the Lincoln, made by the Lincoln Motor Company, Detroit; the LaFayette, made by the LaFayette Motors Company, Indianapolis; the Gardner, made in St. Louis, Mo., by the Gardner Motor Company, Inc.; the Hanson, made in Atlanta, Ga., by the Hanson Motor Company; the Handley-Knight, made in Kalamazoo by the Handley-Knight Company; the Harley, made by the Harley Motor Car Company, Kalamazoo; the Moon, made in St. Louis, Mo., by the Moon Motor Car Company; the Daniels, a Pennsylvania product, made by the Daniels Motor Car Company, Reading, the H-C-S made by the H. C. S. Motor Car Company, Indianapolis; the Sheridan, a new General Motors product made in Muncie, Ind.; the Ace, made in Ypsilanti, by the Apex Motor Car Company.

In addition to these there are a score of new models made by old timers or concerns whose other models have been handled in the city for some time.

Many ingenious models, demonstrating working parts, have been prepared by manufacturers.

If the cars on display indicate the season's tendencies, bright colorings, luxurious designs, gorgeous upholsteries and devices which will insure simple operation predominate. There are many novelties. Marvelous bodies, in natural wood finishes, metal parts in polished nickel and steel, continental type headlights and fancy steps in place of running boards are evident in many designs.

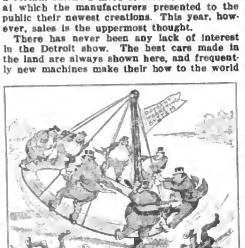
The art of the "carossiere" is displayed strikingly in the Packard, McFarlan, Cadillac, Pierce-Arrow, Lincoln, LaFayette, Marmon, R. & V. Knight, Roamer, Peerless and Paige exhibits. "Carossiere" is the correct term in French for elite coach building.

Bodies generally seem to run to the low rangy models, with speed and comfort in every

(*Continued on Page 37*)



Morris, for Geo. Matthew Adams Service.
THE LIFE PRESERVER MAY SAVE HIS WAGES



Beer in the Fargo Courier-News.
FUN FOR SOME

Digitized by Google

Reported Cleveland Cliffs Will Build a Steel Plant

Of interest to Michigan is the report that the Cleveland Cliffs Iron Company, which has properties in this state and in Ohio, Minnesota and Wisconsin, is preparing for extensive expansion, and among other things will put up a steel plant. In this connection the Wall Street Journal prints the following from Chicago:

"Further indications that the Cleveland Cliffs Iron Company, holder of extensive property on the east shore, from Marquette to the Isle, intends to go through with the plan for the construction of a great steel plant on the east side is shown in a $7,061,000 real estate transfer just filed with County Recorder Wells.

"All holdings of the Cleveland Cliffs West Virginia Corporation under this transfer are conveyed to the new Cleveland Cliffs Iron Company, an Ohio corporation which was organized on December 20, 1920.

"Property of the concern in Ohio, Michigan, Minnesota and Wisconsin, much of it in rich iron districts, are transferred to the Ohio corporation.

"It was announced by officials of the company that the transfer is only a formal requirement to place the property on the records of the Ohio company and that stockholders in the West Virginia concern have received similar holdings in the new incorporation. All of the properties in various cities have been transferred also. The transfer is understood to mean in the business world that the company will in the near future begin the big construction program on the east side, thus making Toledo the production base for all raw materials from its holdings in other states.

"The Cleveland Cliffs concern realized the property taken over by the Government during the war for the building of the big nitrate plant.

"The Government now is involved with the company, which is seeking to collect large rental and also damages alleged done to the property."

ELECTRICAL BUSINESS IMPROVES

Manufacturers of electrical equipment report a general improvement in business, although buying is not brisk, nor will it be until the financial situation improves. It is known that there are construction plans which call for a great amount of equipment, but the utilities in question are held back by their inability to obtain money. The Pacific coast utilities are showing the greatest activity at this time. The California Edison Company, for instance, has a 15-year program of construction work that will cost $200,000,000. Some of the equipment has been ordered.

WHITE ADDRESSES S. A. E.

Prof. A. E. White, director of the Department of Engineering Research at the University of Michigan, was the guest Friday evening of the Detroit Section, Society of Automotive Engineers. He spoke on "The Relation Between the Industry and the University of Michigan."

In the list of new corporations published in the issue of March 12, Michigan Manufacturer & Financial Record, the name "General Safety Corporation" should have read "National Safety Corporation," which is the correct name of a Detroit concern established to provide expert safety and fire prevention services. The mistake is acknowledged and this means taken to correct it.

CANADY FORMS ADVERTISING CO.

The United States Advertising Agency has been formed in Toledo, O., by Ward D. Canady, Geoffry J. Dwyer, G. R. Carpenter and Hubert O. Bennett, all formerly connected with the Willys-Overland Company. The firm has been incorporated under the laws of Delaware, with capital of $50,000. Mr. Canady has been advertising manager of the Overland company for the last five years. Mr. Dwyer was in charge of publications and publicity. Mr. Carpenter was connected with the advertising department and Mr. Bennett is the son of George W. Bennett, who was at one time vice-president and general manager of Willys-Overland. The new firm was formed after a deal had been made by Mr. Canady for the handling of the advertising of the Willys-Overland Company. The Overland account has been handled during the last few years by the Martin V. Kelley Company.

FORD ON THE BUSINESS SITUATION

Henry Ford and his son Edsel made an inspection of the Detroit, Toledo & Ironton Railroad last week. To a representative of the Toledo Blade Mr. Ford is quoted as saying that he sees America more than half way along the road leading to normal industrial production and the purchasing power of a dollar increased by 50 per cent.

"I don't know precisely what 'normalcy' means," Mr. Ford said, "but I know the future rests in the state of mind of the American people. Heaven, yes, I am in a state of mind. But there must be a willingness to work, to do the task at hand, and where that is found there is work for everybody. There has been a period when we have forgotten the need for digging in real estate in the more illuminating prospect of buying real estate."

Railroad Needs Told Flint's Traffic Club

Flint's Transportation Club, an organization of railroad men brought into existence two months ago, entertained 150 members and guests at the first annual banquet in Hotel Durant, last week. F. A. Butterworth, Chicago, assistant general freight agent of the Pere Marquette, was the principal speaker, his address being a review of the general railroad situation.

"The charge that the high railroad rates are largely responsible for the present business depression is without foundation," Mr. Butterworth said. "The business depression was bound to come. The railroads are suffering from two general conditions, which, in turn, will result in a revision of rates downward."

Flint's contribution to freight volume was discussed by George C. Conn, director of traffic of the Buick Motor Company. In 1920, he said, the industrial establishments of the city produced more carload freight than the four leading agricultural products of the whole state. This increase in industrial business and the work of transportation organizations of this character has brought railroads and shippers closer together.

ENGINEERS ORGANIZE COMPANY

Frederick H. Mason, commercial engineer, has organized by Frederick H. Mason Company with E. E. Tipton and R. C. Coberly as associates, and will furnish commercial engineering service. The office is in the Moffat building, Detroit.

TRIPP MFG. CO. RESUMES

After having been practically idle four months, the Tripp Manufacturing Company, Allegan, is reported to have resumed production with a full force. It was said that the demand for its products, shock absorbers, locks and steering wheels is nearing normal.

Former Kalamazoo Man Invents a Steam Motor

George Coats, formerly of Kalamazoo but now living in Indianapolis, has developed a new type of steam car which he believes he can sell for $1,000. It is a five-passenger, six-cylinder car with a fire and water tube boiler so constructed that it can be used under any type of hood. The steam line leads direct to the rear axle, which is an engine and axle in one unit. In this axle the power is divided, part sent to one half of the housing and part to the other half. The engine is no larger than an ordinary axle gear case. Differentials are eliminated.

The housing of each half of the axle carries three fixed cylinders, set at 120 degrees. These cylinders are like those of the automobile engin, with poppet valves, pistons and connecting rods. The bore is 2⅜ inches, stroke 3 inches. The three connecting rods in each half are pivoted to a crank pin integral with the drive shaft of each wheel. At a speed of 40 miles an hour, the engine is running at 500 revolutions per minute.

An overlapping stroke is obtained. Before one cylinder is entirely off pressure, another has begun to take hold, and the third is completing the motion. In actual tests the cars are said to have done 20 to 40 miles on one gallon of kerosene. With this type of steam and water cycle, one filling of the water tank runs the car from 300 to 500 miles.

The exhaust steam is taken by return pipe to the condenser which is located in front of the boiler in the position of the ordinary radiator. The initial heating for starting is electrical, controlled by switch on the cowl board.

An automobile expert has declared that the engine had power enough to pull a switch engine. Yet it is smooth and flexible. The range is not three speeds or four speeds, but any speed from drifting to 60 miles an hour, the whole range being controlled by one lever on the steering wheel. There is no gear in the power line of the car, and the power is never separated from the load to go from one speed to another.

MICHIGAN PAYROLLS GROWING

Considerable increase in the payrolls of Michigan manufacturers during the last month is reported by Harry B. Martin, secretary of the Michigan Employers' Casualty Company, Lansing, who has been calling on employers in various parts of the state. Competitive selling is here to stay, he says, and manufacturers who have hustled for business are operating. The head of one Lansing firm, which found nearly all of its orders cancelled, packed his grips and personally went out and got business, so the company is operating to its full capacity. Mr. Martin says Lansing is doing better industrially than any other city in the state.

MAKING 50 WASHERS DAILY

An average production of 50 electric washers a day has been reached at the plant of the Universal Utilities Corporation, in Alpena, where output for some time had been considerably reduced. About 35 men are now employed.

LAUZON FURNITURE ON FULL TIME

Full time operation has been resumed at the plant of the Lauzon Furniture Company, Grand Rapids, which makes living room furniture and phonograph cabinets. The men whom the company laid off the first part of the year are back on the job.

NEW ADRIAN MANAGER

John W. Koehn has become general manager of the Adrian Brass & Aluminum Castings Company.

Digitized by Google

Life and Industry in India

Detroit Engineer, Returning After Three Years, Tells of Some of the Trade Opportunities Open

NOT MORE than a dozen tiger leaps from the jungle in the half-Oriental, half-Occidental city of Jamshedpur, India, two blast furnaces pour their fiery liquids regularly to supply the steel needs of two civilizations a thousand years apart.

One of these furnaces represents little or no investment, is operated by an ancient and honorable punjab and his two sons and has an output of 10 to 15 pounds of very good steel a week. For more than 1,000 years this "plant" has been the possession of one Hindoo family, and in every respect is no different today than when its originator first learned his primitive art.

The other plant represents an investment of $250,000,000, employs 42,000 men and women and prodnces monthly 17,000 tons of raw and fabricated steel. Snch extremes in industrial proficiency and efficiency seldom and found in such proximity.

George E. Maxiow, who ran across the ancient blast furnace, was an American engineer supervising the construction of the great steel mills of the Tata Iron & Steel Works at Jamshedpur, a new industrial center which is growing up at the very edge of India's impenetrable jungle. Mr. Maxiow recently returned after three years resitence in Jamshedpur, and is now general superintendent at the plant of the Detroit Range Boiler and Steel Barrel Company.

Following his discovery of the ancient furnace Mr. Maxiow paid many visits to the open-air plant for the purpose of studying the primitive steel-making methods. The Hindoo punjab, as all skilled workers in India are known, apparently operated his furnace as a side line, his main occupation being that of a farmer. The industrial program has followed was about as follows:

On Monday he collected his clay and built his furnace, the character of which can be judged by the accompanying illustration. The collection of ore, which lies upon the surface in clods in ore regions of many acres, limestone and delamite kept the old man and his sons busy all day Tuesday. On Wednesday he collected his wood and burn d his charcoal, charged his furnace on Thursday, and retired to his farm to spend Friday and Saturday.

Sunday morning he returned and connected to the furnace his blowers, consisting of two goatskin bellows attached to the furnace by means of bamboo pipes. This work completed, the process of steel making began. Until late in the afternoon either the old man or one of his sons did a sort of Dervish dance on the bellows. Standing with one foot on one bellows and the other foot on the other, the operator patiently and laboriously pumped air into the furnace.

At various times during the afternoon the old man tested the molten metal with an iron rod. When satisfied with the smelting, he knocked a hole in the side of the furnace and permitted the metal to flow into a hole in the ground, and left it to cool. This lump of metal he bartered for rice or such other provisions as he needed, to some metal worker, who converted the steel into ax heads, knives, arrow and spear heads.



EXTREMES IN INDIAN INDUSTRY

The larger photograph shows a section of the $250,000,000 mills of the Tata Iron & Steel Works, at Jamshedpur, India, while in the insert is shown the primitive blast furnace of the Hindoo punjab, only a short distance away.

Although Mr. Maxiow spent three years in India, during which time he traveled over much of the country, he never found another furnace of this type and so far as he could learn his punjab friend had a monopoly on primitive steel making in that part of India.

It is quite likely that such simple smelting methods were sufficient before India's more enlightened Parsees and her foreign residents began to thirst for Western civilization and modern inventions. Certainly the punjab and his chimney pot furnace would fall miserably in meeting India's steel requirements today. Railroad construction is increasing yearly, steel reinforced structures are replacing mud huts, rivers are being bridged and machinery is taking over the age-old hand methods of production.

The great Tata steel mills, which Mr. Maxiow helped to build, are but one indication of the coming industrial development of India. While they lie in a region having an inexhaustible supply of iron ore, to obtain which no mining is necessary, the nearness of material supply was by no means the main incentive for establishing the plant. India needs all the steel it can get for the next 100 years, Mr. Maxiow says.

The Tata plant was financed by Parsees and Armenian Jews, the chief promoters being Sir Sassoon David, an Armenian Jew, and Sir Dorab Tata, a wealthy Parsee, or Indian capitalist. C. C. Perrin, New York, was the consulting engineer. When Mr. Maxiow left Jamshedpur, plans were being made to enlarge the plant to three times its capacity and employ 80,000 natives in the manufacture of steel rails and structural shapes.

Within easy hauling distance of the plant there are acres and acres of splendid ore which seems to have been broken out of the earth by some tremendous upheaval.

"I do not believe," Mr. Maxiow says, "that the supply can be exhausted in a thousand years. A rail line has been run into these fields and gangs of natives pitch the ore chunks into the cars. That is about the extent of the mining. Within easy distance of these deposits there are limestone, coal, delamite and magnesite deposits. Money to finance these operations appears to be equally plentiful. The Parsees, or capitalists; the Janes, or merchants; the Mawarries, or rice, corn and jute growers, and the Bengals, or professional men, are all wealthy and quite ready to invest in industrial development.

"The greatest need in India today is manufactured drugs, machinery, tools, shop equipment, stoves, steel barrels, small steel products and electrical goods. So far as I have been able to see there has been no real energetic selling done by foreign concerns. Various foreign companies have sent agents into India, but the major part of their efforts to develop business have been conducted from hotel verandas.

"Their idea seems to be to wait until some Rajah wants something bad enough to come after it, which to an American's mind is a poor way of building up foreign trade. Detroit and Michigan manufacturers many of the commodities India needs and is ready to buy. I believe that if the manufacturers interested in foreign trade would club together and send a representative to India it would be well worth the cost.

"Labor is never a serious problem in India.

(Continued on Page 38)

Digitized by Google

Copper and Brass Milling

How This Industry Overcame Obstacles in Michigan; What It Has Accomplished; Something About Processes

THIS is an age of steel, but there is a lot of brass in it. It takes a lot of brass to make the average man a going concern. One kind of brass the successful man needs, and usually has plenty of, is not made in a mill; therefore we will not talk about it. The other kind he has thrust upon him in one form or another. He has it in his shoes and he fastens his belt and sometimes his trousers with it, although it may bear another label. His watch is full of it. His automobile would be a hopeless heap of junk if there was not brass in it. In his home the electricians have camouflaged the lighting wires with brass. If he has the nightmare in the night he is likely to bump his head on brass.

Wherever there is brass there is copper, because brass is a fusion of copper and zinc; so that if more is said about brass than copper, just remember that copper is a silent partner in everything to be said hereafter. This being an automotive center, where one out of every few inhabitants own an automobile, and the rest either run around in one or are run over by one, the most pointed remark we can make about brass is that it is a vital element in the carburetor, which in turn is the heart of the motor car. If that little needle valve, which is made of brass, is not made right, the carburetor is no good, and neither is the rest of the car. If the brass with which the needle valve is made is not mixed correctly, the carburetor will go on the blink; therefore the brass industry pricks us just where we live, ride and have our being.

It's an Old Industry

Long before man began to keep records of his life and occupations he worked with brass, copper, tin and bronze. The ancient habit of making a funeral also a general moving day and carrying all the deceased's goods and chattels to the grave with him has provided succeeding generations with some knowledge of early metallurgy. Bones may come and bones may go, but brass goes on forever. The early civilizations of Britain seem to have cornered the brass-making industry, from whence it was brought to America along with Puritan purity.

History says the first attempt to cast brass in the American colonies was in 1644, and the brave soul who tried it was John Winthrop, Jr., in Lynn, Mass. In 1790 Henry, Silas and Samuel Grilley had a brass button factory in Waterbury, Conn. In those days brass buttons on the Colonial "soup and fish" were as chic as short skirts and waistless waists are today. The buttons were cast from brass until Abel and Levi Porter joined labors with the Grilleys and began making buttons from sheet brass. They used the process of Adams Emerson, an Englishman, and rolled the first brass in this country. Prior to this time one of the great New England home industries was the manufacture of pewter buttons. Brass outshone pewter to such an extent that the Waterbury buttoners saw the handwriting on the wall and began making brass buttons, which necessitated the rolling of sheet brass.

This thumbnail sketch is offered merely to show why New England has been for so long the home of the brass-making, rolling and fabricating industry. It is important because it shows that when Michigan, with its wealth of copper, undertook to tackle the brass business it did so against heavy odds.

Brass-making, especially that branch of it having to do with mixing, or fusing copper and zinc, is one of the few industries left in which the human element rules supreme. You can dig all the copper in Michigan and gather all the zinc in creation, build a fire, put a pot on and boil the metals until the copper is skating in Gehena, but there is no guarantee you will get brass.

It is one of those arts like tempering—it starts out as heritage and sticks in the family like a lazy brother. The secret is a combination of eyesight, smell and temperament. A born brass maker, and there are no other kind, can tell by the color of the flame from his pot of copper porridge when to dump in the spelter; and his sense of smell, or some other sense not catalogued, tells him when to tip the bucket. For years England had the brass business sewed up in a sock. The mixers and casters, like royalty, succeeded each other to 24-hour-a-day jobs, five days a week. They ate, drank and slept brass.

There is no record of any brass makers in the Mayflower; therefore when the art was started in this country, much to the disgust of England's brassmakers, it was necessary to smuggle mixers and casters from England in hogsheads. Some stayed, others quit cold and went back to their beer and skittles. Those who remained married docile wives and reared "brasslings," who in turn did likewise, and so on and so forth. Thus we have in this country "brass-bloods" as well as bine bloods and, believe us, they know it.

Within 25 miles of New York 75 per cent of the copper and brass refinement is done. There are 30 brass and copper rolling mills in the United States and 19 of them are in Connecticut; hence the brass-making aristocracy is there, too. All the years that Michigan has been yielding its wealth of copper as the third largest copper state in the Union, the New England States have been buying it and making brass with it.

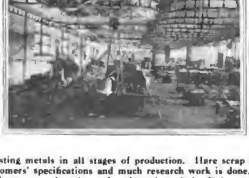
Brass fixtures, brass novelties and brass wares of all kinds sold in Michigan were made in Connecticut, or somewhere in the New England States, but more often than not, they had Michigan copper in them. It is natural, therefore, that the idea of having brass and copper foundries, rolling mills and fabricating plants in Michigan should possess certain men. Well mixed with money and grit, ideas make progress and industry.

Automotive Industry Provides Market

The first mixture of grit, money and ideas resulted in the Detroit Copper & Brass Rolling Mills. It produced sheet and rod brass from which were manufactured teakettles, coffee pots, household utensils, roofing, fixtures and a multitude of other products. While the pioneers in Detroit brass and copper milling did not have to import skilled labor in hogsheads, they had to have the skill and it had to come from the New England States. Generous pay and transportation brought brass workers. They stayed until they found there were no hills or mountains in Detroit, then they lit out. Labor turnover and New England brass-making traditions came near putting out the crucible fires.

Then along came the automotive industry like the shower of manna in Scripture. There was more brass in, as well as behind, the early motor cars than there is now. Who will ever forget those rear-entrance tonneaus with as much brass on them as a yacht, the brass







At the left is shown a brass laboratory for testing metals in all stages of production. Here scrap is tested for its percentage of alloys, finished products are put through to see if they meet with customers' specifications and much research work is done. Photo taken at the plant of the General Brass & Aluminum Company, Detroit. In the center is shown a modern brass foundry—that of the Roberts Brass Manufacturing Company, Detroit. Note the coke furnaces, with crucibles and crane. At the right is shown an inspector testing a product at the plant of the General Aluminum & Brass Company. There is rigid inspection all along the line. For the production of many small brass castings, particularly for automotive work, an inspector is posted at every few machines.

Digitized by Google

radiator cases and the brass band tunes they played? There is not so much brass used in a car today, but more cars are made, hence more brass goods are manufactured.

After the Detroit Copper & Brass Rolling Mills came the Michigan Copper & Brass Company. These constitute two of the 30 mills in this country, and they are in Michigan, in the heart of the automotive industry. Both of these concerns have fought hard against New England traditions. Even the automotive industry in the state offered them little encouragement, not that the product was not right, but more because of the aforesaid traditions.

Just as it takes heat to make brass, so it takes fire to test the mettle of industrial builders. Instead of succumbing to discouragements, the builders of copper and brass-milling industry in Detroit improved their methods, hired the best labor and bought the best machinery. It takes a lot of money to set up a rolling mill, A. B. Selig, secretary and general manager of the Michigan Copper & Brass Company, says that the successful establishment of a copper and brass rolling mill requires a capital of at least $3,000,000.

Huge and Expensive Machinery Used

The character of the industry calls for an enormous amount of working room and ponderous machinery. The largest rolling mill concern in the brass and copper industry covers 150 acres, others have 14 acres up. The kind of machinery used in these plants can be judged by the fact that it is possible to put a brass billet, two feet long, six to seven inches in diameter and weighing about 200 pounds, into one end of a machine and collect at the other end such finished products as hinge parts, door casings and other shapes too numerous to mention. The manufacture of these articles from brass billets requires machinery developing a pressure of 1,000 pounds to the square inch, for the brass bar is forced through a die that cuts the shape entirely by pressure.

Making shapes, however, is not the main business of Detroit's two mills. Sheet making and drawing rods for fabrication is the principal work. The rods are used largely for turned products and the sheets for stamped. The facilities of the two concerns permit a production of approximately 100,000,000 pounds annually, the Detroit Copper & Brass mills having somewhat greater facilities than the Michigan company. Each company, however, specializes in certain products for which it has the particular type of machinery necessary.

Like nearly every other industry in the state, these rolling mills were drawn into Government contract work during the war and thereby made more money than had been possible during the pre-war years. There is a small margin of profit in the brass business and consequently the sales volume must be large to meet expenses and show any gain. Unlike the steel business, for instance, the cost of raw materials constitutes a large item. Copper, of which two pounds is used to every pound of zinc, has cost from 10 to 12 cents a pound. Fuel has been a costly item. The immense machinery necessary runs into thousands of dollars, and after raw materials, fuel and machinery are accounted for, there is the labor charge. As I have shown, any old kind of labor will not do, hence the price must be paid for the skill required.

Detroit District Largest User of Brass

When it is known that more brass goods are sold in the Detroit manufacturing district than anywhere else in the country, if not the world, the future of the copper and brass rolling mill industry can be fully appreciated. It has taken years for the two Detroit concerns to build up confidence in their products, but the battle is fairly won. Much can be said for the facilities and manufacturing ability of the New England mills, but all the ability is not there, and whatever facilities they may have can be, and have been duplicated so far as required. Not only that, but if the brains and skill in brass milling have originated largely in New England, the transplanting to Michigan soil has been a mere matter of reward and transportation. The men who guide Detroit's mills and the men who work at the machines are New Englanders, or at least many of them are. They brought to Detroit the knowledge and skill necessary to successful plant management and brass and copper milling, hence it cannot be said with fairness that because these mills happen to be in Michigan, their product is not as good as that from the East.

Probably because of its industrial youth, Michigan has so far missed opportunities to develop to the utmost industrial plants for the refinement and fabrication of the raw materials in her soil. Practically all the copper used in industry comes from the Middle West and west of the Middle West. It is mined and transported at great expense over great distances to mills located as near to seaboard as possible, which would give the impression that export business was the first thought. In a semi-refined or wholly completed state, the copper, or copper alloy products are again transported back to the Middle West and the Far West. The establishment of rolling mills in Detroit is merely one of many illustrations of economic wisdom of production near the raw material supply, and helps reduce the high costs of products to the ultimate consumers.

No attempt will be made to go into the technical details of brass making and fabrication. It is too deep and too wide a subject to be treated in a limited space, but a brief outline of a few of the principles of brass manufacture will be given merely to show the character of the industry now being so rapidly developed in this state.

In the whole category of brass manufacture the most important operation is the melting and casting. Any failure in this initial operation cannot be rectified by any later operation. Despite this fact it is the concensus of opinion of all brass makers that the least progress has been made in the development of scientific processes which will eliminate the human equation. Another interesting fact is that, while the plants and much of the equipment used today in brass melting have been improved and changed somewhat in character, basically the methods are the same as used in the Middle Ages. The crucibles, furnaces and molds still bear a marked resemblance to those used by the ancients. While the mechanical fabrication of brass has been developed to a wonderful degree, the first processes handed down from father to son through ages have been secrets jealously guarded.



Section of rolling mill where brass and copper in rolls are produced. View shows brass used for radiators. Photo from Michigan Copper & Brass Company, Detroit.

The furnaces, as a rule, are of the natural draft-pit type, square in shape. Anthracite coal or coke is used for fuel. The ancients used wood or charcoal. The crucibles are made of clay and graphite and have a capacity of from 160 to 300 pounds of metal. The life of these crucibles is from 25 to 35 heats, according to the care with which they are used. Modern molds are made of soft, gray iron, hand finished. The molds of the early brass makers were made of stone.

The copper is put into the molds and heated until it shows a certain color and then zinc is added. Brass intended for sheet rolling is cast in flat bars of various widths, while that for rods or wire is cast in cylindrical billets. For tubes these billets may be solid or hollow, but are cylindrical in shape. The whole responsibility for the quality of brass produced rests with the caster.

60 to 70 Per Cent Copper

Common brass, as the term is commercially used, applies to a mixture of from 60 to 70 per cent copper and the balance zinc, the percentage of copper varying according to the class of work for which the metal is to be used. Of course it is very seldom that all virgin metal is used; as high as 50 per cent scrap is utilized, depending largely upon the type of scrap and the class of metal desired.

When correct box moulds are used it is not necessary to anneal the metal before the breakdown process, except in the case of leaded stock, when it is advisable to give the metal a heavy annealing before attempting to roll. However, in some mills the old match moulds

(*Continued on Page 38*)

Digitized by Google

Detroit Entertains Mexican Trade Delegation

LAST SUNDAY the Detroit Board of Commerce entertained and was entertained by a delegation of Mexican business men who stopped in the city as part of a tour of 28 American cities which began February 26 at Mexico City and ends April 18 at the same point. The itinerary includes the west coast of United States westerly through Chicago, Cleveland and Buffalo, to Boston; westerly through New York, Philadelphia, Baltimore, Washington, Louisville, Cincinnati, New Orleans, and returning via Laredo and the National Railways of Mexico. It is interesting to learn from these gentlemen that there is now through Pullman and dining car service from San Antonio to Mexico City and that other through arrangements are soon to be effected. It is about 1,000 miles from Laredo to Mexico City and takes about 36 hours. The delegation is in the United States as official representatives of the Confederation of Mexican Chambers of Commerce and is designated as "the Good Will Committee." There are 58 individual chambers of commerce in the Confederation which have joined to hold an international industrial convention and exhibit in Mexico City the last week in June.

The delegation was given automobile rides around the city which took in the industrial plants, Belle Isle and Highland Park and the Rouge, and was billeted at the D. A. C., where in the evening the visitors and representatives of the Board held a get-together dinner. Arthur T. Wsterfall, vice-president and assistant general manager of Dodge Brothers, guested. The Detroit point of view was given by J. Walter Drake, chairman of the Board of the Hupp Motor Car Corporation. Fernando L. Novelo, president of the Confederation of Mexican Chambers of Commerce, responded. Senor Novelo's remarks were in Spanish but were conveyed to the assemblage by W. L. Vail, vice-president of the Trust Company of Mexico, who is a thorough linguist. It was frankly asserted by Senor Novelo that the business interests of Mexico were anxious to promote friendly relations by every means possible—that the principal object of the tour was to invite American business men to attend the June convention wherein a first hand impression of Mexico today may be obtained.

Adolfo Martinez, director of the Confederation and chairman of the mining section, gave some interesting figures on the metal situation in Mexico. During 1920, he stated, the country produced 654,910 ounces of gold, 63,658,471 ounces of silver, 101,538,183 pounds of copper, 267,715,825 pounds of lead, 31,665,082 pounds of zinc and 180,260 pounds of mercury. Of the last mentioned, 40,000,000 ounces were used in the motion picture film industry. Silver, he asserted, was purchased by the government mint at a fixed price of 54 cents, so that the demand was limited to the normal consumption of pocket money of the people.

Bruno Newman, an American hailing from Boston originally, and who is a director of the Confederation, is president of the Lion Brand Products Company of Mexico and also a director of the American Chamber of Commerce of Mexico, talked interestingly on the petroleum situation. He asserted that only one fifth of the actual oil available was being mined because of poor facilities for transportation, the remaining four-fifths of the wells being capped until railroads and other facilities become available. He said very pointedly that if the United States was to hold on to the 80 per cent majority of Mexican foreign trade it must begin at once to develop the business intensively because of the new life being injected by British and other European countries into Mexican sales campaigns. He laid emphasis on the investments which Britain is making in Mexico, which ultimately will give the English traders a considerable advantage.

Hernando J. Zetina operates a modern shoe factory in Mexico City employing 700 hands and turning out 2,000 pairs of shoes a day. His contribution to the discussion was an explanation of a factory school idea which is unique in his plant. There are many boys who are illiterate; so he has established a school of his own. He requires the older boys to go to the school and the younger boys to go part of each day. Before going to work on Monday morning each boy must exhibit a certificate from the school master of his previous week's attendance. It is particularly noteworthy that English is a required study in Senor Zetina's school.

When the delegates alighted from the train at the Michigan Central terminal a mild surprise on finding that three of the nine official delegates were Americans now resident in Mexico and interested in various business enterprises. John B. King, general manager of the Mexico-American Excursion Company, director of this tour, was a newspaper man in Chicago 20 years ago. From these three gentlemen one obtained a comprehensive view of both sides of the Mexican situation. Politics was not officially discussed except the expression of opinion, in answer to inquiry, that as time went on President Obregon eventually would vindicate himself in the eyes of Americans. It seemed to be the opinion that the job of keeping the lower classes satisfied, and at the same time keeping the moneyed interests quiescent, was one which required a dual personality and some action necessary to this end might not always be understood by the world outside of Mexico.

The Mexico-American Excursions, Inc., 1, cinco de mayo, Mexico City, has been authorized by the government to make rates for and to conduct excursions into Mexico.

The banking situation is improving, according to W. L. Vail. There is no accepted currency, all the older issues being non-current at present. All payments must be made in gold coin, silver being used merely for small change. The Mexican Congress is at work on a law which will create a central bank of issue something like the Federal Reserve Bank, and the proposal may be made to the United States to give control of this bank for twenty years in consideration of the U. S. furnishing 51 per cent of the capital. The list of delegates follows:

Fernando L. Novelo, president, Confederation Mexican Chambers of Commerce, importer and exporter of foodstuffs.

Bruno Newman, director of the Confederation and of the American Chamber of Commerce of Mexico; president Lion Brand Products of Mexico.

W. L. Vail, vice-president Trust Company of Mexico.

Adolfo Martinez, director, Confederated Chamber of Industries; chairman Mining section; mine and smelter operator.

Leopold H. Palazuelos, director of the Confederation; importer.

Camilo Sansores, director of the Confedera tion; planter and hemp exporter.

Bernardo H. Zetina, shoe manufacturer.

Humberto Garridan, special representative of "El Universal."

John B. King, general manager, Mexico Excursions Company.

Antonio Espejo, official interpreter.

Mrs. Bernardo H. Zetina and Miss Martha Newman.

ANOTHER LANSING PRODUCT

Another addition to Lansing's manufactured products is being brought out by the Korff Manufacturing Company. It is a steel voting booth originated by H. G. Porter, factory manager of the company. The city of Lansing has ordered 100 of these booths, and a national selling campaign will be inaugurated. The booths are of light steel construction, may be taken down in three minutes and the parts are interchangeable.

CO-OPERATIVE FURNITURE ADVERTISING

One of the principal matters taken up at the meeting of the National Council of Furniture Associations last week in Cincinnati, was the question of co-operative advertising of furniture. It is expected that between $200,000 and $250,000 will be expended on the campaign the first year. Several representatives of Grand Rapids furniture makers were at the meeting.

MORE EMPLOYERS ASKING FOR MEN

THE EBB in the tide of unemployment in Michigan has spent itself, according to M. D. Kirby, deputy state labor commissioner. While the change is not marked, it shows that the movement is now in the right direction. In December and January the reports from the twelve state free employment bureaus showed an increase in the number of unemployed, with fewer employers asking for help, but during February the tendency was the other way, the applicants for jobs dropping while the demand for labor gained. In February 1,467 employers asked for help, as against 1,202 in January, the number of men wanted in February exceeding those in January by 589. The demand for common labor is increasing.

PORT HURON ENGINEERS ELECT

The Port Huron chapter of the American Association of Engineers, recently organized, held its first annual meeting a few days ago and elected the following officers: W. W. Gaskins, Marysville, president; E. R. Whitmore, Port Huron, vice-president; D. M. Belyea, Port Huron, treasurer, and L. C. Read, Sandusky, secretary. Rose and C. A. Hill, and C. E. Wood, both of Port Huron, constituted the board of directors.

COAL MINING AT GRAND LEDGE

The Grand Ledge coal mines instead of being exhausted are furnishing better material as the work continues, says a special dispatch to the Lansing State Journal. The Russell mine has mined and delivered 2,000 tons since July 1 to people coming from Lansing, Lake Odessa, Charlotte, Portland and other points. The new 30-inch vein has been worked about 500 feet and the quality becomes better and the coal thicker as the vein is continued. There are yet about 50 acres of the Russell mine to be mined. Fourteen men are employed.

Digitized by Google

OHIO STEEL INTERESTS MERGED

Plans are being made for the merger of the Berger Manufacturing Company and the United Furnace Company with the United Alloy Company. All these concerns are located in Canton, O. When the merger is completed the assets of the new corporation will be close to $50,000,000. The officers will be: Chairman of the board of directors, E. A. Langenbach; president, Harry Ross Jones; vice-president and general manager, George H. Charles; vice-president and secretary, E. L. Hang; vice-president and treasurer, Charles W. Krieg; Homer Gleeson, assistant treasurer; Paul Moseley, assistant secretary.

MINING OUTLOOK CONFUSING

With independents working along restricted lines and with reduced pay and shorter hours, mining men are at a loss to figure out how matters are going to shape up for the coming season. Operations in Minnesota ranges are said to be the lightest in several years, but many of the mining men are optimistic. They contend that many of the limitations now retarding industrial operations will be straightened out within the next few weeks and that a substantial revival will occur when perhaps least expected. In the opinion of some mining men the next shipping season may open late, due largely to unsettled ore traffic rates on rail and water. Unless these matters are adjusted satisfactorily it is expected that the season will open with light movement of ore.

CLARK DAM CASE QUASHED

Judge L. Burget Deavolgnes, Circuit Court, St. Joseph, has quashed the case against Eugene B. Clark and other officials of the Clark Equipment Company, Buchanan, who were charged by Bainton Brothers, grist mill owners, with having destroyed a dam and mill race in Buchanan. The reason for the decision was incomplete information. An appeal has been taken to the Michigan Supreme Court. The Clark Equipment Company manufactures an internal gear for motor trucks.

POLISH CONSULATE IN DETROIT

Announcement has been made in Grand Rapids by Consul G. Barthel de Weydenthal, of the Republic of Poland, that a consular office has been opened at 80 Garfield avenue east, Detroit, where Vice-Consul W. Kozlowski will vise passports and legalize documents intended for use of any authority in Poland. The office will have jurisdiction over the states of Michigan and Ohio.

OGLEBAY-NORTON OFFICES

The executive offices of Oglebay, Norton & Company and their affiliated interests—Montreal, Castile, Bristol, Fortune Lake, Fort Henry and Brule Mining Companies and Commonwealth Iron Company—are now located in the Havna building, Cleveland, the change having been made on March 1. The office of the range manager is at Ironwood, Mich.

MAPES SEEKS COMMERCE POST

Congressman Carl E. Mapes, Grand Rapids, who is chairman of the committee on the District of Columbia, a position equivalent to being mayor of Washington, has announced his desire to resign and become a member of the House committee on interstate and foreign commerce, a vacancy having been left by the retirement of Congressman Hamilton of Michigan.

MAC-SIM-BAR PLANT RESUMES

The plant of the Mac-Sim-Bar Paper Company at Plainwell, Mich., has resumed operations on a five-day a week schedule.

"MORE DAYLIGHT" PLAN OPPOSED

The Lansing city council has decided not to put the "more daylight" plan into effect this year, because of opposition shown by workers in the factories and elsewhere.

STRAIGHT LINE METHODS

The Business Graphics
OF
ERNST & ERNST

A Necessity in the Control of Business

Clear and accurate mental pictures of your business activities and the conditions of trade are vital to successful management. Dependable figures, of course, must be the basis of such pictures. But to assimilate columns of figures, and get their meaning, requires time and a definite mental concentration not always at command.

The Business Graphics of Ernst and Ernst are the answer.

The value of these charts to the executive or manager in any line of business cannot be exaggerated. They make visible at a glance all progress or decline. They locate weakness and waste; disclose hidden sources of revenue; suggest balance, and point out logical development. It is impossible to avoid their mathematical conclusions. They are simple, definite, final.

Ernst and Ernst Business Graphics are the work of a large and highly specialized department. The preparation of charts is based on sound engineering and accounting principles. These charts reduce to a comparable basis, instantly visible, all elements of a business of whatever magnitude. And by the use of simple standardized methods, the actual preparation of charts is made possible and practical by the clerks of your own office.

Our pamphlet on "Business Graphics," with sample charts in colors, to executives or managers on request.

ERNST & ERNST

AUDITS—SYSTEMS
TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON
CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY
CLEVELAND, BUFFALO, PITTSBURGH
CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND
NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Collections of Every Kind and Size

TACTFUL PERSONAL COLLECTION SERVICE for Manufacturers and Dealers Business and Professional Men

Write ——— For Interview ——— Phone

B. APPLEBY Dist. Mgr.
1019 Dime Bank Bldg., Detroit Main 3361

"Results or No Pay"

EFFECTIVE

PHOTOGRAPHER
STUDIO BUILDING
4638 Woodward Ave.
NEAR WARREN

Commercial and Portait

Rush Work Given Special Attention

Glendale 10

Corporation Tax Bill Introduced

Measure as Sponsored by the Governor Placed Before Senate by Vandenboom; Legislative News

[*By Staff Correspondent*]

LANSING, March 21.—The Governor's corporation tax bill has been introduced in the upper house by Senator Frank H. Vandenboom, Marquette. The measure provides that corporations of this state file an annual report each August, the first to be made in the current year. It is estimated the returns from the levy will total approximately $12,000,000 every biennial period.

Among the provisions of the bill are: A flat fee of $5 for filing articles of incorporation; a fee of $2 for each annual report of a corporation; a fee of $5 for any amendment to articles of incorporation; a fee of $1 for preservation of records of corporations voluntarily dissolved; a fee of $10 for appealing any case to the board of appeals, comprised of the state treasurer, secretary of state and attorney-general; a fee of $10 for each non-profit corporation and an annual fee of $10 for each annual report.

Under the bill, corporations of the state whose business nets a profit, a tax of one mill is levied against the net value, the basis of the tax to be placed upon the Michigan property of the corporation. A minimum of $25 is fixed in the measure.

A tax of three and one-half mills would be paid by profit-making corporations on each dollar of capital and surplus, although certain conditions regulating the levy are made in the bill. The corporations must pay on their face capital, despite any loss during the fiscal year. On their surplus, the mill tax is levied against the net value minus the capital stock and any liabilities of the corporation.

The par stock is assessed at not less than $1 a share and the tax is levied against either the sale or book value set by the secretary of state, whichever may be higher. When the stock is not divided into shares, the value of the whole property is taken as the capital stock in levying the tax. Under the provisions of the act, the first fees enumerated above are taken in lieu of the tax.

The only corporations exempt from the tax are railroads, interurbans, telephone and telegraph and non-profit corporations. A complete detailed statement showing the assets and liabilities and any added information desired by the secretary of state, must be filed with each annual report.

For violations of the proposed law, the fine of $100 for each offense is provided and $5 for each additional day after the date set for filing the returns. The secretary of state would report any infractions against the law and the attorney general would be empowered to start suit to collect the tax.

While still working usually on the short-hour schedule, the Legislature during last week has passed upon many measures, a number of which are of interest to the manufacturers, financiers and business men. The fence manufacturers of the state have entered a protest against the McNaughton wire fence bill, which has passed the Senate and is now before the House. The manufactrners claim the bill discriminates against Michigan plants and does not protect the farmers from cheap products sent into the state by mail order and other outside concerns. John L. Lovett, general manager of the Michigan Manufacturers' Association, has asked for a public hearing, which is expected to be arranged.

Senator Hicks' fall-train-crew bill was put through the Senate and referred to the House for consideration. Gov. Groesbeck's reconstruction bill, creating a department of agriculture, in which are combined a number of boards and commissions, has been adopted by both houses.

The McDonald bill, which would give automobile owners in the Upper Peninsula and the northern counties of the Lower Peninsula motor vehicle licenses for three-fourths of the regular annual rate because of the shorter season, was defeated in the House. The killing of a person by reckless driving would be made manslaughter and speeding and reckless driving not wanton or wilful but resulting in killing a person, would be negligent homicide, punishable by $1,000 fine or five years in prison or both, under the terms of a bill introduced by Rep. Milo N. Johnson, of Wayne.

Two bills introduced by Rep. William O. Lee, Port Huron, provide for the registration of service stations, garages and automobile repair shops of all kinds, and for the licensing of skilled automotive mechanics.

The joint resolution of Rep. Frank R. Mosier providing for a state income tax has been reported out of committe in the House. This bill is strongly opposed by Michigan manufacturers.

Passenger rates for all interurbans in the state would be fixed by the Michigan Public Utilities Commission, but local franchisees would remain in effect, under a bill introduced by Rep. Andrew B. Giasple, of Oakland county. Expecting that the power of the Legislature to delegate such power might be doubted, and to provide rates during periods when the rates of the Commission might not be in effect, the bill fixes a schedule of 1½ cents a mile for companies where gross earnings equal or exceed $16,000 a mile; 2 cents a mile for companies with earnings of from $12,000 to $16,000 a mile; 2½ cents for earnings of from $8,000 to $12,000, and 3 cents a mile for below $8,000.

A bill by Rep. Charles Evans, Tipton, would give the state administrative board full authority in financing highway construction and would repeal the act authorizing the state to raise funds for road building by taxation or loans, transferring the power to the board.

A bill of Senator Walter J. Hayes, Detroit, would allow banks to lend money from their funds from which they collect interest in advance an interest rate of 7 per cent and also charge $1.50 on each $50 loan for accounting expenses. This is an amendment to the industrial bank law.

BUILDERS' SHOW A SUCCESS

Detroit's 1921 Builders' Show in the Guard Armory had, at the time of this writing, surpassed all previous shows in attendance and general interest. Saturday and Sunday's records showed between 8,000 and 9,000 visitors, while on Monday the attendance was reported at 15,000, more than that for the whole week last year. Exhibitors regarded this as an evidence of a renewed interest in home-building, which promises an active season. The exhibition is far superior to efforts of the builders. One part of the drill hall was laid out as a model street, with various types of houses, each embodying some special feature of construction. Besides the model houses there was exhibited every essential to home building. Good use was made of the information department established as a new feature to give advice and detailed information about every type of building construction. The American State Bank exhibit, the Burton historical collection, the motion pictures and the entertainment program all were appreciated.

Digitized by Google



Harvey's Sons Co. Will Build

TO CARE for rapidly increasing business, A. Harvey's Sons Manufacturing Company, Detroit, plumbing, steamfitting and engineers' wholesale supply house, announces the erection of a $260,000 reinforced concrete building, to start immediately. The building, which is to be six stories in height, is to be situated on the site of the present structure, at First and Woodbridge streets. It will replace one of the old landmarks of Detroit, for the company has been on the present site since 1855. The building will extend 106 feet on Woodbridge street and 85 feet on First. It will connect up with another six-story branch building, 45 by 70 feet, which has already been erected.

The general contractors are the Walbridge & Aldinger Company and the architects and engineers are Smith, Hinchman & Grylls.

The first floor will house the store and order departments; the second story will be devoted exclusively to offices and show rooms. The other four floors will be used as a warehouse.

The building and equipment will be fireproof, with bins and shelving of steel. A spiral chute will extend from the top to the bottom of the building and all of the latest conveniences for rapid and accurate handling of material will be installed. A loading platform, the height of trucks, will be built across the entire south side of the building.

The president of the company, James Harvey, has been active in the concern more than 50 years. The other officers are Clarence Harvey, vice-president, and George Harvey, secretary and treasurer.



Architect's sketch of the proposed new building of A. Harvey's Sons Manufacturing Company, Detroit.

WHAT THE BEET GROWERS WANT

Michigan sugar beet growers, especially those identified with the Michigan State Farm Bureau, will ask $6.45 a ton this season, on the basis of 5-cent sugar, with an increase of $1.29 a ton for each additional cent increase in the price of sugar above 5 cents, it is announced at the Bureau's headquarters in Lansing. Copies of the contract form have been mailed to 12,000 growers.

BEARINGS SERVICE BONUSES

Two per cent of the net sales income for 1920 was set aside for the payment of bonuses to all employes of the Bearings Service Company who have been with the company more than six months and these bonuses are to be paid shortly.

BUILDING SCOWS AT MUSKEGON

The Michigan Materials Company, Muskegon, has started work on three scows to be used in handling gravel and other building material. Two of the scows will be 126 by 26 feet in dimensions, while the third will be somewhat smaller and will be used for a derrick. It will probably take 60 days to construct the three.

Digitized by Google

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

O'SHEA & CUMMINS

Formerly with U. S. Internal Revenue Office

INCOME TAX REPORTS

Main 6188

408 Burns Building

524 Griswold Street

SALES PROSPECT LISTS INSTALLED AND REVISED

Surveys Made

Banks

Investment Houses

Trade Associations

IRENE WILLIAMS

104 South Michigan Avenue

CHICAGO

The Bellefontaine Bridge & Steel Co.

Engineers, Fabricators and Erectors

STEEL BUILDINGS AND BRIDGES

Main Office and Works, Bellefontaine, O. Detroit Office, Ford Bldg. Cadillac 6558.

FREE FACTORY SITES

At Harbor Springs, Michigan.

On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

U. S. C. of C. Meets April 27-29

Less Government Management in Business Will Be Theme of Strong Program Prepared

THE GENERAL THEME of the Ninth Annual Meeting of the Chamber of Commerce of the United States, Atlantic City, April 27 to 29, will be: "In the public interest more business methods in government; less government management of business." All of the questions brought before the meeting will be approached as they relate to the general subject. Speakers will include government officials and leading business men in many lines of finance, commerce and industry. Much of the work of the convention will be done in group sessions. Groups representing the major divisions of business will take up, first, problems peculiar to the industries or interests within the group, and second, major problems common to all business, which will include the question of the tariff and that of taxation.

The program for the meeting marks a new departure for the Chamber in that groups will discuss questions of a more general nature than those affecting solely the industries within the group. The purpose of this is to get the fullest and freest discussion on broad general problems that touch various phases of business differently. In a membership as comprehensive as that of the Chamber, there is always a difference of viewpoint on important questions. The group arrangement as planned gives related industries the opportunity to express their views. Afterwards, the Chamber if it is considered necessary, can take a referendum vote of its membership on the questions considered and get after proper consideration the opinion of business as a whole.

On the day before the convention opens there will be a meeting of the National Council of the Chamber, made up of one representative from each of the more than 1,400 organizations included within the Chamber's membership.

In the first day of group meetings, the group representing domestic distribution will discuss current price declines and their effects; constructive means for better marketing by produce exchanges and boards of trade, and methods of merchandising which will enable the distributor better to meet conditions of financial stringency.

Treatment of wages, contract cancellations, better accounting methods and the need of national statistics on production will be taken up by the group representing fabricated production. The finance group will have before it matters connected with the government's fiscal policy, taxation, including the proposed turnover tax, reorganization of government operations and the question of the government's future policy with respect to rediscount rates.

The group on foreign commerce will discuss foreign trade matters, including in its program such subjects as these: The work of national foreign trade conventions, foreign trade work of national trade bodies, foreign trade work of chambers of commerce, foreign trade work of banks, railroads and express companies, and the operations of foreign trade clubs. The aim is to give an opportunity for an interchange of information as to the most approved methods of extending and prosecuting foreign trade effort. In connection with this group a meeting will be held for foreign trade organization secretaries.

The insurance group will discuss among other things: Private initiative as against state monopoly in insurance, insurance as a credit factor, and the relations between government and insurance.

Recent agitation in Congress looking to the enactment of legislation which would provide for government management of basic industries will furnish the subject for discussion in the natural resources production group, where the main subject will be the Government's relation to natural resources, including lumber, coal and oil. Another subject which will be taken up by this group is that of the proper activities of trade associations.

Transportation and communication will be considered under two groups; the first having to do with shipping, and the second, railroad transportation. The subjects to be taken up by the shipping group are: Sale of government-owned ships, the continuance of the Shipping Board and its functions as an operating organization, and differentials in cost of operation under various flags. The railroad transportation group will go into a report by the Chamber's railroad committee, the present financial situation of the railroads in relation to plans for consolidation, and the shippers' part in rate-making.

The civic development group will discuss schools and social interest.

When the groups meet to take up the subjects of taxation and the tariff, each group will consider, with relation to taxation these questions: Should there be an increase in the income tax? Should there be a sales tax? Should there be a resort to loans? With regard to tariff policies these questions will be gone into:

Should not the tariff be framed with due regard to export trade sales or the protection of manufacturing in the United States?

Should the fact that we are now a creditor nation alter our tariff policy with respect to protection?

Should the United States tariff other trading or bargaining possibilities for international commercial treaties to encourage our export trade?

Should the United States tariff be liberal in its provisions in view of our desire for liberality of tariff on the part of other countries?

Taxation and tariff policies will be discussed also at one of the general sessions of the meeting. Other subjects which will be gone into at the general sessions, include foreign financing, the International Chamber of Commerce, education, international relations and the relations of government and business.

A TRADE MARK DECISION

The Billings & Spencer Company, Hartford, Conn., has won an important trade mark suit in Canada, the Exechequer Court having decided against the Canadian Billings & Spencer Company, Ltd., ordering the Canadian registration of the company's trade mark expunged. In explaining the case, H. E. Hart, attorney for the American concern, states that in 1906 the Canadian company bought machinery from Billings & Spencer, Hartford, and a concession was permitted by which the buyers made use of the "Triangle B," the trademark of the company for a time, but the buyers had no permanent legal right to use this trade mark. A year ago it became clear that the interests of the Hartford company were being jeopardized and the suit followed.

REVIVAL IN TECUMSEH

Word comes from Tecumseh that the Heesen Brothers & Company foundry has resumed operations after a shutdown of a few weeks. The Quaker Oats Macaroni Company's plant, which had been closed for some time, reopened recently with a small force.

Digitized by Google

BRICK CONCERNS MERGED

The Briggs Company, Lansing, has increased its capitalization from $150,000 to $400,000 preparatory to consolidation with the Briggs Clay Products Company, Grand Ledge. The Briggs Company purchased the property of the Michigan Clay Products Company last year, but it has been operated as a separate company. The Grand Ledge plant has been renovated and new equipment installed, and will be opened April 1 with about 50 men. The property consists of the plant and about 70 acres of clay and shale. The plant specializes in face brick and is the only one of its kind in Michigan, the clay deposits being the same as those in Ohio. The capacity of 50,000 brick daily will be maintained by the company. With higher freight rates the concern will be able to meet Ohio competition. There is also a substrata of coal on the property which enables the firm to supply its own fuel. The company may make building tile later. The output of the Grand Ledge plant last year was about 2,000,000 brick. The Briggs Company handles about 50 different kinds of brick besides its own product.

COAL PRODUCTION INCREASED

The output of bituminous coal during the week which ended March 5 totaled 7,406,000 tons as compared with 7,240,000 tons for the preceding week, reports the Department of the Interior show. Anthracite production totaled 1,917,000 tons compared with 1,816,000 tons for the week of February 26. The output for the coal year thus far was 497,818,000 tons of bituminous coal, or 50,000,000 tons more than for the corresponding period in 1920, while the total output of anthracite was 85,408,000 tons or 250,000 tons less than last year. The report also shows an improvement in carloads of coal shipped from the mines. There were 135,656 carloads of bituminous coal shipped the first week of March or 3,550 more than the previous week. Anthracite shipments totaled 36,651 or nearly 2,000 carloads more than the last week of February.

DETROIT RE-EMPLOYMENT LEADS

A report of the employment division of the United States Department of Labor says that in the number of men returned to jobs Detroit leads all industrial centers. A review of 65 cities with 1,423 concerns employing 500 or more men shows that on January 31 there were 1,643,253 men at work, but on February 28, the number was 1,626,958, or a decrease of 16,295, or one per cent for the month. In 36 cities there was a decrease of 60,235; in 29 cities, an increase of 43,940.

SAGINAW SHIPBUILDING ELECTION

The Saginaw Shipbuilding Company, Saginaw, has elected the following officers and directors: President, Charles W. Stiver; treasurer, Walter C. Hill; secretary, James M. Birss; chairman of the board of directors, William J. Wickes; directors, Otto Schupp Charles W. Stiver, O. L. Dittmar, George H. Hannum, Charles T. Kerry, Benton Hanchett, Henry T. Robinson, John J. Jeffers and Walter C. Hill.

FORD NEGOTIATIONS DENIED

A statement has been issued by the Michigan Iron & Chemical Company, which owns the Boyne City Chemical Company and the East Jordan Chemical Company, to the effect that no overtures have been made to Henry Ford for the sale of its Michigan plants, contrary to the reports which originated, it is said, from Manceiona.

TWIN DIE PRESS PERFECTED

The Richards Brothers Die Works, Detroit, has perfected a twin screw press for trying out sheet metal dies of all kinds. One is being used in the plant and can be operated by hand or power. A pressure of 400 tons is claimed for it.



MORTON AUDIT COMPANY
1201 MAJESTIC BLDG. PHONE CHERRY 4510 AUDITS SYSTEMS COSTS
INCOME TAX RETURNS CORRECTLY MADE OUT
BY
CERTIFIED PUBLIC ACCOUNTANTS
Special Investigations Carefully Conducted

H. S. DODSON
R. V. CARD
Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS
226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

Reduce Boiler Room Costs!
Use the Coupon
The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:
Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.
Name .....
Business Address .....
Home Address .....
Date .....
THE WICKES BOILER CO.
SAGINAW, MICHIGAN

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

CASE COMPANY CUTS PRICES

The J. I. Case Plow Company has announced a cut of 15 per cent in the prices of all its products.

PACKARD TO BUILD BUSES?

There seems to be a possibility that the Packard Motor Car Company, Detroit, will build motor buses. Inasmuch as the company is a big producer of trucks, it would not be surprising that it would also add buses to its regular output. The reason for assuming the above is that, according to the Saginaw News Courier, N. J. Ockersyder, transportation engineer for Packard, was requested to go to Saginaw to confer with the mayor on the resumption and completion of the proposed survey of Saginaw's transportation problems. It appears that the Packard company some time ago requested and was given permission to make a survey to determine whether street cars or motor buses would more adequately fill the needs of the city, reports the Saginaw paper. The company also promised to send a new motor bus, with special body for demonstration, and offered to turn over the bus' receipts to the Welfare League. The work apparently was started, but was held up or dropped without any explanation to the council. Labor bodies petitioned the city council to ask the company to complete the survey, and Mr. Ockersyder's communication, announcing plans to resume, came as the answer to the city clerk's letter informing him of the council's action.

THE SHOW AT ST. JOSEPH

The first successful motor car show ever held in Berrien county, says the Benton Harbor News-Palladium, was that at St. Joseph last week. It was promoted by the Twin City Automobile Dealers' Association—those from St Joseph and Benton Harbor. Among the vehicles shown were the Packard, Hudson, Essex, Paige, Handley-Knight, Maxwell, Chalmers, Oakland, Auburn, Oldsmobile, Apperson, Mitchell, Buick, Cole, Hupmobile, Chevrolet, Reo, Dodge, Studebaker, Ford, Commerce, Republic, Federal and Nash. This includes both passenger cars and trucks. In addition, there was a good display of accessories.

CHANDLER'S BUSINESS

The Boston News Bureau says concerning the business of the Chandler Motor Car Company, Cleveland, O.: "Chandler shipped 789 cars the first two months of this year and for that period earned about $56,000 after all charges. Expectations are that March shipments will be at least 900 cars and earnings for the full quarter should approximate $450,000."

WADDELL JOINS DURANT MOTORS

W. C. Durant, president of the Durant Motors, Inc., has engaged the services of Capt. Al. C. Waddell as advertising manager and representative on the Pacific Coast. Capt. Waddell has been advertising manager of the Chevrolet interests on the coast.

GOODRICH SALES FOR 1920

During 1920 the B. F. Goodrich Company, Akron, recorded sales totaling $150,007,345, or $8,663,926 more than in 1919. Manufacturing expenses amounted to $142,259,719, or $20,671,454 in excess of those of the previous year, so that the net profit from the sales was $7,755,626 as compared with $19,764,154 in 1919; $21,313,857 in 1918, and $14,878,674 in 1917. After adding other income and deducting depreciation charges, foreign exchange loss, the net profit before taxes, was $931,248, compared with $17,304,813 in 1919; $15,637,114 in 1918, and $10,544,677 in 1917. After taking care of preferred and common dividends, the balance sheet shows a deficit of $5,371,792, compared with a surplus of $12,657,813 in 1919, $11,452,114 in 1918, and $6,296,677 in 1917. The sum of $8,000,000 was added to the reserve for contingencies of $2,000,000 provided out of profits in prior years, leaving a total reserve on December 31, 1920, of $10,000,000 to cover possible losses on future commitments and contingencies.

PIERCE-ARROW COMPANY

Net profits of $1,769,914, after deduction of taxes, were earned by the Pierce-Arrow Motor Car Company in 1920 compared with $2,491,070 in 1919. Net earnings after dividend on preferred was equal to $3.88 per share on the 250,000 shares of no par common stock. In 1919 net was $6.75 per share. Surplus at end of 1920 was $4,541,545 against $3,571,631 at the end of 1919.

FORD ORDERS MORE AUTO FRAMES

The Parish, Bingham Company, Cleveland, O., has received an order to release 45,000 automobile frames for the Ford Motor Company for March delivery. The February order was for 15,000 frames only.

GOVE CO. STARTS PRODUCTION

The Gove Motor Car Company announces that it will begin production of a 2½ ton heavy duty truck and a five-passenger light six car in its plants at Brighton, Mich.; Reno, Nev., and Tilbury, Ont., within a short time. The officers recently elected are: President, H. E. Gove; vice-president, D. H. Gove; secretary-treasurer, H. K. Wolfson; directors, Robert M. Drysdale and H. D. Hansen.

TRUCK DRIVERS' BUREAU URGED

The Detroit Automobile Club and the police department favor the organization of a bureau to keep records of all motor truck drivers. It is said by the traffic officials that trucks cause three and a half times as many accidents as passenger cars.

PEERLESS TRUCK INCOME

Net income of the Peerless Truck & Motor Corporation, Cleveland, for the year 1920, after deduction of taxes and interest totaled $1,063,306, compared with $872,454 in 1919, and $773,986 in 1918. This equalled $5.31 a share, compared with $4.36 the year before. Net sales totaled $14,919,065, compared with $12,928,601 in 1919, and $11,890,079 in 1918. Surplus was $5,602,577, compared with $5,259,600 in 1919, and $4,588,972 in 1918.

SIMONS COMPANY PROMOTES PAIGE

E. R. Paige, who has been manager of the wholesale department of the Simons Sales Company, Detroit, distributor of Willys-Overland cars, has been made general sales manager and placed in charge of three branches of the company in Detroit and vicinity.

FORD PICKS FOREIGN SALES AGENT

James J. Harrington, formerly of Cincinnati, has been made supervisor of foreign sales for the Ford Motor Company and will have headquarters in London, Eng. William Knudson, executive in the production department of the Highland Park plant, has resigned.

Digitized by Google

Rueschaw Addresses Reo Dealers at Detroit Dinner

The motor car producer having a strong, time-tried and cohesive selling organization in the field is he one which will be able to find business in such times as these. The quality of product, the methods of the factory sales manager and frequent gatherings of dealers for social as well as business purposes are what keep a solid, efficient sales organization together.

Judging from the remarks of R. C. Rueschaw, sales manager of the Reo Motor Car Company, Lansing, who spoke at a dealers' dinner in Hotel Statler, Detroit, last week, he has endeavored to build up such an organization and has succeeded well. One of his statements was to the effect that if there was a depression in motor car business, so far as the Reo company was concerned, it was largely hearsay. Of course Mr. Rueschaw knew there was a depression, but he desired to impress the dealers with the fact that their company had been doing business right along as a result of their efforts and the company's conservative policy of trying to build cars according to quality, rather than quantity rules.

This point was illustrated in motion pictures in two parts. The first section was more in the line of a comedy showing the trip of a motion picture camera to a motor plant where the business principle was making cars as cheaply as possible and in as large quantities as possible; where labor was selected at the lowest price without regard to skill, and where the stockholders were not motor car builders, but merely investors interested in profits and not in mechanical matters.

The second half of the picture told the history of the Reo company, bringing out sharply the fact that the plant officials were stockholders and associates of many years' standing, in whom the pride of accomplishment and interest in the industrial success of their home state exceeded other considerations.

In the course of his talk, Mr. Rueschaw said that while at the Kansas City automobile show he saw an interesting experiment made. One of the exhibitors sent a representative around to the various exhibits, and in only two of them was the representative approached by a salesman with a selling talk.

"I believe," said the speaker, "that the best salesmanship presupposes every person to be a car prospect. At any rate it does no harm to talk motor car to every person in your exhibit whether the person looks like a prospect or not."

Another experiment mentioned was tried by a dealer handling both passenger cars and trucks. This dealer obtained the services of high school boys to take the names and addresses of every user of horse-drawn vehicles seen on the streets of the city. These names were turned over to the sales department and canvassed. The boys were paid for their services and invited to the show.

"The adoption of such a method not only provides a prospect list, but it encourages the development of future motor car salesmen," Mr. Rueschaw said.

GRASSL DIRECTS REPUBLIC SERVICE

Contrary to previous announcements, H. Y. Grassl will continue as director of service for the Republic Truck Sales Corporation.

FISK PLANT ON FULL TIME

After cutting wages 10 per cent the Fisk Tire & Rubber company, Chicopee Falls, Mass., increased from three days a week to full time for all employes.

KEEPING HIS PLANT BUSY

Henry Hammel, president of the Northern Furniture Company, Sheboygan, Wis., was in Grand Rapids recently, reports the Grand Rapids Press, in furtherance of an unusual plan by which he has managed to keep his plant, employing 800 men, working full force five days a week. He has overcome the reluctance of country dealers to order by distributing large quantities of catalogs among them and advising them that orders of even a single piece of furniture will be accepted. Dealers then ask their customers to make selections from the catalog and they order what the sale calls for, and no more.

CRATER RAZOR CO. INCORPORATES

The Crater Guarded Razor Company, Constantine, Mich., has been incorporated under the laws of Vermont for $1,000,000. A full line of straight-edge razors will be manufactured. The officials of the company are: President, W. S. Crater; vice-president, Frank C. Dunbar; secretary-treasurer, W. S. Newton, all residents of Columbus, O. The general manager is O. E. Crater, Constantine, while R. C. Schellenharger, Pontiac, is a director. It was stated that while the factory will remain in Constantine, the general offices will be in Columbus.

Substitute Measure On Trucks Prepared

[By Staff Correspondent]

LANSING, March 23.—The first meeting ever held of cartage men from all over Michigan assembled at Lansing today to protest to the House Committee on Roads and Bridges against House Bill 323 introduced by Rep Strauch, of Shiawassee county. The bill would put motor trucks and buses under control of the Public Utilities Commission and tax them 5 per cent on gross revenue.

The protests pointed out that the bill was discriminatory since it exempted from its provisions the vehicles owned by corporations and used in their private service. It was emphasized that the trucking industry was very new, having been developed since the war, and should not be strangled by taxation before being put on its feet. Figures were presented showing the extremely narrow margin of profit from trucking operation at present.

Speakers told of new bus lines that served rural communities where there were no railroads or interurban system, that would be hit, and the movement of perishable commodities was cited to show how the trucks could serve if given opportunity to develop.

The result of the meeting was to prepare a substitute measure for the committee, which was commenced at once. About 75 delegates from all over the state attended. The meeting was called by the Detroit Transportation Association and was presided over by Secretary F. L. Henk, Detroit.

OLD TIMERS MEET APRIL 2 AND 3

The first meeting of the directors of the Old Timers' Club since the election of its officers during the week of the Chicago automobile show will be held in Flint, April 2 and 3, at the Hotel Durant, having been called by President Albert Champion, who is also president of the Champion Ignition Company. At this two-day meeting many matters of importance will be acted upon and the work of the organization will be outlined and put under way. Membership is reserved to men connected with the automotive industries for five years or more and more than 6,000 applications for membership have been filed. The slogan of the new association of old timers is "Good Fellowship—Good Laws—Good Roads."

STEWART WITH BROOKS AGENCY

W. J. Stewart has been made sales manager of Thomas Brooks, Inc., sales agents for the Davis Six car with salesrooms at 12942 Woodward avenue, Detroit.



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

Detroit United Lines
(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7.20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6.20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6.50 p. m.

JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8.10 p. m. Sundays only, 11:00 p. m.

PISTON PINS

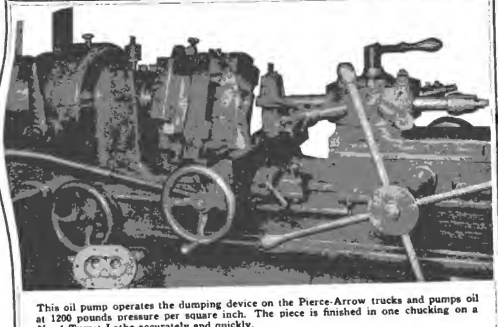
Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

Digitized by Google



This oil pump operates the dumping device on the Pierce-Arrow trucks and pumps oil at 1200 pounds pressure per square inch. The piece is finished in one chucking on a No. 4 Turret Lathe accurately and quickly.

Improving Turret Lathe Production

Turret lathe production
can be improved by better tooling—
and we have an excellent line
of standard tools
for any make turret lathe.

Our engineers
will suggest the tools
best suited to your work—
or you may prefer
to make your own selection
from our catalog
"Turret Lathe Tools."

You may save
the price of a new turret lathe
by changing the tooling
on your old ones.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company

CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Transportation

Detroit—The Michigan Central Railroad has issued notice to all its employes, except trainmen and telegraphers, that a general reduction in wages is to take effect April 16. The cut is not specified and will not be until after conferences between representatives of the workers and officials of the railroad. In the course of the announcement it is said that "since the effective date of the rates now paid, there has been a marked change in conditions and these changed conditions justify and require reduction in existing rates."

Grand Rapids—The Pennsylvania Railroad announces that Paul Jones has been named superintendent of the Grand Rapids division. He has been holding the position of superintendent of the Toledo division. His headquarters will be in Fort Wayne, Ind. J. K. Sherman has been transferred from Toledo to Grand Rapids as division engineer, with T. L. Doyle as assistant division engineer.

Jonesville—The Southern Michigan Traffic Association held a meeting here recently, at which representatives from Adrian, Coldwater, Jonesville, Sturgis and Quincy were present. President Fred E. Chambers, of Coldwater, presided. The questions of claims and of better passenger accommodations were considered at length.

Grand Rapids—A sign of business revival is noted by the Pere Marquette Railway in the resumption of shipments of gravel to Detroit and Saginaw. The gravel is to be used for construction work. The Green Oaks pits at Hersey and Wing, which supply Saginaw, are asking for cars.

Kalamazoo—Freight coming in and going out of Kalamazoo increased in February quite appreciably over January, according to the local railroad freight agents. Indications thus far show that March will be a busier month as to freight dispatch. This may be taken as a further indication that business is coming back.

Lansing—The Michigan Public Utilities Commission has been notified by a number of the small railroads in the upper part of Michigan that tariff schedules increasing their state rates by 20 per cent will be filed. The Michigan 1919 rate law provided a passenger rate of two and a half cents a mile, giving smaller roads the right to increase their rates up 4 cents, based upon their gross annual receipts per mile. Now that the federal rate of 3.6 cents a mile governs, the roads propose to base their increase upon the higher fare, which would give them up to 4.8 cents a mile.

Detroit—A new ruling of the United States Shipping Board will permit the allocation of ships to the United States Maritime & Development Company of this city for the New Orleans-Brazil trade. A former decision ruled against the Detroit interests.

Detroit—The unionized common laborers of the Pere Marquette Railroad have refused to accept a wage cut and have asked President F. H. Alfred to place the matter before the railroad labor board in Washington. The cut proposed brings wages down to an average of $3.20 a day for an eight-hour day.

Detroit—Addressing the inland waterways committee of the Board of Commerce at a recent meeting, Col. E. M. Markham, United States Corps of Engineers, in charge of river and harbor work in this territory, said that if the exporters and manufacturers of this district would unite on terminal and harbor development, Detroit could be made a great port.

Mount Pleasant—More than 100 members of the Chamber of Commerce of Mount Pleasant visited Midland last week, also meeting at the same time members of the Board of Commerce of Bay City, for the purpose of talking over matters connected with better transportation facilities between the three cities.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting

Free Cutting Screw Stock

Axle and Alloy Steel

Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

L-XX

HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

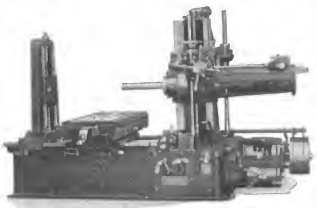
Detroit, Mich.

GIDDINGS & LEWIS

HORIZONTAL BORING MILLS

FOR

Tool Room and Production Work



Let us quote on your needs.

THE MOTCH & MERRYWEATHER MACHINERY CO.

MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

An Engineering Service

This organization is composed of men whose experience embraces years of practical association with all branches of manufacturing in the metal and wood-working industries.

Our laboratories, associated factories and personnel are at the disposal of manufacturers who are confronted with a production, patent development or sales problem.

Wright-Fisher Engineering Company
3087 E. Grand Boulevard
DETROIT MICHIGAN
Market 3930

ARE YOU REPRESENTED IN CALIFORNIA?

The advertiser intends leaving here about June 1st to make his permanent home in California and is seeking a high class sales connection on a straight commission basis. Have had experience in selling in California but at present and for the past two years have been employed as District Sales Manager in Detroit territory for a large well known corporation. Sales record here and in the past has been a very successful one. Can furnish references as to integrity and ability. Address Box C. No. 1, Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 680 Fort St., E.
Main 6602 DETROIT

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

ADDS TO ITS LINE

The Conchoic & Joy Manufacturing Company, Lansing, has remodeled its shop and installed new machinery and will manufacture sash, window and door frames, interior finish and do cabinet work.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Kalamazoo—Charles B. Hays has organized the Hays Home Building Company to construct homes and attend to all the details from plans to building. A. M. Worthington heads the architectural division; E. J. Stevens, the civil and structural engineering department; H. F. Young, the contracting department, and W. C. Hunting, the business and accounting division.

Grand Rapids—John H. Loomis, who has been manager of the terminal elevator plant of the Gleaners' Clearing House Association in this city, has resigned to go into the business of manufacturing fruit baskets and containers. He will build a plant in Ludington.

Detroit—An offer of land has been made to the Cerutl Aircraft Corporation, which is considering the erection of an aircraft plant near the proposed Russel Municipal Aviation field.

Chicago—The nineteenth annual meeting of the National Lumber Manufacturers' Association and the Third Annual Lumber Congress will be held here from March 30 to April 3. The new bureau of wood utilization and waste prevention will make a formal report.

Detroit—A new factory building is being erected in this city for the Spietz Cigar Company. It will be three stories high and solid brick construction.

Lansing—Contracts for 70 miles of paved road will be awarded April 1 by the highway department. These roads are located below the Straits. Work on roads in the Upper Peninsula will be started later. These plans are being made in anticipation that the Michigan legislature will pass a bill raising the interest rate from 5 to 5½ per cent on highway bonds amounting to $2,000,000 for highways for which Federal aid will be allowed.

Portland—Work on the foundation of the Western Oil Company's $25,000 building will be started at once. The start had been delayed until the automobile business gave sign of revival.

Detroit—A number of sub-contracts in connection with construction work were awarded by contractors during the week ended March 16. One concerned the Rouge State Bank, another a store and factory building being erected for the Federal Screw Works, another for an apartment building and one for work on six stores, six flats and six garages.

Port Huron—Port Huron is said to be one of the busiest cities in the state in the matter of building operations, and, in proportion to its size, it is perhaps the leading town just now in this line of work in Michigan. That is the opinion of P. E. Tanrath, who travels for a large roofing concern in Chicago and who has already visited several cities in the state.

Detroit—The city council has voted to cancel the contract for the construction of the sewer between Woodward and Yacama avenues because the contractor is too far behind in the work. The city will complete the work.

Saginaw—The city council has asked bids on $275,000 worth of paving work to be started in April to give employment to idle men.

Washington—There is available for Michigan road and bridge building $20,000,000 of the total amount of $622,000,000 available for the whole country for 1921 construction.

TO REBUILD CHEMICAL PLANT

Plans for the rebuilding of that part of the Delta Chemical Company's plant in Wells, was destroyed by fire, a few days ago, were started within 24 hours after the fire. The loss is estimated at $200,000 The Escanaba press quotes G. C. Craver, general manager for the company, as saying that there would be no delay in starting construction. The cause of the fire is unknown.

ALLEN LEAVES AMERICAN STATE

Fred W. Allen, who has been manager of the foreign department of the American State Bank, Detroit, for the last year and a half, has resigned. Mr. Allen came to Detroit from the First National Bank of Chicago, with which he was connected 17 years. It is understood that details of a new connection will be made public shortly.

TEXTILE PRICE SITUATION

Until labor and manufacturing costs are reduced the prices of textiles will not be reduced further, according to Frederick Stockwell, of Edson, Moore & Company, who addressed the semi-annual meeting of the Michigan Retail Drygoods Association, Detroit, last week. Mr. Stockwell said costs of raw materials had been cut, but manufacturing costs were still too high.

HENDRICKS LEAVES KING CO.

R. G. Hendricks, factory manager for the King Motor Car Company, has resigned.

RALSTON-NOLAN LAND TAX BILL

The National Committee of Manufacturers and Merchants on Federal Taxation, from its Chicago headquarters, sends out the report that 26 000 business concerns and 144 commercial organizations are backing the Ralston-Nolan bill (H. R. 12,397), providing for a tax of one per cent on the privilege of holding land and national resources valued at more than $10,000, which, it is claimed, would produce a billion dollars in revenue to take the place of revenue derived from excess profits and other business taxes.

Notice!

The old Briscoe factory and office building, between Woodward and Cass on Baltimore, being wrecked.

BUILDING MATERIAL GOING CHEAP

Save thousands of dollars on your new building; 1,000,000 brick, 2 and 3-inch white pine joists, steel, pipe, radiators, doors, windows, vault doors, flooring, factory doors, windows, sinks, pipe coils, gas and electrical fixtures, timbers, etc., at lowest prices.

Salesman on job.

JOYCE WRECKING COMPANY
Northway 4435

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

Digitized by Google

Detroit Vortex Club Has a Busy Season

One of the livest commercial exchange organizations of Detroit is the Vortex Club, which, like other organizations of its kind, is comprised of one man from each line of business, each trade and each profession.

The Vortex Club of Detroit has 245 members. They hold a weekly meeting on Wednesday noon at the Fellowcraft Athletic Club, at which meeting the members are privileged to hear addresses by various prominent men of Detroit and other cities. Every week day, except Wednesday, a private dining room is reserved at the Detroit Board of Commerce for the use of the Vortex Club members. These luncheons are always well attended.

The purpose of the Vortex Club, as in the case of other similar organizations, is an interchange of business among members and also an exchange of business information.

A number of club activities have been planned for the remainder of the present year. These include a dinner dance at the Loschmoor Club on April 7, and 12 other events up to June 9. On this date will held the annual excursion of the Club to Tashmoo Park. For this purpose the Steamer Greyhound will be chartered. Although participation in this pleasure trip is limited to members of the Vortex Club, their families and friends, it is expected that more than 2,500 will attend.

The officers of the Vortex Club are James Purkis Sharpe, president; George C. Becker, first vice-president; Henry C. Russell, second vice-president; Harry F. Wunderlich, secretary; Paul H. Benzien, treasurer, and Jules H. Crohn, sergeant-at-arms. The board of directors includes Harry W. Rapp, George Wood Hays, George W. J. Linton, Dr. Claude W. Moore, and George T. Whitney.

President Sharpe of the Vortex Club is the Michigan distributor for the Safe-Cabinet Company.

The Vortex Club of Detroit has an official monthly publication called the "Vortexian." This is a four-column, 24-page magazine, of which Melvin Lewis Burdick is editor-in-chief. The office of publication is at 49 West Forest avenue.

WHAT PONTIAC HAS DONE

C. W. Otto, of the Board of Commerce of Pontiac, was the guest of honor recently of the St. Johns Commercial Club, St. Johns, and impressed his hearers by his views on organization and co-operation in municipal betterment efforts. Mr. Otto told how the city of Pontiac, through the Board of Commerce, induced the Grand Trunk Railway to spend $1,125,000 in improving facilities in the city and how by organizing a mortgage investment company the city built 1,500 houses in one year and then was rewarded when the General Motors Corporation spent $1,000,000 in building additions to one of its plants.

GREAT LAKES DREDGE & DOCK

The position of the Great Lakes Dredge & Dock Company, according to Chicago advices, is very favorable. The company is said to have five and a half months' work ahead on old contracts. Capital stock is $6,000,000, without bonds, preferred stock, notes or bank loans. The company has $3,200,000 cash, and since the annual statement was issued showing $1,400,000 of city warrants, $8,000,000 of city funds have been approved, so that these warrants will be paid in cash immediately, making total cash resources of $4,600,000.

TURNING OUT ITS NEW PRODUCT

Work has been started by the United Engine Company, Lansing, on large orders for its new electric clothes washing machine. According to Charles L. Sprinkle, president and manager, the orders come chiefly from eastern points.



When purchasing cutters, bear in mind that —

BROWN&SHARPE

Carbon & High Speed Steel

CUTTERS

Give highest returns per dollar invested.

B&S cutters are the result of fifty years' experience in the manufacture and use of milling cutters. The shops around you will insist that B&S cutters give longest service and reach the maximum of Cutter Economy. They know from experience.

BROWN & SHARPE MFG. CO.
Providence, R. I.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Pitt Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, MARCH 26, 1921

Ground for Hope

As Dr. Munyon used to say in his oft repeated advertisement, "there is hope." Perhaps no state has indulged in so many vagaries of legislation as Wisconsin. Out of the hopper has come some very good legislation, from which other states have patterned their own, but a whole lot more of it has been harmful; has been of the type that may generally be classed as LaFollettism. A very large amount of it has been labor legislation, conceived by men who were exploiting labor, growing out of no honest economic demand for the improvement of the conditions either of work or of workers, and enacted in the spirit of experiment, regardless of results while the experiment was being carried on. Much of this legislation was socialistic in its economic aspect and was directed against the industrial cities of the state. For be it known that where we to the east of the Badger State have looked upon its leading industries as being beer making and dairying, Wisconsin follows very closely after Michigan in the scale of industrial performance.

Kenosha, Racine, Janesville, Beloit, Fon du Lac, Lacrosse, Madison, Eau Claire and Superior are proud little industrial centers, which while easily led in productivity by Milwaukee, contribute immensely to the wealth of additional machinery, furniture and textiles with which the country is annually endowed.

The harmful legislation has been usually put over by the so-called labor interests, log rolling with the farmers. The farmers had their own axes to grind and were quite willing to have labor turn the stone during the process, they in turn accomplishing the operation of the grindstone when the laborite held the blade of his axe to it. In the various legislative melees the extreme of conservatism as represented by the tiller of the soil was hooked up with the extreme of radicalism, as represented by Victor Berger's followers from Milwaukee, while the bourgeois element were as distinctly set apart as they were, on a larger scale, in Soviet Russia.

This year the unexpected has happened, and because conditions under which Wisconsin legislation has been enacted in the past are not materially different from those which have marked lawmaking in Michigan it is worth while reciting the Wisconsin experiences and drawing the lesson and extracting the consolation therefrom. The current session of the Wisconsin legislature has had before it, much to the dismay of industrial employers of labor, a measure known as the Conway Act, designed to force every mill, factory and industrial plant, except those devoted to the making of dairy products, to limit their employment of help to eight hours a day. The motives of the legislation, as described by its proponents, were the usual ones of interest in the health and comfort of working people. A rather franker representative came out flatfooted and declared: "This is a boost for labor. There are two hundred thousand idle men in this state. If we force two shifts it means more jobs for more men."

It can be readily seen that so great an incentive to the members of the Wisconsin legislature to attract the votes of city constituents and so excellent an opportunity for the Wisconsin farmers to join with the laborites in the congenial job of putting it over on the cities caused much annoyance to the Wisconsin employers of industrial labor. The relief came from a most unexpected source on Tuesday of this week, the source being none other than the farmer representatives themselves. One can readily imagine the surprise of the state when a farmer representative declared: "The statement has been made that Wisconsin is a progressive state and this is a progressive measure. It is a progressive state. We have progressed so rapidly that we are trying to find a landing place. This bill is dangerous. It tends to create idleness. The more idleness we have, the more crime." Still another farmer representative reasoned that while farmer industries were exempted, they would have to pay in two ways; the one the temptation of their labor to easy conditions in the cities, the other the increased cost of factory products. And yet another farmer asked the question, if it were injurious to the health of workers to labor more than eight hours a day, why not legally prevent the farmers from injuring their health? When and whereupon the farmers slaughtered the bill in combination with the non-laborite representatives.

This experience in the Wisconsin legislature gives a ray of hope to the captains of industry, who have been harrassed by legislation devised by walking delegates and representatives or organized labor more concerned with keeping their jobs than with the enlargment of the supply of work and the increase of the fruits of labor. The men who declared against the labor legislation were not freaks. They had no new, sudden notion. They were reflecting the sentiment of the rural communities which they represent in the legislature. The fact that a break has been made in one state suggests the possibility of creating conservative sentiment in Michigan. Is there a way for industry in Michigan, the industry which makes the most immediate market for the products of the farm, which pays the largest share of the taxes, which develops and devises the creature comforts for the men and women who live on the farms, to convey its message of thrift and opposition to idleness to the farmer and have him join it in the prevention of harmful conditions? Or is it one of the fruits of readjustment that the farmer has learned that he can no longer afford to make urban labor conditions so attractive, so profitable and so non-productive that he can lay to that condition the unattractiveness of his own processes and the absence of an adequate distribution of farm labor. If the former condition be a possible one to bring about, industry owes it to itself to carry its message to the farmer. If the process of education be already accomplished, then there is ground for hope that industry can go on without the periodical creation of new legal restrictions.

In either case there is ground for hope that a betterment of conditions is at hand.

William B. Wilson Retires

PRESIDENT HARDING is to be congratulated on his prompt action in obtaining the resignation of William B. Wilson, former Secretary of Labor, as a member of the International Joint Commission investigating the proposed Great Lakes-St. Lawrence Deep Waterway, with the presumable intention of reinstating former Senator Obadiah Gardner. Everyone who likes fair play hopes that Mr. Gardner will be reappointed without delay.

Why President Wilson in the closing days of his administration displaced Mr. Gardner is not easily explained. The best that can be said for the episode is that it probably was the result of a whim of Mr. Wilson, inasmuch as there could have been no advantage at that time in making a change. No one ever had ever questioned Mr. Gardner's ability, and even if it had been

Digitized by Google

questioned, there could have been no wisdom in removing him at a time when the evidence in the waterways case was practically all in. His successor, no matter how able a man, could not be expected to vote intelligently, for the reason that the facts could not be as familiar to him as to Mr. Gardner. If President Wilson had wanted to take care of his Secretary of Labor, he could have found another place for him.

With Mr. Gardner back on the Commission, the latter can pass intelligently on this issue, which is of commanding importance to the country at large.

Tax Slackers

WRITING in the Annalist, C. T. Chenery brings the deadly parallel column into play to back up an observation which ought to supply food for thought for the people who are hunting for sources of national revenue. Mr. Chenery wonders whether we haven't in this country some few millions of men who despite the elaborate government machinery made and provided, are successfully dodging the payment of income taxes. If there are, and a way could be found to reach them, it would be possible to eliminate, for one thing, the excess profits taxes, which for so long have been depressing business.

Mr. Chenery makes use of figures from two sources—the Bureau of Internal Revenue, as showing the number of persons who filed income tax returns for 1918, and of the American Automobile Association, as showing the number of motor cars in use in 1919, taking the latter year on the theory that the cars were purchased from savings accumulated in 1918. The government reports show that about 4,500,000 individuals paid income taxes for the year in question, while the A. A. A. totals reveal that there were something like 7,000,000 owners of cars. There is thus a discrepancy of 2,500,000. That being the case, one of two things is possible: Either there are car owners who failed to file returns or there are persons who have discovered a system which enables them to live and own a car on an income of less than $1,000 a year, if single, or $2,000, if married. Such a system must be a wonderful thing.

As might be suspected, the figures show that the proportion of income tax payers to automobile owners is larger in the centers of population and the manufacturing districts than in the agricultural communities. Some striking examples may be seen in the following table:

CENTERS OF POPULATION AND MANUFACTURING	Automobiles	Taxpayers
Pennsylvania	490,337	518,729
New York	555,789	559,753
New Jersey	189,167	185,706
Massachusetts	288,059	209,786
Illinois	478,438	366,918
AGRICULTURAL STATES		
Kansas	288,601	64,794
Iowa	363,000	118,933
Oklahoma	151,300	46,818
Georgia	126,563	39,072
North Carolina	109,000	21,730
Minnesota	259,743	84,515

This is not hard to understand when one remembers that in the manufacturing centers the larger portion of business is conducted by corporations and partnerships whose operations and salaries and commissions paid are easily accessible to the tax collectors. In the rural districts, on the other hand, where books are seldom kept, or where those subject to the tax sometimes live remote from the internal revenue offices, it is easier to avoid payment. Our farmer friends, who are always ready to saddle as much more of the tax burden on the urban centers as they can, will do well to ponder some of the indications shown in the Annalist's article.

Mr. Chenery's conclusion is that there should be 9,000,000 payers of income taxes—about double the present number. If the federal government adopted effective measures to bring in the slackers, the burden not only would be more equitably distributed, but some of the present uneconomic tax levies could be done away with.

Short Measure Stuff

HOME BREWED EDUCATION

WE ARE TAKING a correspondence course. It is a good course and most interesting, and in a subject taught only in universities.

This is our first experience with these latter day educations a la carte and we find that they lack kick.

Education of the present is quite painless when one finds time and money to attend school in actual residence. But with a correspondence course it is different. All one can do is study and write blue books and ask questions and study some more and pay the tuition. Damme.

There are no co-eds, no junior hops, no eight o'clock classes to bolt, no yells, no athletics, no fraternities, no deans and no boarding houses. How is a chap ever going to get educated without all these things?

So we don't expect very much after we get all through. We probably will have one of these one-track minds and won't know a durned thing except what we learned. We won't ever have discovered what to do with a "soup and fish" outfit rented for commencement and there won't be any alma mater to "tap" us forever after. It's a gloomy prospect.

* * *

This is the season when the handbill squad comes to your door with kidney pill almanacs, announcements of sensational money-saving sales and short cuts across your fresh sod from the house next door.

* * *

The auto show was a success,
The best one yet by far,
And if I could have made a touch,
I'd sure have bought a car.

* * *

Clara Hamon has organized a movie company and will make pictures, but she warns us that they will be perfectly proper and Christian. Looks like she needs a better press agent.

* * *

NOTICE TO OUR COUNTRY EXCHANGES

Notify the boys back home that they'd better polish up the opera glasses that haven't been used since the last World's Fair. A New York contemporary just announces the following plays released for stock company production in the small centers of the country:

Up in Mabel's Room.
The Ruined Lady.
Daddies.
She Walked in Her Sleep.
The Girl in the Limousine.
Nighty Night.
Breakfast in Bed.

—A. F.

Brains, Such as They Are

AVERAGE men and women, says Prof. Henry F. Adams, of the University of Michigan, are only about ten per cent efficient above the neck. That may explain a lot of things that have been puzzling us, and likewise why we have been puzzled. But there is some consolation in it, too.

For one thing, it may explain some of the legislation being proposed at Lansing, where a lot of average men—very average—are in session. For another thing, it may explain why a lot of labor unionists are making it quite clear that if there is to be any wage reduction in this process of business readjustment, it will be "over their dead bodies." It also may explain some of the public utility theories of some aldermen and some newspapers, although in the case of the latter it usually is not so much a proposition of lack of gray matter as absence of scruples. It also may explain some of the ideas about government and economics being handed us by pulpit, platform and press. Indeed, Prof. Adams seems to have come upon the fountain head of most of our ills and the nostrums offered for them.

On the other hand, we may take comfort from the fact that things are no worse than they are. The world has got along fairly well to date, making a little progress here and a little there, on ten per cent brains. It probably couldn't have kept up with itself if what cogitating machinery there is had been functioning even at 50 per cent—to say nothing of 100 per cent. And again, if the general level were any higher, there would be more competition.

Those of us moderns who have wheels where something else is supposed to be ought not be discouraged. Even old Socrates was a little dippy.

Digitized by Google

FINANCIAL

The Business Outlook

By PHIL S. HANNA

ONE of the largest building financing concerns in America announces this week that it is ready to make loans for construction of dwellings and apartments. And it goes further and says publicly: "We see no reason that warrants the belief that costs are going to decrease materiinly from present levels. It is therefore our opinion that it is good judgment to BUILD NOW."

This pronouncement comes after the corporation had made a nation-wide survey which reveals n shortage of at least 1,000,000 homes and also shows reduced stocks in the hands of all manufacturers and dealers in building supplies that presages exhaustion and higher prices if anything like real activity gets under way. It is to be hoped sincerely that the prognosticator quoted is correct. Many things point this way. The announcement adds another truism—that "rents will not come down until buildings go up. This concern has financed many building enterprises and its observations, it seems, should serve as a dependable guide to the future.

Detroit will especially welcome anyone who is fain to offer us a loan. We are in many respects just as dependent on outside capital as any newly developing country. Our motor industries are still in short pants, as it were, and the more concerns like the one quoted above who come along, the better.

We haven't discussed exports and imports for several weeks, but attention is again drawn to foreign trade matters by a statement of Secretary Hoover that by March his department will put out dependable figures. This paper has dwelt for some months in the belief that there have been grave errors in the government figures, for the reason that actual shipments fell off some 60 days before the Washington figures began showing the decrease in exports. Now we have it, and therefore quote the following:

"Increased imports and decreased exports in February, as compared with January of this year, are shown by official foreign trade figures released by the Department of Commerce. Imports and exports for the eight months ended February, 1921, decreased, as compared with the similar period of 1920."

Wednesday one of the Detroit bond houses had three long distance phone calls from country banks in different sections of the state asking for paper. The total sales effected were more than $100,000, and the incident is another of those little things which show the way money matters are going in the country.

* * *

Tending to illustrate how the Detroit housewife is changing her buying habits and adjusting herself to changed conditions of purse, is the story learned today that the linling counter at one of the largest Woodward avenue stores is now doing about $200 a day, as against $100 a day a year ago. The Missus says this means that more women are making their own clothes and relining old dresses rather than buying new ones.

MERCHANDISE

	1921		1920	
	February	Eight months ended February	February	Eight months ended February
Exports	$448,000,000	$645,000,000	$615,000,000	$5,220,000,000
Imports	215,000,000	269,000,000	747,000,000	3,235,000,000
Balance	$274,000,000	$446,000,000	$2,370,000,000	$178,000,000	$1,995,000,000
GOLD				
Exports	$ 1,000,000	$ 3,000,000	$121,000,000	$42,000,000	$362,000,000
Imports	44,000,000	38,000,000	787,000,000	4,000,000	43,000,000

BAXENDALE JOINS DETROIT SAVINGS

H. N. Baxendale, since July, 1920, n state bank examiner, and prior thereto connected with the Detroit branch of the Federal Reserve Bank for two years, becomes auditor of the Detroit Savings Bank, April 1. His work will involve a complete reorganization of the auditing department of the bank made necessary by increased business and additional branches which have been opened recently. Mr. Baxendale obtained his banking experience in Peoria, Ill., having spent nine yenrs in the Central National Bank of that city.

Wilson Fleming, assistant cashier, takes on additional duties by becoming manager of the new business department of the bank, this department being a recent creation. Kenneth Pinton has been made an assistant cashier. He has been with the Detroit Savings Bank since 1909, having started as a messenger. For six yenrs he was in charge of branch banks, part of the time at the Clay and Oakland branch and the remainder nt the Grattiot and St. Antoine branch. He has been with banks continuously since 1909, except two years spent in the Navy. This promotion comes in recognition of his faithful efforts.

New branches of the Detroit Savings Bank will soon be opened at Hamilton and Collingwood and Junction and Warren avenues.

FIRST NATIONAL BUILDING PROGRESS

Burton Newcomb, who recently became manager of the new building in progress of construction by the First and Old Detroit National Bank, reports the steel superstructure tonnage more than 76 per cent erected. The facing work for the outside of the building, which will be of Indiana limestone, has been started and some of the concrete work on the bank vaults is under way. Fireproofing of the steel work is in progress. The steel smoke stack is keeping pace with the steelwork and construction generally is so far along that some of the electricians and plumbers and heating installers have been set to work.

This building will be 312 feet high above sidewalk, the highest in Michigan. Lot area is 21,500 square feet. Weight when completed will be 175,000,000 pounds, distributed 9,000 pounds including foundation over each foot of ground. The building will be supported on 74 concrete caissons reaching 85 feet below street level.

CONSUMERS POWER

Net income of the Consumers Power Company for the year ended December 31, 1920, as reported to the city clerk of Grand Rapids, was $1,570,600. The statement follows: Cost of properties $65,413,577.32; liabilities, bonds $34,468,000; other debts, $2,196,130.34; common stock, $14,425,900; preferred stock $13,263,000. Gross income was $9,918,736.83, plus income from gas properties of $176,980.70; less operating expenses of $6,609,856.29 and interest and discount of $1,909,251.58. This leaves net income of $1,570,600.

PERE MARQUETTE

Pere Marquette Railwny reports gross earnings of $2,404,654 for January, as against $3,116,812 in January, 1920. Net operating deficit for the month was $290,145, against $16,989 a year ago.

D. T. & I. RAILROAD

Gross earnings of the Detroit, Toledo & Ironton Railroad for January are reported as $248,425, as compared with $351,380 in January, 1920. Net operating deficit after taxes was $183,519, compared with a deficit of $63,603 the year previous.

BECKWITH'S NEW CONNECTION

Vere Beckwith, cashier of the Enu Claire State Bank, has resigned to become cashier and treasurer of the Michigan State Investment Company, Benton Harbor. The latter has resources of nearly $400,000.

NEW BRANCH PROPOSED

The Peoples Savings Bank, Grand Rapids, of which E. D. Conger is president, has submitted n proposition to the directors of the Farmers & Merchants Bank, Madison Square, to take over the building lease of the latter and to open a branch of its own in which the liquidation of the Farmers & Merchants will be carried on. While this is by process it is proposed to accept certified deposits as the basis for n loan to depositors in the F. & M. up to a certain percentage of such deposits.

BOOKLET ON EXCHANGE

Fenton, Davis & Boyle have furnished this office with a circular entitled "Foreign Exchange and Foreign Internal Bonds," which discusses clearly the reasons for the present depreciation of foreign exchange in this market and drnws some interesting conclusions in respect to these matters. One of the conclusions is given herewith: "As has been discussed heretofore it is our opinion we shall continue to have industrial liquidation nt least until we grow new crops and our market for merchandise, particularly imports, will not be good until we have created more wealth with which to purchase that merchandise."

SHERLITZ JOINS MEEKER CO.

Otto H. Sherlitz, who for five years has been assistant manager of E. W. Wagner & Company, has become associated with Meeker & Company, members of the New York Stock Exchange, Pittsburgh Stock Exchange and Chicago Board of Trade. The Detroit offices of Meeker & Company are at 256-262 Penobscot building.

PONTIAC CLEARINGS

Bank clearings in Pontiac last week were $23,791.86 less than the previous week, when total clearings were $359,238.74.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Bankers Land & Inv.	2½	4
Burroughs Adding Machine	137	145
Columbia Nat. Fire	16	17
Commerce Fin.	15	20
Detroit Mortgage, com.	3⅜	4½
Detroit Mortgage, pfd.	6½	8¼
Detroit Copper & Brass	12	20
Detroit National Fire	25	26
Detroit Life	55	56
Federal Bakeries Co.	26	33
Federal Discount Co.	7	7½
Fisher Body	52	54
General Necessities Corp.	10⅝	11⅜
Gladys Belle Oil, com.	29	40
Gladys Belle Oil, pfd.	58	64
Great Lakes Engineering, new	11	14
*Great Lakes Engineering, old	53	65
Hoover Steel Ball	14	16
Hayes Wheel Co.	13	15
Interstate Fire	25	28
Invader Oil	153	
Jewett, Bigelow & Brooke Units	10	11
Jewett, Bigelow & Brooks, com.	7	7½
Kelsey Wheel	45	48
Little Wonder Stove	1½	3
Monroe Binder Board	39	41
Detroit Motor Bus	5	9
McCord Manufacturing, com.	5¾	6¼
McCord Manufacturing, pfd.	35	45
Michigan Copper & Brass	15	17
Noble Oil, com.	51	53
Petoskey Portland Cement	11	11½
Peninsular Fire Ins.	21	30
River Raisin Paper	12	13
Trippensee Mfg. Co.	6⅜	7¼
Union Mtge, 100% com.	9	11
Union Mtge. 90% com.	7	9

Range During 1920, Approximate

Hoover Steel Ball	24¼	18
Columbia Motors	4⅜	6
Noble Oil, com.	130	58
Mich. Copper & Brass	36	19¼
Detroit Mtge., pfd.	6½	6⅜

Motor Stocks	Bid	Asked
Briscoe Motors	15	17
Columbia Motors	4⅜	6
Chalmers		3
Chevrolet	175	200
Cole	240	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	2	5
Denby Truck	1	3
Elgin Motors	5¾	7
Harroun	⅝	1⅛
Haynes	170	175
Hupp	14	15½
Jackson, com.		1⅜
Jackson, pfd.		2½
Keystone Tire	14⅜	14⅝
Lafayette Motors	30	50
Liberty Motors	6½	8
Liberty Motors, pfd.	60	70
Lee Tire	23	29½
Locomobile	2	3
Maxwell Motor	6	6
Mercer	4½	5½
Mitchell Motor	6	9
Motorbus	3	9
Nash	320	325
Pierce-Arrow Truck	33½	34
Republic Truck	16	17
Saxon Motors	6½	8½
Scripps Booth	25	35
Stevens Duryea units	60	90
Stromberg Carburetor	37	38
Studebaker	74	76
Willys-Overland	3	3¾
Wilson Truck	4¾	5⅜

Grand Rapids Stocks

American Public Utilities, Common	7 - 12
American Public Utilities, Preferred	21 - 31
Commonwealth Power Railway & Light, Common	13¼ - 14
Commonwealth Power Railway & Light, Preferred	33 - 35
Citizens Telephone Company	4¾ - 5⅜
United Light & Railways, Common	24 - 25
United Light & Railways, Preferred	59 - 60
Cities Service Bankers' Shares	27 - 27½
Cities Service, Common	232 -237
Cities Service, Preferred	65¼ - 67
Cities Service, Debenture "B"	122 - 127
Cities Service, Debenture "C"	92 - 94
Cities Service, Debenture "D"	84 - 87

Quotes by Howe, Snow, Corrigan & Bertles, March 22.

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. K. Parkan, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

Digitized by Google

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED

Resources	Mar. 18, 1921	Mar. 11, 1921	Mar. 19, 1920
Total gold reserves	$2,206,029,000	$2,187,906,000	1,954,591,000
Legal tender notes, silver, etc.	209,260,000	210,618,000	132,748,000
Total reserves	2,415,289,000	2,397,924,000	2,066,326,000
Bills discounted—			
Secured by U. S. Government obligations	1,900,386,000	1,895,977,800	1,353,399,000
All other	1,224,533,000	1,262,478,000	854,172,000
Bills bought in open market	127,780,000	145,608,000	463,232,000
Total bills on hand	3,247,699,000	2,515,058,000	2,676,913,000
U. S. Government bonds	25,849,000	25,847,000	26,797,000
U. S. Victory notes	19,000	19,000	58,000
U. S. certificates of indebtedness	284,861,000	255,347,000	410,119,000
Total earning assets	2,658,514,000	2,796,611,000	3,167,887,000
All other resources	762,746,000	651,174,000	1,087,682,000
Total resources	5,836,749,000	5,845,709,000	6,155,905,000
Liabilities			
Capital paid in	101,053,000	101,003,000	90,958,000
Surplus	262,636,000	262,636,000	120,126,000
Government deposits	58,789,000	81,523,000	60,583,000
Due to members—reserve account	1,677,774,000	1,731,429,000	1,850,103,000
Other deposits, including foreign government credits	38,072,000	30,776,000	109,969,000
Total deposits	1,774,635,000	1,843,726,000	2,011,578,000
F. R. notes in actual circulation	2,962,840,000	3,005,840,000	3,047,133,000
F. R. bank notes in circulation—net liability	178,280,000	182,697,000	211,132,000
All other liabilities	616,910,000	511,617,000	674,984,000
Total liabilities	5,836,749,000	5,845,709,000	6,155,905,000
Ratio of total reserves to deposit and F. R. note liabilities combined	51.0%	50.9%	42.5%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against deposit liabilities	60.6%	59.9%	48.2%

Michigan Bond Items

Taxpayers of the school districts of Dover, Fairfield, Madison and Seneca, Lenawee county, have voted, 62 to 24, in favor of a bond issue of $70,000 for the purpose of constructing a centralized rural high school, to be located probably in Sand Creek.

It is probable that an election will be held in Big Rapids on a proposal to bond the city for the erection of an armory.

The voters of Belding have decided by a majority of 4 to 1 to bond the town for $30,000 for concrete streets.

It was announced a few days ago at a meeting of the city commission of Grand Rapids that the question of disposing of the $355,000 of tuberculosis hospital bonds was likely to be solved through an offer made by President Dudley E. Waters, of the Grand Rapids National City Bank, to sell the paper to local investors without expense to the city.

The electors of Ionia will be asked at an election to be held probably in April to bond the city for $10,000, the additional money needed for street paving. The job will cost approximately $75,000.

REO MAKES STOCK RULING

Owing to difficulties which have arisen in cases where one of two joint owners of a stock certificate has died the Reo Motor Car Company has ruled, according to D. N. Parsons, assistant treasurer, that the survivor must exhibit evidence of transfer of the deceased's interest, executed prior to the latter's death, before a joint ownership certificate will he transferred to the survivor.

NEW LOAN COMPANY

The Citizens' Mortgage & Loan Company, Lansing, incorporated for $50,000, has leased offices and will open for business April 1. Its purpose is to care for small loans and financial needs of the public on short terms.

The officers of the company are: President and general manager, Charles A. Ferguson; vice-president, Harry J. Bond, Mason; secretary-treasurer, Miss L. M. Cook. The directors comprise the first two officers and Seymour H. Person, J. G. Reutter and Carl J. Moelter.

DECISION AFFECTS CABLE TRANSFERS

Advices from New York are that the Court of Appeals at Albany had decided that where one gives money to a bank for transfer, the money becomes the property of the bank and a debtor and creditor relation is thereby established. The court held that a trust relationship is not established and that a bank does not hold the money as agent or trustee until the foreign credit is set up. The case in question is one known as Legniti vs. Mechanics & Metals National Bank and has been in litigation since 1914. Doubtless the decision in this case will affect many other transactions now in litigation

C. P. R. EARNINGS

Earnings of the Canadian Pacific Railroad during the first week of March totaled $3,255,000, or $11,000 more than for the corresponding period last year. Total earnings since January 1 were $30,307,000, as compared with $30,571,000 last year.

U. S. STEEL REPORT FORECAST

The Wall Street Journal says that when the annual report of the United States Steel Corporation is made public in about two weeks it will show a working capital close to $600,000,000, a gain of around $367,000,000 in six years, equal to more than $72 a share on the common stock. The report also will show that the corporation has spent close to $500,000,000 for new construction and acquisition in that same period, which added to increased working capital of $367,000,000, gives a total of $867,000,000, equal to more than $170 a share on the common.

WORTHINGTON PUMP EARNINGS

Net income of the Worthington Pump & Machinery Corporation for the year ended December 31, 1920, after reserves for federal taxes was $2,030,923, as compared with $3,257,064 in 1919; $3,137,775 in 1919 and $4,432,365 in 1917. After deduction of dividends, the surplus amounted to $272,896, as against $2,246,266 in 1919. Including previous surplus, the total surplus of the company at the beginning of this year was $4,625,734, as compared with $5,852,738 the year before. Sales totaled $27,924,745, while in 1919 the figure was $32,074,592; in 1918, $43,443,485 and in 1917, $28,407,699.

PNEUMATIC TOOL STATEMENT

The annual statement fo the Chicago Pneumatic Tool Company for the year which ended December 31, 1920, shows surplus of $1,273,061 after deduction of taxes and all charges, which is equivalent to $9.87 a share on the capital stock of $12,897,900, compared with $7.65 a share earned in 1919 on a capital stock of $6,448,800. In the statement to the stockholders, H. A. Jackson, president of the company, says: "Net sales for the fiscal year while suffering from the depression felt about the middle of the year, still slightly exceeded those for the year preceding. While the gross earnings show a decrease from the previous year, the discrepancy is accounted for by the continued increase in the cost of manufacture, and the larger proportionate sales of the less profitable varieties of the company's products."

MR. ZINKANN'S CAREER

Sidney H. Zinkann was born in Wellesley, Ont., November 15, 1880. Went to school at Kitchener, Ont., and started in 1906 to work for the Canadian Express Company, at London, as a clerk. In 1909 he was made cashier of the London office and in the same year was moved to Windsor in a similar capacity, at which office he was afterward made agent of the company. He left Windsor in July, 1913, and came to the Dime Savings Bank, Detroit, with which he remained until August, 1919, having risen from clerk to assistant auditor. From the Dime Savings he went to the Commonwealth-Federal Savings Bank as general utility man, which connection he held until December 1, 1920, when he joined Walter G. Toepel in organizing the Continental Bank, of which he is now assistant cashier.



SIDNEY H. ZINKANN

Mr. Zinkann has been active in the Detroit chapter of the A. I. B. and is at present a member of the board of governors of that body. He is also secretary of the Junior Bankers' Club of Detroit.

LIFE INSURANCE LOANS HIGH

An interesting feature of the annual statement of the New York Life Insurance Company as of January 1, 1921 is the fact that total payments during the year to living policy holders were more than twice the payments to beneficiaries. The former was $79,395,838 and the latter $35,453,758. Officials of the Ohio Life Insurance Company state that no doubt a compilation of figures for all the life insurance companies will show similar tendencies during 1921. For a time they say it seemed as if every policy holder was trying to borrow on his contract. Loans on Policies as shown by the New York Life statement are $147,499,247 out of total assets of $966,644,397.

FIRST & OLD TAKES COUNTY BONDS

The First & Old Detroit National Bank purchased $2,000,000 worth of Wayne County bonds March 17, which were offered by Auditor William Gutman. The issue bears 5½ per cent. Proceeds will be used for the new bridges crossing the River Rouge at Jefferson avenue west and Fort street west.

Digitized by Google

STUDEBAKER CORPORATION REPORT

The annual report of the Studebaker Corporation has been issued. We present below a statement of profits together with a comparative balance sheet.

Assets.	Dec. 31, '20	Dec. 31, '19
Plant Account	$35,162,605	$25,706,454
Good will, etc.	19,807,276	19,807,277
Citizens Housing Corp.	2,266,832	
Inventories	38,076,793	20,667,338
Investments	826,910	1,177,971
Accts & Notes Rec.	5,628,774	6,541,185
St. Dfrs. Outstanding	2,137,094	2,001,385
Cash	4,236,224	1,171,175
Liberty Bonds, etc.		2,026,00
Due from U. S.		1,675,280
Short term loans		2,000,000
Deferred Charges	471,692	406,491
	$99,604,211	$88,115,378
Liabilities.		
Preferred Stock	9,800,000	10,260,000
Common Stock	60,000,000	45,000,00
Notes Payable	8,500,000	
Deposits on Sales	358,347	395,646
Accounts Payable	2,312,341	3,619,818
Reserved for Taxes	2,235,990	1,855,240
Reserved for Payrolls, etc	2,830,485	2,919,091
Special Surplus	3,645,000	3,240,00
Surplus	9,822,048	20,925,583
	$99,604,211	$88,115,378
Profits and Loss Account.		
Net Sales	90,652,362	66,382,307
Plus Other Income	120,014	
	$90,772,376	$66,382,307
Less:		
Manufact. Cost. Dep. etc	78,521,555	55,099,844
Interest		116,951
Federal Taxes	3,428,767	1,854,229
Preferred Dividends	710,150	748,475
Common Dividends	3,937,500	2,160,000
Surplus Earnings over outgo	5,174,404	6,462,808
Surplus at beginning of period	34,165,583	18,413,137
Less Stock Dividend $15,000,000		
Losses 872,940		
	15,872,940	
	8,292,643	
Plus Net Earnings	5,174,404	*6,462,806
Surplus at end of period	13,467,048	24,165,583

* Less adjustments.

Net earnings after expenses and taxes were $9,832,054, or more than $15 per share on the $60,000,000 common stock after allowing for preferred dividends. In 1919 net was $28.54 on $30,000,000 common stock.

Excerpts from President Erskine's report follow:

"Demand is quite heavy from all sections except in a few spots. In a number of places it is double and treble what it was last Spring. March sales probably will exceed 5,000 cars. Manufacturing schedules call for 5,235 cars in March, 5,440 in April, 7,015 in May and 7,320 in June. If general conditions become no worse business should exceed that of last year."

HANCHETT OFFERS ARKANSAS BONDS

Hanchett Bond Company, Chicago, is offering $350,000 Benton County, Arkansas, road district bonds, bearing 6 per cent interest due serially, on a basis to net from 6½ to 7 per cent according to maturity selected. Benton County is said to be the banner apple producer in the United States. Assessed valuation is more than $3,000,000 while the total debt is the amount of this issue, $350,000.

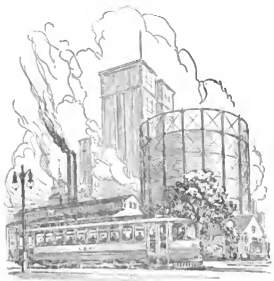
DETROIT TRUST CO. BOOKLET

We have been favored with a copy of a recent booklet published by the Detroit Trust Company, which contains a thorough-going explanation of how the corporation department of the company serves the public. The department is divided into three divisions: Managerial, insolvency and service, and the layman may obtain a splendid conception of the workings of a trust company by perusal of this booklet.



HARRIS, SMALL & LAWSON
150 CONGRESS ST., W.
DETROIT

PUBLIC UTILITY BONDS



Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6303

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

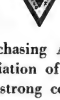
before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange



Purchasing Agents' Association of Detroit, is that strong constructive force which is raising the occupation of purchasing to a profession.

Publicity Office 49 Garfield Building Glendale 8819

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MARCH 22nd

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.			100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Lt. & Trac. Co., com.	102	102½	100	114 - 09	204 - 55	4%	4%	Quarterly	Feb. 1, 1921		1¾%	1%	1¾%	$23,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,336,200
Auto Body Co.	6¾	8	10	8¾ - 4¾	12½ - 5½				Jan. 20, 1917		25%			$1,074,000
Do., pfd.			100		10½ - 10¾	6%		Semi-Ann	Feb. 1, 1921	3%		3%		$527,600
Bower Roller Bearing Co.			10	17½ - 17	29¾ - 16				July 1, 1920	16%				$600,000
Charcoal Iron Co. of America, com.	2¼	2½	10	2¾ - 2	6¼ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd.	3	3½	10	3½ - 3	8¾ - 2½				July 1, 1919	5%				$5,317,250
Cities Service Co., com.	235	240	100		255 - 230½	8%		Monthly	Mar. 1, 1921	1½%	1¼%	1½%	1¼%	$42,877,800
Do., pfd.	66¾	67	100		70 - 65	6%		Monthly	Mar. 1, 1921	1½%		1½%		$76,623,499
Conbulls Lead & Zinc Co.	8	12	1	16 - 13¾	25 - 6				Nov. 15, 1917	50¢				$300,000
Columbia Sugar	11½		10	14½ - 10¼	20½ - 11¼	18%		Quarterly	Jan. 2, 1921	2%		8%		$3,000,000
Commerce Motor Car Co.			10	2¾ - 1¾	13½ - 1¾				July 1, 1920	3%				$500,000
Com. Pw. Hgt. & Light Co., com.			100	6¾ - 3¾	18½ - 6¾				July 1, 1920	3%				$18,585,900
Do., pfd.			100	35 - 34	23 - 23	36%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,953,000
Continental Motor Co., com.	6¾	6¾	10	8¾ - 6¾	14½ - 6¾				Jan. 15, 1921	1%		1%		$7,296,280
Do., pfd., XD		87	100		100½ - 93	7%		Monthly	Jan. 15, 1921	1¾%		1¾%		$2,181,700
Detroit Brass & Malleable Works			100	98 - 98	98 - 93	8%		Monthly	Mar. 1, 1921	1½%		1½%		
Detroit & Cleveland Navigation Co.			50	75¾ - 71	100 - 67	8%		Quarterly	Feb. 1, 1921	2½%		2½%		$6,038,000
Detroit Creamery Co.		23½	100	25¾ - 22¾	38¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,500,000
Detroit Edison Co., XD	97¾	97½	100	98 - 92½	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,655,200
Detroit United			100			8%		Quarterly	Mar. 1, 1921	2%				$18,000,000
Edmunds & Jones, com.			None	14½ - 9¼	34 - 9¼	$2.00		Quarterly	Jan. 1, 1921	50¢		50¢		$ 40,000 sha.
Do., pfd.			100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$843,700
Federal Truck	20½	23	10	22¾ - 18	82 - 16¾				Jan. 1, 1921	1%				$2,000,000
Ford Motor Co. of Canada	293	296	100	295 - 272	460 - 216	Varies		As Decl'd	July 15, 1920	16%				$7,000,000
General Alum. & Br. Mfg. Co., com.			10	13¾ - 10¾	28 - 11	Varies		As Decl'd	Oct. 1, 1920		5%			$1,062,750
General Motors	13¾	14¾	10	16 - 12¾	42 - 12¾	$1.00		Quarterly	Feb. 1, 1921	25c		25c		20,383,334 shs.
Godchaux Sugar, com.			None		69¾ - 39½									$ 70,000 sha.
Do., pfd.		27½	100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$1,893,600
Hanna Furnace, com.			10	20 - 85										$1,500,000
Do., pfd., XD			100			8%		Quarterly	Mar. 15, 1921	2%		2%		$750,000
Hall Lamp Co.			10	15 - 13¾	32½ - 16	Varies		As Decl'd	Jan. 24, 1920	2%				$750,000
Hayes Mfg. Co., com.	3¾	3½	10	3½ - 2¾	8¾ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1½%				$1,500,000
Holland-St. Louis Sugar Co.	9½	9½	10	10 - 7	19½ - 7¾				July 1, 1919	5%				$2,000,000
Iron Silver Mining Co.		60	20		48 - 42				July 1, 1919	10c				$2,500,000
H. S. Kresge, com.			100	96¾ - 90¾	96¾ - 43½	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.			100			7%		Quarterly	Jan. 2, 1921	1¾%		1¾%		$2,000,000
Lindeman Steel, com.			10		14½ - 13½	6%		Quarterly	Jan. 2, 1921	1½%		1½%		$1,668,000
Lincoln Motors, Class A	18¾	19	50	21½ - 17½	50¾ - 13½				July 30, 1920	$1.25				$8,000,000
Macauley Trade Rubber Co.			10	6¼ - 6¼	13½ - 6¼				Dec. 1, 1919	37½				$750,000
Michigan Drop Forge, com.			None		50 - 38¾	$3.00		Monthly	Mar. 1, 1921	25c		75c		$ 12,500 sha.
Do., pfd.			100		90 - 90	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$500,000
Michigan Stamping Co., com.	17½	18½	10	18½ - 17½	30 - 16¾	6%		Monthly	Feb. 25, 1921	8¾%		8¾%		$1,300,000
Michigan Sugar Co., com.	8	8½	10	9 - 6¾	11¾ - 1¾	8%		Quarterly	Mar. 1, 1921	2%		2%		$7,471,100
Do., pfd.			10	8¾ - 8	9¾ - 9¼	8%		Quarterly	Dec. 16, 1920	1¾%				$3,793,500
Miles-Detroit Theater Co.	16	19	10		19½ - 15¼	*16%		Quarterly	Jan. 10, 1921	1%				$500,000
Motor Products	41		None	43 - 37½	60¾ - 27½				Jan. 2, 1921	$1.25		$1.25		$ 100,000 shs
Motor Wheel	10¾	10¾	10	11⅞ - 8¾	13⅞ - 8⅞	*8%		Quarterly	Mar. 21, 1921	2%				$4,500,840
Murray Mfg.			10		1,26-1 00	*18%			Oct. 1, 1919	2%		3%		$733,500
National Grocer Co.	7¾	7¾	100	9¼ - 8¾	156 - 156	*8%		Semi-Ann	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.			100		60¾ - 47½	*6%		Semi-Ann	Jan. 2, 1921	3%		3%		$2,000,000
Chas. F. Noble Oil & Gas Co., pfd.	105	115	1.00	1.26-1 00	$ 00-1.05	*18%		Quarterly	Jan. 1, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com.	12½	12¾	10	12 - 9¾	28¼ - 9¼				Oct. 15, 1919	2½%				$11,250,100
Do., pfd. XD	73½	75	100	79 - 68½	96¾ - 67	7%		Quarterly	Mar. 15, 1921	1¾%		1¾%		$15,223,800
Paige-Detroit Motor Car Co.	25	26½	10	23½ - 12	48½ - 12				Dec. 16, 1920	1%				$2,000,000
Parke, Davis & Co.	89	90½	25	93¾ - 89	117½ - 95	*16%			Jan. 3, 1921	8%		8%		$13,841,984
Penberthy Injector, pfd			100			8%		Quarterly	Jan. 2, 1921	2%		2%		$500,000
Rex Motor Co.	22½	22½	10	23½ - 17½	29½ - 16¾	16%		Quarterly	Jan. 1, 1921	2½%		8½%		$6,937,250
Scotten-Dillon Co.	7		10	21 - 18¾	38 - 9¾	6%		Quarterly	Jan. 3, 1921	1½%	50%	2%	50%	$1,500,000
Timken Axle, com. XD	32½	35	10	34¾ - 26¾	*83¼ - 26	12%		Bi-Month	Jan. 16, 1921	2%		2%		$3,000,000
Do., pfd.			100		93 - 90	6%			Jan. 1, 1921	1½%		1½%		$1,500,000
True-Con Steel Co., com. XD	27¾	28¾	10	28½ - 27¾	29½ - 29¼	16%		Quarterly	Jan. 15, 1921	4		4		$1,450,250
Do., pfd.			10		9¾ - 9¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,522,780
U. S. Radiator, com.			100		31½ - 26									$4,000,000
Do., pfd.			100		95¾ - 80	7%			Jan. 25, 1921	1¾%		7%		$2,800,000
Warner Hat Co., com.			None											
Do., pfd.			100			8%		Quarterly	Jan. 1, 1921	2%		8%		
Western Knitting Mills	9¼	10½	None	11 - 8½	30¾ - 8½				Nov. 25, 1919	50¢				$ 140,050 sha.
White Star Line			50		50½ - 50½				Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.	2½	2¾	10	3 - 2	5¾ - 2½				Dec. 16, 1917	1%				$1,000,000

*Old $60-670: new 63¾-27 $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip ¶ Book value, $959,409, Ed. & J. ‖ Book value, $3,219,327, Godchaux. Book value, $2,277,694 00, Western Knitting Mills. ‡ Book value $5,084,456, Motor Products. ¶Sold ††Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 3, 1921	Mar. 23, 1921
London	4.8665	3.8275	3.8550	3.9078
Switzerland	.1930	.1529	.1603	.1595
Paris	.1930	.0888	.0768	.0627
Belgium	.1930	.0825	.0748	.0728
Holland	.4019	.3162	.3376	.3425
Italy	.1930	.0848	.0363	.0858
Greece	.1930	.0782	.0735	.0757
Spain	.1930	.1328	.1393	.1394
Vienna	.2023	.0023	.0028	.0029
Berlin	.2382	.01245	.0158	.1466
Denmark	.2679	.1585	.1940	.1785
Norway	.2682	.1576	.1964	.1868
Sweden	.2680	.2015	.2190	.2325

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Mar. 22, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 3, 1920	July 1, 1919	Jan. 3, 1919	July 1, 1918
U. S. Liberty 3½s	90.40	92.50	90.00	91.08	99.80	99.75	98.96	98.82
U. S. Liberty 1st 4s	87.10	85.50	85.82	85.80	98.00	94.80	98.00	94.12
U. S. Liberty 2nd 4s	87.20	86.30	84.10	85.00	91.88	88.84	88.04	84.10
U. S. Liberty 1st 4¼s	87.30	86.86	83.80	85.18	93.48	89.34	88.80	....
U. S. Liberty 2nd 4¼s	88.88	88.84	84.84	85.00	88.20	84.08	95.70	....
U. S. Liberty 3rd 4¼s	90.10	90.04	87.20	88.82	91.88	84.10	84.44	....
U. S. Liberty 4th 4¼s	87.10	86.48	84.96	85.58	93.78	100.10	....	....
Victory Bonds, 4¾s	97.88	96.48	96.30	98.80	94.00	98.08	98.88	98.32

Digitized by Google

Dividends Payable

Company	Rate	Payable	Stock of Record
Auburn Automobile, com.	$1.00 Q	Apr. 1	Mar. 21
Auburn Automobile, pfd.	1¾% Q	Apr. 1	Mar. 21
Amer. Agricult. Chem., com.	2% Q	Apr. 15	Mar. 21
Amer. Agricult. Chem., pfd.	1¾% Q	Apr. 15	Mar. 21
Amer. Window Glass, com.	1½% Q	Apr. 1	Mar. 18
Amer. Window Glass, pfd.	1¾% Q	Apr. 1	Mar. 18
Amalgamated Oil	$1.50 Q	Apr. 15	Mar. 31
Amer. Sugar, 1st pfd.	2% Q	May 1	Apr. 16
Brier Hill Steel, com.	40	May 1	Apr. 16
Brier Hill Steel, pfd.	1¾% Q	Apr. 1	Mar. 20
Brunswick-Balke-Collender, pfd.	1¾% Q	Apr. 1	Mar. 20
Barroughs Add. Machine	2% Q	Apr. 1	Mar. 21
Chandler Motor Car	$2.50 Q	Apr. 1	Mar. 20
Canadian Gen. Elec., com.	2% Q	Apr. 1	Mar. 15
Canadian Gen. Elec., pfd.	3½% Q	Apr. 1	Mar. 15
Cities Service, com.	¾ of 1% M Cash	May 1	Apr. 15
Cities Service, pfd.	½ of 1% M Cash	May 1	Apr. 15
Cities Service, pfd. B.	½ of 1% M Cash	May 1	Apr. 15
Chile Exploration	1½% Stock	May 1	Apr. 15
Crucible Steel, com.	2% Q	Apr. 30	Apr. 15
Dodge Mfg. Co., com.	1¾% Q	Apr. 1	Mar. 20
Dodge Mfg. Co. com.	1% Extra	Apr. 1	Mar. 20
Dodge Mfg. Co., 1st pfd.	1¾% Q	Apr. 1	Mar. 20
Detroit Edison	2%	Apr. 25	Mar. 31
Federal Sugar Refin., pfd.	1¾% Q	May 2	Apr. 22
General Cigar, deb. pfd.	$1.75 Q	Apr. 15	Mar. 31
Hydraulic Steel, pfd.	1¾% Q	Apr.	
Hupp Motor Car, pfd.	1¾% Q	Apr. 1	Mar. 21
Intern. Harvester, com.	$1.75 Q	Apr. 15	Mar. 25
Intern. Motor Truck, 1st pfd.	1¾% Q	Apr. 1	Mar. 23
Intern. Motor Truck, 2nd pfd.	1¾% Q	Apr. 1	Mar. 22
Mich. St. Paul & S. S. Marie	$2.00 S. A.	Apr. 1	Mar. 19
McCrory Stores Corp., com.	1% Q		
McCrory Stores Corp., com.	2½% Extra		
New York Central	1½% Q	May 2	Apr. 1
Pittsburgh Plate Glass	2% Q	Apr. 1	Mar. 15
Phelps Dodge	$1.00 Q	Apr. 1	Mar. 20
Reading	2% Q	May 12	Apr. 19
Republic Motor Truck, pfd.	$1.75 Q	Apr. 1	Mar. 22
Union Twist Drill, com.	3½% Q	Mar. 31	Mar. 21
Union Twist Drill, pfd.	1¾% Q	Mar. 31	Mar. 21
United Light & Rys., pfd.	1¾% Q	Apr. 1	Mar. 15
White Motor Co.	$1.00 Q	Mar. 31	Mar. 21
C. R. Wilson Body Co.	1¾% Q	Apr. 1	Mar. 21
Western Union Tel.	1½% Q	Apr. 1	Mar. 15
Westinghouse Air Brake	$1.75 Q	Apr. 30	Mar. 21
Youngstown Sheet & Tube, com.	$1.00 Q	Apr. 1	Mar. 19
Youngstown Sheet & Tube, pfd.	$1.75 Q	Apr. 1	Mar. 19

The quarterly common stock dividend of the American Agricultural Chemical Company has been declared payable in common stock or in scrip convertible into common stock at par.

The Youngstown Sheet & Tube Company has reduced its quarterly dividend from $1.50 to $1.00.

The Union Twist Drill Company declared a dividend of 3½ cents on its common stock, or one-half of the former amount.

The Brier Hill Steel Company has reduced the quarterly dividend on the common stock from 60 cents to 40 c nts.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,382,894	$121,492,204
January 12	90,173,447	136,067,009
January 19	101,826,982	131,311,087
January 26	79,915,867	97,611,655
February 2	87,239,326	91,772,826
February 9	76,606,422	101,049,806
February 16	70,031,923	101,282,963
February 23	87,711,081	92,528,757
March 2	98,235,932	137,706,554
March 9	75,768,352	105,011,659
March 15	96,838,483	133,175,052
March 22	80,146,495	144,937,660
Month of		
January	389,480,226	467,221,870
February	332,341,626	430,611,202
March	570,426,229	649,274,963
April	549,374,965	484,386,859
May	484,386,859	555,766,287
June	555,766,287	572,434,146
July	572,434,146	533,359,086
August	533,359,086	541,592,960
September	541,592,960	516,425,780
October	516,425,780	466,032,460
November	466,032,460	452,981,248
December	452,981,248	544,937,660
Yearly totals, 1920	$6,102,223,894	
Yearly totals, 1919		$1,840,836,153

Kalamazoo Stocks.

Paper Companies

	Bid	Ask
American Box Board, com.	19	21
American Box Board, pfd.	9½	10
Bardeen	17	18½
Bryant	12	19
Eddy, com.	9¾	10
Eddy, pfd.	9¾	10
Hawthorne	11¾	13¾
Kalamazoo, new	20	25
Parchment, stock	13¾	13¾
Parchment, rights		2¾
King	19	20
Ply. units	125	135
Mac Sim Bar	13¾	14¼
Michigan	18	19
Monarch	12¾	13¾
Rex	17	18½
Northern Michigan Pulp	160	175
Standard	20	32
Sutherland	9¾	10¾
Watervliet	21	22
Western Board	20	24
Banks		
First National	225	
Com. Savings	175	180
Kalamazoo City Savings	190	200
Kalamazoo National	150	152
Miscellaneous		
Barley Motor, com.	25	45
Barley Motor, pfd.	65	80
Hinds Wheel	14	16
Kazoo Loose Leaf	15	16
Kazoo Corset	19	
Upjohn Co.	8	9
Kalamazoo Sanitary Mfg.	9¾	10¾
Labrunie Roofing	10	11

Quotes by Olmsted & Mulhall, March 22.

Cleveland Stocks

	Bid	Asked
March 22, close:		
American Multigraph	20	22
Cleveland Automobile	200	210
Firestone Tire & Rubber, com.	71	80
Do, preferred	73	
Fisher Ohio Body	17	19
Do, preferred	35	
Goodyear Tire & Rubber	13	14
Do, preferred	21	32
Grant Motor	3	8¾
Interlake Steamship	175	210
Jordan Motor	125	135
Miller Rubber	50	60
National Acme	6	64
National Acme	22	24
Paragon Refining	22	25
Peerless Motor	27	30
Peerless Motor Corp.	2	4½
Do, preferred	32	
Prod. & Refin. Corp.	4½	5
Do, preferred	3	
Standard Parts	1	2
Do, preferred	3	
Stearns Motor	20	28
Victor Rubber	15	18
White Motor	40	41
Youngstown Sheet & Tube	71	
Do, preferred	108	

Quotes by Otis & Co.

Detroit Listed Bonds

Name	Mar. 15, 1921	Bid	Ask
Conv. Sew. Co.—5s, 1925	80	81	
Detroit & Flint—5s, 1921	67¾	98½	99
Det. Ft. W. & M. R.—5s, 1927	69¾	76	78
D., M. & T. Short Line—5s, 1923	21	23	
Det. & Northw'n—4½s, 1921	98	99	
Detroit & Pontiac R.—5s, 1931	96	99	
Detroit & Pontiac—4½s, 1926	84	86	
Det. & Pt. Huron R. R.—5s, 1955	62	64	
Detroit Railway—6s, 1934	36	38	
Det. Ypsi. & A. A.—6s, 1924	100	102	
D. Y. & A. A. Jackson—5s, 1926	82½	85	
Det. United Ry.—4½s, 1933	60	68	
Detroit Edison Consol.—5s	87	89½	
D. Ed. Co.—1st & ref. 5s 1940	80	80¾	
East Mich. Power—6s, 1932	78	80	
Detroit Edison Deb. 7s, 1928	96½	98	
Detroit Edison Deb. 7s, 1929	96½	98	
Detroit Edison deb. 7s, 1926	95	95¾	
Detroit Edison deb. 5s, 1931	101½	102	
D. C. Gas Co., G. M.—5s, 1913-23	89½	92	
D. C. Gas Co., P. L.—5s, 1923	90	95	
Detroit & Sub. Gas Co.—5s, 1926	78	80	
Mich. State Tel. Co.—5s, 1924	87½		
Tel. Power Co.—5s, 1920		99	
Wyan. & Det. River—5s, 1916		90	
Ry-Prod. Co. Corp.—6s, 1924		40	
Detroit Rock Salt 6s, 1922		86	

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric		
Economy Baler Co., com.	6	
King Trailer Co., pfd.		
Hoover Steel Ball, com.	14½	
Mich. Milling Co., com.	7½	
Motor Products Co., com.	42	44
Prod. Foundries, com.	2	4
C. A. Sauer Co.	7½	8

Quotes by Langley, Hildner & Co., March 21.

Price Range Detroit Bank Stocks

Detroit Stock Exchange

Name	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Mar 22, '21 Bid	Mar 22, '21 Ask
American State	221	215	226	200	*221	....
Detroit Savings	260	258	259	250	*260	....
Dime Savings	258	258	259	258	*258	....
First and Old Detroit Nat'l	273	271	275	268	*273	....
First State	....	....	....	....	....	....
Highland Park State	260	260	268	265	*260	....
Merchants National	149	149	163	142	149	....
Nat'l Bank of Commerce	210	210	235	200	*210	....
Peninsular State	....	....	220	215	*220	....
People State	360	355	365	350	*355	....
United Savings	208	208	215	209	*208	....
Wayne County Home	....	....	347	300	*347	....
American Loan and Trust	....	....	155	155	*155	157
Bankers Trust	....	....	....	....	....	....
Guaranty Trust	....	....	148	148	....	166
Detroit Trust	295	295	....	....	*295	300
Security Trust	....	....	....	....	*300	....
Union Trust	180	180	197	195	*180	190
Commonwealth-Federal	....	....	130	....	105	107
Bank of Detroit	....	....	....	....	*192	200
Continental Bank	....	....	....	....	*125	....

*Last Sale.
Decimal Quotation.

Lansing Stocks

	Bid	Asked
Auto Body Co.	4½	5
Auto Body, pfd.	....	7
Duplex Truck Co.	5	7
Lewis Spring & Axle Co.	....	15
Motor Wheel Corp.	19	10¾
First Bond & Mortgage Co.	25	35
Michigan Mortgage Co.	9	10
Michigan Screw Co. (ex. stock div.)	18	26
Oakland Motor	28	40
Atlas Drop Forge Co.	55	72½
Federal Motor	8½	10½
Novo Engine	28	36

Quotes by G. M. Murchey & Co., March 23.

Current Investment Offerings

HALSEY, STUART & CO., CHICAGO

	Rate	Maturity	Price Yield
Brown Co., Wis., Hiway 3	6	1922-40	5.40 to 6.00
Republic of Chile	8	1941	99.00
Gr. Winnipeg Wat. Dis. 5	6	1922	96.38
Saint Louis Land Bank 6	6	1923-38	6.00
S. W. Bell Phone Notes 7	7	1925	96.50
W. Penn. Power 1st mtge. 7	7	1946	98.00

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg.

Co.	6	1924-30	7.00
Remi-Robinson Co.	6	1926-7	6.00
Ralph Myers Co.	6	1926-7	6.00
Morrir Zack	6	1924	6.00
Coplin H. Colwell	6	1924	6.00

R. L. CLARK & CO., DETROIT

City of Detroit sewers	6	1926	5.50
City of Detroit sewers	6	1925	5.25
City of Detroit sewers	6	1926	5.25
City of Chicago gold	4	1920	5.30
Detroit Municipal Lighting Plant	6	1929-38	5.70 to 5.50
Det. Edison Conv. deb.	8	1921	Mkt.
West. Canada Power 1st mtge. Series 1-7	7	1946	96.50
Cincinnati Gas & Elec.	7	1922	98.00

BOLLERS, MOSSER & WILLIAMS, DETROIT

Plainwell, Mich., School Dist. No. 2	2	1926-32	5.85
Three Rivers & Lockport Twp., Mi. Joseph Co., School	5½	1926	5.75
Hattlesburg, Miss., Sch. & Fire	6	1922-46	5.25
Galveston, Tex., munic.	5	1922-34	6.00
Midco Wat. 1st mtge.	6	1923-25	8.75
Morrison Hotel & Boulevard Theater House 1st mtge.	6	1922-30	7.60

EXTON, DAVIS & BOYLE, DETROIT

C. & C. W. Ry. Corp.	6	1922	6.50
L. & N. Equip. Trusts	6½	Serial	6.50
Republic of Chile	8	1941	6.10
Province of Ontario	6	1923	5.75
Empire Dist. Elec. Co.	7	1949	8.00
Okla. Gas & Elec. Co.	7½	1941	8.00

AMERICAN STATE BRANCH MOVES

The Woodward and Clifford branch of the American State Bank, Detroit, heretofore located near Woodward avenue on the north side of Clifford, has been moved to the Empire building, in Clifford street, near Washington boulevard. The new number is 109 Clifford street. The office is directly across from the entrance of the Michigan State Telephone building.

Digitized by Google

No. 3 of a series of Examples

When a stockholder claims to have lost or destroyed his certificate is the corporation obliged to issue him a new one?

Yes, upon the stockholder making proof as to the loss or destruction and furnishing satisfactory bond of indemnity, for the issuance of a new certificate does not relieve the corporation from liability in damages to a person to whom the original certificate has been or shall be transferred for value, without notice of the proceedings or of the issuance of a new certificate.

Our familiarity with these matters enables us to handle them promptly and satisfactorily to both stockholder and corporation.

This service is of great value to corporations and involves only moderate cost.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Michigan Finance Corporation

120 West Kearsley Street FLINT, MICHIGAN

Capital $4,500,000. 7 per cent Cumulative Participating Preferred Stock, 600,000 Shares of Common Stock.

Preferred Stock now paying quarterly dividends at the rate of 7% annually.

OFFICERS:

ALBERT E. MANNING, President,
Resigned as Deputy State Banking Commissioner to accept Presidency of the Corporation.

CARROLL F. SWEET, Vice President,
Vice-President Old National Bank, Grand Rapids.

C. S. MOTT, Vice President,
Vice-President of General Motors Corporation. President Industrial Savings Bank.

CLARENCE O. HETCHLER, Secy., GRANT J. BROWN, Treas.,
President Ford Sales Co., Flint. Cashier Indus. Savings Bank, Flint.

DIRECTORS:

DAVID A. WARNER
Travis-Merrick-Warner & Johnson, Attorneys, Grand Rapids, Mich.

W. P. CHRYSLER
Vice-Pres. Willys-Overland Co., Director Industrial Sav. Bank, Flint.

FRED J. WEISS
Vice-Pres. and Treas. Flint Motor Axle Co., Director Ind. Savings Bank, Flint.

E. R. MORTON
Vice-Pres. City Bank of Battle Creek, Mich.

HERBERT E. JOHNSON
President Kalamazoo City Savings Bank, Kalamazoo, Mich.

LEONARD FREEMAN
President Freeman Dairy Co., Director Industrial Savings Bank, Flint.

FLOYD ALLEN
President Flint Board of Commerce. President Trojan Laundry, Flint.

S. A. GRAHAM
Vice-President Federal Commercial and Savings Bank, Port Huron, Mich.

CHARLES E. TOMS
Cashier American Savings Bank, Lansing, Mich.

A. C. BLOOMFIELD
Vice-President National Union Bank of Jackson, Mich.

Old National Bank, Grand Rapids, Registrars and Transfer Agents.

Transacts a general financing and discount business.

LINCOLN MOTOR STATEMENT

Assets		Dec. 31, 1920
Cash	$ 111,328.85	
Notes receivable	9,675.00	
Accounts receivable	463,020.84	
Sundry receivable	4,139.20	
Emp. sub. acct. Class A stock	106,098.82	
Advanced to vendors	402,784.80	
Total current		$ 1,096,497.22
Investment Class A stock		595,860.00
Direct material	4,900,877.41	
Direct labor in process	65,318.66	
Supplies	604,162.50	
Service stores	16,038.94	
Total inventories		5,586,417.55
Manufacturing expense unabsorbed	458,647.98	
Prepaid commercial expense	747,536.06	
Prepaid development expense	316,909.50	
Total deferred charges		1,523,113.94
Special tools, patterns, etc.		1,763,164.77
Land	1,567,859.99	
Buildings and accessories	4,376,144.40	
Machinery	2,354,719.65	
Plant equipment	1,266,256.06	
Long-lived tools	483,037.41	
Diamonds	11,326.91	
Office furniture and fixtures	113,710.10	
Construction work in process	10,402.09	
Motor vehicles	68,986.15	
Total capital assets		10,192,431.80
Total assets		$20,759,458.28

Liabilities		
Accounts payable	$ 864,799.76	
Notes payable	5,474,218.85	
Unclaimed wages	1,467.94	
Dealers' deposits	36,250.00	
Liabilities on land contracts	281,360.00	
Excise tax withheld	33,342.12	
Additional discount to distributors	103,223.45	
Excise tax refundable	8,209.63	
Total current		$ 6,804,076.50
Accrued payrolls	73,869.07	
Accrued insurance	9,277.59	
		83,166.57
Reserve for normal depreciation	600,653.11	
Reserve for amort. war facilities	3,499,475.70	
Reserve for contingencies	35,579.12	4,065,707.93
Class A stock, par $50;		
Class B stock, no par		8,000,000.00
Surplus		1,785,635.28
Total liabilities		$20,758,485.28

Receipts and Disbursements

Cash on hand, Feb. 1, 1920		$ 7,896,027.24
Receipts—accounts receivable	$ 2,727,627.83	
Receipts—all other sources	3,995,616.32	
		6,723,254.15
		$14,631,281.39
Disbursed accounts payable	$12,166,340.74	
Disbursed, other accounts, Inc. taxes	2,253,611.40	
		$14,419,952.54
Balance cash, Dec. 31, 1920		$ 111,328.85

Balance Sheet, Jan. 31, 1920

Real estate, buildings, machinery, etc.	$ 4,340,942
Inventories	122,195
Notes and accounts received	70,276
Cash	7,994,242
	$12,527,756
Class A stock; Class B stock	$11,777,623
Accounts payable	498,442
Due on property	252,280
	$12,527,756

FURNITURE COMPANIES MERGED

The John D. Babb Chair Company, Grand Rapids, has sold its interests and plant to Martin Dregge, J. Hamilton Hoult and Ed. ward Gamble, officers of the Luce Furniture Company. The price is said to be more than $750,000. The annual production of the two companies is valued at $6,000,000.

JORDAN PAYS REGULAR DIVIDEND

The Jordan Motor Car Company, Cleveland, has declared its regular quarterly dividend, payable March 31 to stockholders of record March 18.

Digitized by Google

U. S. RADIATOR CORPORATION

The United State Radiator Corporation ended its fiscal year, January 31, 1921, with a gain of $44,954 in surplus after paying all expenses and dividends of 7 per cent on preferred stock. Current liabilities, compared with a year ago, decreased from $284,384.77 to $224,832.95. In the current statement, current assets are more than ten times current liabilities. Mortgage indebtedness was reduced $70,000 during the year. The comparative statement follows:

Comparative Balance Sheet

ASSETS

	Jan. 31, 1921	Jan. 30, 1920
Cash	$ 126,605.60	$ 92,367.44
Notes receivable	10,868.26	14,569.57
Accounts receivable	816,650.67	1,012,297.80
Inventory	1,695,572.49	1,682,478.94
Total current assets	$2,649,697.02	$3,006,336.70
Land, bldgs., equipments	1,963,595.66	1,849,884.92
Good will, patents, copyrights, etc.	4,000,000.00	4,000,000.00
Other assets	58,778.44	51,696.28
	$9,672,061.29	$8,907,784.90

LIABILITIES

Notes payable		$ 200,000.00
Accounts payable	$ 216,641.51	151,566.76
Accrued	8,191.34	32,798.01
Total current liabilities	$ 224,832.95	$ 384,364.77
1st mtge. bonds, 1928 serially	525,000.00	595,000.00
Land contract	2,500.00	2,500.00
Reserve for federal taxes	99,372.66	150,000.00
Reserve for contingencies	163,860.99	163,860.99
Preferred 7% outstanding	2,800,000.00	2,800,000.00
Common outstanding	4,000,000.00	4,000,000.00
Surplus	856,493.67	811,539.14
	$9,672,061.29	$8,907,784.90

Income Statement Condensed

Gross earnings year end. Jan. 31, '21	$1,321,565.96
Plus—Recoveries	5,643.16
	$1,327,212.14
Less—Disc't on sales	$ 97,842.61
Loss on accounts	9,754.65
Interest on bonds	35,250.00
Interest on loans	54,190.02
Depreciation	203,615.14
Inventory adjustments	646,104.96
Tax provision	40,000.00
	1,086,257.61
Addition to surplus	$ 240,954.53
Surplus Jan. 31, 1920	811,539.14
	$1,052,493.67
Less dividends	196,000.00
Balance surplus Jan. 31, 1921	$ 856,493.67

Henry T. Cole is president of the corporation; Edward E. McNair, vice-president; William E. Mosher, secretary and treasurer, and James A. Venable, manager of the operating department.

FOREIGN TRADE BANK PROGRESS

The organization committee will seek an amendment to the Edge act which will permit the directors of the new Foreign Trade Financing Corporation to call for installments on capital stock payments at such times as future business demands greater capital. It is expected that such an arrangement will encourage the taking of stock by many corporations that would not be in position to subscribe if the arbitrary provisions of the present law had to be followed.

BARBER GOES TO MONTGOMERY

E. W. Barber, formerly assistant cashier of the First State Bank of Camden, Mich., has been elected cashier of the Montgomery State Bank, Montgomery, succeeding E. C. Corbett, who has returned to Reading, Mich. Mr. Corbett is vice-president of the State Bank of Reading.

GRAND RAPIDS CLEARINGS

Clearings of the Grand Rapids banks for February were $20,102,270, as against $26,316,590 for February, 1919, a shrinkage of 23.5 per cent.

A LIST of the bonds we have selected to sell can, after all, only *suggest* a choice to you. The *individuality* of any one of them, its appropriateness to your own investment plan, will not be disclosed except by a detailed examination of its essential features.

Besides the price, yield and maturity, you want to know the history and character of the issuing company, the qualities of the article or service it sells and the permanence of the demand for the company's product, whether it be a commodity or a service. Other inquiries may occur to you.

Right at this point our organization becomes necessary to you. Before we purchased the bonds we have to sell we completed the very examination you are now contemplating. Giving the benefit of this knowledge, as well of our entire experience in bond buying, is a service we offer you freely and gladly. On our list of good bonds is one *best bond* for you. We can tell you, after we know your investment needs, which one it is. Your inquiry on any phase of bond buying, is our opportunity for service.

A. B. Leach & Co., Inc.

Investment Securities

Chicago, Philadelphia, St. Louis, Boston
New York, Milwaukee, Cincinnati
Baltimore, Cleveland, Minneapolis, Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Digitized by Google

MICHIGAN TAX EXEMPT
SCHOOL BONDS

City of Three Rivers and Lockport Township, St. Joseph County, Michigan
School Building 5½% Bonds
Due February 1, 1926
Price to net 5.75%

Plainwell, Michigan, School District No. 2, Township of Gun Plains, Allegan County
6% School Bonds
Due April 1, 1926 to 1936. Price to net 5½% to 5.85%, according to maturity

Descriptive Circulars of the above and other Municipal Bond offerings sent on request.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

The
Public Accounting Department
of
THE MICHIGAN TRUST COMPANY

PREPARES Income and Excess Profits Tax and other Federal Tax Returns;

INSTALLS General and Cost Accounting Systems;

MAKES Audits and investigations for any purpose desired.

Pearl St. and Ottawa Ave., Grand Rapids, Michigan.

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

OCCUPIES ITS NEW BUILDING

The Farmers & Mechanics Bank of Grand Rapids this week moved into its new building, which is located on the site at the corner of Main and Huron streets which the bank has occupied for many years. The old structure for some years has been too small to accommodate the growing business of this institution and the problem was solved about a year ago when the bank purchased an adjoining building formerly occupied for a long period by Dawson Bros. drug store. The formal opening and dedication of the new quarters was held Wednesday evening, when the doors were thrown open to visitors from 7:30 to 9 o'clock.

The Farmers & Mechanics bank has had a rapid growth since its organization in 1882. The original building soon proved inadequate, so it was found necessary to remodel it in 1901, but this improvement was not long sufficient. From totals of $700,000 in 1901 the bank has grown until resources are now more than $2,600,000. H. A. Williams is president; J. E. Beal, vice-president; G. W. Millen, vice-president; F. T. Stowe, cashier, and E. L. Jenkins, assistant cashier.

PRIVATE BANK CLOSED

The Farmers & Merchants bank of Madison Square, Grand Rapids, which closed its doors 10 days ago as the result of the withdrawal of deposits, and which last Saturday sold its building and fixtures to the Peoples Savings Bank of Grand Rapids, has made an assignment to the Michigan Trust Company for the benefit of depositors. The bank was a private institution. No estimate of the inefficiency of the assets has been made, but it hoped that recourse against the owners of the bank will enable the receiver to pay depositors in full.

OTSEGO FURNITURE CO. RECEIVERSHIP

The original issues of preferred stock being retirable, the directors of the Otsego Furniture Company have voted to dissolve the company. H. L. Johnson, Kalamazoo, and H. D. Lanz, Otsego, being appointed receivers by Judge O. S. Cross, of the Allegan circuit court, in which the petition for dissolution was filed. Reorganization of the company is to follow the conclusion of receivership proceedings.

STANDARD PARTS FINANCING

A report was current in Cleveland a few days ago that the Standard Parts Company's reorganization plans were taking a new turn. It was said that the new plan is to refinance the Standard Welding Company, the Perfection Spring Company, the Bock Bearing Company, Toledo, and the new Eaton Axle Company along separate and original lines and in a way independent from each other. Nothing officially has been given out.

NEW BUILDING OCCUPIED

The Farmers and Mechanics Bank of Ann Arbor has moved into its new building located on the same site.

STOCK SALE INJUNCTION ASKED

Efforts of the City Trust & Savings Bank to sell four and one-half shares of stock owned by Jennie Lamos, Grand Rapids, to force the collection of a 100 per cent assessment against the stock to cover the defalcations of Fred W. French, former cashier, has resulted in circuit court injunction proceedings.

That officers and directors already have made good the losses is the claim. In view of this condition the need of the assessment is denied by the petitioner. The bill shows that upon the petitioner's refusal to pay the assessment when made, under the banking laws the bank made preparations to sell the Lamos stock in order to obtain the necessary funds.

The bill also alleges misconduct in office on the part of the officers and directors of the bank in not discovering and stopping the defalcations. In this respect and in view of the fact that a Lamos victory probably would enable other stockholders to regain the assessments which they have paid in, the case will act as a test action on the relative financial responsibility of bank officers and bank stockholders in cases of this nature. The date for the hearing on the permanent petition has not been set.

ANOTHER MEANS & WADE BANK

The latest addition to the Means & Wade string of banks is the new Strathmoor State Bank, at Grandy River and Westlawn avenues. This community has had a rapid growth and the faith of the bankers in its future is evidenced by the handsome building erected. The exterior walls are constructed of a warm buff face brick and select Indiana limestone. The floor and wainscoting of the lobby is of Hauteville marble tile construction, set off by a verde marble base, while the dome-shaped ceiling with its ornamental plaster panels is very attractively decorated. The tellers' cages are constructed of bronze mesh and channel iron, the fronts being of wrought bronze and plate glass. The rooms are equipped with every modern convenience for carrying on the banking business, including safety deposit vault and boxes for rental to customers. There is a room which will be available for use of neighborhood organizations which may desire a place to congregate.

The organizers of the bank are Howard C. Wade and James H. Means, of Means & Wade, investment bankers; George H. Kirchner, president of the First State Bank of Detroit, and John S. Haggerty, banker and brick manufacturer. Capital stock is $25,000 and surplus, $5,000. The bank plans to open within two months.

Other banks in the so-called Means & Wade string are the Rouge State Bank, the Halfway State Bank, Halfway, and the Ecorse State Bank.

Another new building recently finished is the permanent home for the Rouge State Bank, West Jefferson and Linden avenues. The building is of much the same high-grade finish and accessories as the Strathmoor bank and also has safety deposit box conveniences. Edward T. McLachlan is cashier. Capital and surplus February 21 was $60,000 and total deposits, $344,797.92.

New Publications

INCOME TAX PROCEDURE

Distribution is being made by the Roland Press Company, New York, of the 1921 edition of Income Tax Procedure, by Col. Robert H. Montgomery. This work is in three volumes. The first deals with federal income tax procedure and is in four parts. Part 1 covers application and administration; two, all phases of income; three, deductions, and four, special classes of taxpayers. Summaries of decisions and a complete cross index for reference use are features.

Volume 2 is entitled "Federal Excess Profits Tax Procedure," and covers preparation of returns for corporations subject to the excess profits tax law. There are twenty chapters. The third volume is confined to the New York state income tax.

One feature of value is the illustrating of all tax forms of every nature, covering not only report blanks but forms to be used when applying for relief or deductions of any kind.

Col. Montgomery is one of the leading accountants and cost experts of the United States. He is a professor of accounting at Columbia University, an official of the National Association of Cost Accountants and a member of the firm of Lybrand, Ross Bros. & Montgomery.

Digitized by Google

CHARCOAL IRON STATEMENT

Charcoal Iron Annual Report was sent out to stockholders this week. We give below comparative balance sheets and income statement with excerpts from President Blair's report:

Assets	Dec. 31, 1920	Mar. 31, 1919
Cost of Properties	$10,856,986.60	$10,451,037.00
Inventories	3,224,452.35	2,595,340.66
Notes and Accounts Receivable	856,599.02	228,115.18
Cash	95,336.79	79,522.62
Liberty Bonds and W. S. S.	8,336.00	6,786.00
Insurance, Taxes, Etc., Deferred	121,614.21	70,703.14
	$15,162,924.88	$13,428,504.02
Liabilities		
Preferred Stock 6% Par 10	$ 5,217,250.00	$ 5,217,250.00
Common Stk Par 10	2,839,350.00	2,839,350.00
7% Gold Notes, due serially (net liab.)	1,055,184.31	1,183,576.09
Notes Payable	718,105.01	416,562.11
Trade Acceptances	126,732.13	.....
Payroll	62,271.29	.....
Accrd Ore Royalties	276,722.74	.....
Accts. Payable, misc.	358,362.21	* 666,803.82
Accrued Taxes	161,786.19	.....
Machinery contracts	55,751.31	.....
Mac. Accts. Payable	552,509.62	.....
Reserves	1,918,721.49	1,472,588.28
Surplus	1,852,175.57	1,632,539.72
	$15,162,924.88	$13,428,504.02

*Includes Accrued Wages.

Changes in Surplus

Balance at Dec. 31, 1919	$1,406,611.92
Net profits after deductions	445,563.65
Balance Dec. 31, 1920	$1,852,175.57

Excerpts from President Frank W. Blair's report to stockholders are as follows: "The statement shows net profits of $445,563.65 after deduction of $600,000 as reserves for Federal taxes, items due employes, amortization of plants, adjustment of inventories, etc." Net profit and loss for first three quarters was a gain of $1,200,229.69, while the last quarter showed a loss of $187,264.94, leaving profits of $1,045,563.65, from which $600,000 for reserves was deducted to arrive at a net gain of $445,563.65.

The record of production and shipment of all products in tons follows:

	Production	Shipments
Quarter ended Mar. 31, 1920	7,437,980	5,372,651
Quarter ended June 30, 1920	7,051,939	4,526,977
Quarter ended Sept. 30, 1920	8,681,607	2,218,801
Quarter ended Dec. 31, 1920	6,963,045	1,758,310
Month of Jan., 1921	503,855	1,346,847
Month of Feb., 1921	570,128	1,107,757

"At present only one Manistique and Ashland chemical plants and blast furnaces are in operation. It is estimated from these not to exceed 4,500 tons of pig iron, 60,000 gallons of alcohol and half a million pounds of acetate will be produced monthly. In the event of the depression continuing we may soon find it necessary to close the Manistique operations completely. Payrolls have been reduced 65 per cent."

DISTRIBUTED STOCK NOT TAXABLE

Judge Booth, of the United States Court of Claims, Washington, has ruled that the distribution of stock does not constitute income taxable for revenue under the income tax law. C. W. Phellis, stockholder in the E. I. du Pont de Nemours Company, sued the Government to recover $5,657 collected as income tax on stock distributed at the reorganization of the company. This was a test case involving abatement of taxes amounting to $18,000,000 on corporate stock assessed for income taxes. Judge Booth said: "It is incredible that Congress intended to tax as income a business transaction which admittedly produced no gain, no profit and hence no income."

SAVINGS DEPOSITS GROWING

Cashier Robert Y. Sheir, of the Capital National Bank, Lansing, reports that a notable gain has been made in savings deposits, the amount for the last six months exceeding that for the same period last year by $100,000.

The Beginning of A Great Business

In 1912, when the Compensation Act went into effect in Michigan, there were no records available which would give more than a roughly approximate idea of the cost of this insurance.

Naturally the stock companies, operating for their own profit, set the rates high enough to prevent any possibility of loss to themselves, figuring that if the rates proved too high they could be reduced later.

But as no provision was made for the return to the policyholder of any part of his premium should the rates prove too high, this placed upon the policyholders the entire financial burden of the experiment, with the practical certainty that the excess would show a handsome profit for the insurance companies.

Believing this to be unfair and inequitable, a small group of representative Michigan employers—eleven in all—decided to form an insurance organization of their own in which their interests would be safeguarded in every possible way, and yet would assure them that the excess, if any, would remain their own property and be subject to distribution among themselves.

In this small way began the Michigan Workman's Compensation Mutual Insurance Company.

Today, less than nine years later, the compensation insurance business in Michigan of that same company—now the Michigan Mutual Liability Company—is more than twice that of its nearest competitor — more than the combined total of its two nearest competitors.

The reasons for this wonderful growth will be shown in future advertisements in this publication. Watch for them. Read them and learn why YOU should insure in the

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — Michigan

Home Office: Cherry 2929 — Grand Rapids, Lansing and Saginaw — Hospital: Cadillac 2676

Digitized by Google



To

Corporation officers
Security holders
Credit men
Attorneys
Bankers

And all others interested in corporations and business concerns:

Send for a copy of our "Corporation Department" booklet.

We can render unusual service to those financially interested in corporations, not only in routine matters, like trustee under mortgage or transfer agent, but also in matters requiring a high degree of knowledge and skill,—such as managing director of businesses in temporary difficulties, representative of creditors' committees, receiver, etc.

Telephone Main 2986 for one of these booklets.

DETROIT TRUST COMPANY
OPPOSITE POST OFFICE
DETROIT MICHIGAN

W. J. PEOPLES & CO.
STOCKS
BONDS
FOREIGN
EXCHANGE
First Floor Penobscot Bldg.
Phones Cherry 8640
We solicit your inquiries

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

TRADING DEPARTMENT
Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.
JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation; 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
MEMBER FEDERAL RESERVE SYSTEM
45-47 Fort St. West. 14 Branches
Penobscot Building.

Mixing Politics and Commerce

(Continued from Page 6)

ing foreign markets as dumping grounds for surplus where the margin of profit in domestic trade is sufficient to cover losses in foreign trade.

Government support in foreign trade has been lacking. Take tolls on the Panama Canal as an instance. The charge of $1.25 a ton, or $25,000 for a 20,000-ton ship. Although this canal was built by the United States, its own ships must pay as much to use it as foreign ships. The elimination, or at least a modification of these toll charges for American ships would go a long way towards stimulating American commerce. Another mistake to my way of thinking is the refusal of the Government to allow the establishment of distributing stations in the Canal Zone.

Germany Forging Ahead

Land within five or six miles on either side of the canal has been declared a military reservation and no business houses or warehouses are permitted on this territory. When it is realized that the Canal Zone is a meeting point for ships from every South American port, east and west, the advantage of having distributing stations for American products along the canal can be realized. There is no highway across the isthmus for motor trucks and competition with the Panama railroad, which is government owned, is not allowed. Thus American manufacturers and shippers are given little encouragement to develop South American trade.

Germany is a competitor in foreign trade in South and Central America well worth watching. German influence is growing daily. More than any other exporting country, Germany knows how to meet the peculiar trade conditions dictated by the character of buyers. She will manufacture, pack and ship on any old specifications. Her method of market analysis leaves no stone unturned. She is generous in the support of her foreign trade agents and careful not to create antagonism by mixing diplomatic politics with trade activities. Banks and importing houses are gradually succumbing to German influence.

Income tax burdens forced upon American interests located in foreign countries are handicapping our development. England, France, Germany and other countries having trade or industrial interests in Central and South America are giving their representatives every chance to work unhampered by tax burdens with the result that their foreign interests can undersell the United States. Some remedial measures are called for and it is to be hoped that the present administration will provide them.

The conclusions I would draw from my experiences are these: There is need for a careful governmental investigation of foreign trade conditions, and a similar investigation by manufacturers who expect to engage in foreign trade. There is a need for reorganization of foreign trade agencies and consular service that will eliminate the incompetent, and replace them with well-paid, well-trained trade representatives. I do not believe manufacturers can successfully compete with other countries without having their own agents in countries they are dealing with. This representation can be accomplished by sending personal agents, or pooling interests and establishing central agencies. It is apparent that credit conditions will be improved, and the formation of the new Foreign Trade Corporation will be an important factor in promoting commerce, but such a corporation can accomplish only a limited amount of good unless the manufacturers make themselves thoroughly familiar with foreign trade, not only to guide them in manufacturing and selling, but also to enable them to check

Digitized by Google

up on the inefficiency of Government agents.

On my way home I met a business man from Buenos Aires who told me about a trade commissioner from the United States to his country. This commissioner, my informant said, lost no time in affiliating with the social life of the city in which he was located, but most of his trade investigations were made from the hotel veranda or the ballroom. As a result of his method his first report to the Bureau of Foreign and Domestic Commerce was interesting. He reported that there was little chance for American trade in Buenos Aires because the people were lazy and indifferent; that they would not work and consequently had no money to buy goods with. He advanced the theory that climatic conditions were largely to blame, as it was too hot in summer and too cold in winter.

This agent had made no effort to study the market, and there was a suspicion that through his social connections, he had been thrown into the company of some representative from some other country who saw an excellent chance to make him appear ridiculous. American manufacturers and exporters can expect little for such official representation, and only negative results from such reports.

A Motor Show To Be Proud Of

(Continued from Page 7)

line. Many manufacturers have adopted the continental, or Rolls-Royce type, of radiators. The Velie, McFarlan, Dixie Flyer, Mailbohm, Roamer, Locomobile, Saxon, Mercier, Moon and Packard exhibits seem to favor the nickeled radiator.

Monday was manufacturers' day, which was featured by the presence of factory representatives not only from Detroit but from a wide area.

Tuesday was Ship-by-Truck day. At noon a parade of motor trucks embracing every known variety of hauling unit from the three-quarter-ton delivery to the six and one-half ton heavy duty truck, formed at Canfield avenue and Woodward. From that corner it proceeded south to Jefferson and east on Jefferson to the show building. A brass band headed the procession.

Upon the arrival of the truck cavalcade at the show building, the truck division of the big floor was turned into a motion picture show for part of the afternoon.

Several thousand feet of film portraying varied uses of motor trucks, on farms, in construction work and building service, in delivery for stores and factories and in inter-city express hauling was projected on a screen. The pictures demonstrated how the motor trucks under efficient organization and handling are helping the railways out and speeding up the business of America.

A day will come when the cosmopolitan and metropolitan city of Detroit will have a regular exhibition building and when it will no longer be necessary to "hire another hall" to accommodate all the exhibitors. It is surely not out of place to comment upon this. While the dealers or distributors are generally glad to "get in" at all, they do not hesitate to tell you "on the quiet" that it is a "hell of a thing" to be unable and be with "the rest." The show management is not to blame; the whole city is. For years there has been talk about putting up in Detroit a building for exhibition and convention purposes, a sort of Chicago Coliseum or New York Madison Square Garden. But the talking is about all that has been done thus far.

TABLE PLANT AGAIN AT WORK

Work has been resumed at the plant of the Lentz Table Company, Nashville, with about 50 per cent of the normal force and under a new wage scale.



Disinterested Investment Service

Those actively engaged in the conduct of large affairs must necessarily devote a great deal of study to basic industrial and financial conditions. They often find it difficult to keep thoroughly informed regarding day to day features of many different classes of investments.

The National Bank of Commerce in New York through its Bond Department, offers to its friends the benefit of extensive experience and close studies of investment values. It is equipped to handle this class of business for them efficiently in all domestic and foreign financial centers.

Our advice and assistance in the purchase of securities are impartial and disinterested.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits
Over Fifty-five Million Dollars

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
16th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Know Our Service

Those banks and business houses who commend our service most are the ones who, as correspondents and depositors of this bank, are most thoroughly familiar with it.

Establish a Detroit banking connection with us and know the characteristics of personal attention, dispatch, accuracy, that make our service distinctly helpful.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls

Architects and Engineers

Detroit. Mich.

Digitized by Google

Life and Industry in India

(Continued from Page 9)

I hired common labor at four cents a day when I first went to India. Just before I left the wage had risen to nine cents a day. Semi-skilled mechanical helpers were getting 75 cents a day, and skilled workmen from 75 to 300 rupees, or in American money, from $25 to $200 a month, according to the character of the work and the degree of skill. Of course when you can buy a nice, tender chicken for ten cents, not by the pound, but for the whole chicken, and potatoes sell for four cents for two pounds, the wages do not seem so ridiculously small.

"Women do the same work as the men and get the same wages. They are usually the burden bearers. For instance, in the construction of a brick chimney we used women to pass the brick. A bamboo scaffold was erected by the men who laid the brick. Crude bamboo steps were erected from the ground to the first staging, and these steps were continued upward as the successive stagings were built.

"A line of women was formed from the brick pile to the first staging and up the ladder-like steps. The bricks were passed along from one to another of the women until they reached the masons. This line of humanity was constantly increased as the chimney developed, until near the end of the job the sight of that long line of women perched on bamboo rods at dizzy heights passing brick to one another was truly a picture of another age. It is the Hindoo idea of industrial efficiency.

"One custom of the Hindoo which is bound to be amusing to the American mechanic is the annual puja or "Industrial Thanksgiving," which is celebrated annually with feasting, dancing and religious rites. The purpose of the observance is to give thanks to the god of success. These natives literally worship their machines and tools. The interiors of machine shops, foundries and metal working huts are decorated with foliage and flowers. Every tool, no matter how small or insignificant, is properly decorated with garlands and worshiped."

Mr. Maxlow's staff of engineers and mechanics were all natives trained in the fine technical schools of India, one of which was located near Jamshedpur. "The Hindoo is remarkably intelligent and makes a good mechanic, but they lack initiative and creative genius. They can imitate and they have remarkable memories, but without constant guidance they are helpless," Mr. Maxlow says.

While the primitive steel making of the punjab and his sons may afford amusement by its contrast to modern methods, the craftsmanship of the Hindoo when he works with his hands and according to his lights, commands respect. Mr. Maxlow has brought back with him many specimens of this handiwork in ivory, hammered brass, inlaid work, lace, woven designs and pottery. Also the skins of leopards, tigers, small animals and reptiles which are the results of his hunting expeditions into the jungle call to mind the fact that industrial development of India must be accomplished by men who not only have the genius and daring, but who are prepared to fight the terrors of the jungle.

Copper and Brass Milling

(Continued from Page 11)

are still in existence, and in such cases when the slabs are not filed immediately and correctly, the burs on the metal are likely to cause considerable trouble in the rolling operation, as they have a tendency to crack along the edges. In order to eliminate this defect, it becomes essential to anneal this metal upon its arrival in the rolling mill.

The metal is cast by the casting shop into the various alloys and widths according to the size and mixture desired. It is received by the sheet mill in the form of a slab. Each different size bar is of a uniform average weight which varies only a few pounds one way or the other.

Upon receiving the castings, the first operation performed by the sheet mill is the breaking down process. This is a rolling operation accomplished on a heavy pair of rolls usually 20 by 36 inches. All bars, regardless of the size, are broken down to a standard thickness of five-eighths of an inch, with the exception of leaded stock, which is rolled down to a standard size of three-fourths of an inch.

After the breaking-down operation the metal is placed in the furnace and annealed, thus softening the brass so that the maximum reduction in thickness may be obtained in the next rolling operation. The roller should always study his metal and know exactly when to anneal it so that there is no danger of its cracking or breaking in the rolls.

When the metal has reached a red heat of the right temperature it is allowed to soak for ten or twenty minutes, so that the whole mass will receive a thorough annealing. When coils are being annealed, it is good policy always to loosen them up before putting them in the furnace, so that the heat will reach them more uniformly. The modern annealing furnace has two doors, one on each end, and the annealing pans are so arranged that the metal to be annealed enters the muffle at the same time that the other pans are being extracted. When the metal comes from the furnace it is artificially cooled by means of a slow, uniform spray of water.

When leaded stock is being produced it is allowed to cool off itself, as it is very apt to crack if artificially cooled; these cracks are generally known as water cracks. If the brass is to be finished soft it is allowed to cool off automatically and water is kept away from it entirely.

After the Cooling

After the slabs are cooled they are sent to the overhauling machines where a thin layer of metal is scalped from the surface, usually from four per cent to five per cent, thus removing all grit and scale, so that a fine surface may be attained free from all scratches and blemishes.

The bars are then transferred to the running down rolls, where they are rolled down to a size within two or three gauge numbers of the finished size desired. During the rolling operations the bar elongates without materially altering the width. As previously stated, in such cases where extraordinary widths are required, the bars are either cornered or cross rolled, so that the reverse condition occurs—the width increasing rather than the length. The metal is annealed and pickled once approximately every three of four passes and cut to length at a point depending entirely upon the length of the sheet or coil required.

From the running down rolls the metal is sent to the finishing rolls, where it is rolled to a finished gauge, after which it is then ready to be slitted or sheared to the specified length and width. If it is desired to have the metal finished soft, an extra anneal is necessary prior to the sheets entering the pickle solution. After being cut to the desired dimensions, the sheets or coils are then carefully inspected and packed ready for shipment.

The editors wish to acknowledge the assistance given them in the preparation of this article by A. L. Scott, industrial engineer on the staff of Lybrand, Ross Bros. & Montgomery, public accountants, Detroit. Much of the technical information in the article was written by Mr. Scott.

$1
invested today

will produce practically the same interest return with equal safety as

$1.40
invested 5 years ago

For suggestions write for Circular F12.

Bonbright & Company
UNION TRUST BUILDING, DETROIT

Telephone Cherry 4320

New York Philadelphia Boston Chicago

MERGER AT BRECKENRIDGE

It is unofficially reported that the Farmers State Bank of Breckenridge has been consolidated with the First State Bank of the same place. This will give Breckenridge a bank with totals around the $750,000 mark. Alex. Chisholm is president and R. L. Baldwin is cashier of the Farmers State.

Digitized by Google

New Corporations

FOR WEEK ENDED MARCH 19, 1921

Business Men's Credit Assn., Battle Creek; selling service in the following lines: auditing, accounting, income tax returns, insurance; Harold R. and Beryl R. Keyes, Dick E. and Clara J. Hoyt, Battle Creek..... 2,500

Detroit Syndicate Investment Co., Detroit; buying, selling and operating barber, tailoring clothing, cleaning, rooming house and boot blacking business; William Dooley, 1528 Rivard St.; Oliver H. Wilson, Henry Lewis, Detroit 10,000

T. C. Hodson & Son, Inc., Lansing; to manufacture, buy, sell and deal in, at wholesale and retail, novelties, toys, art goods, books, magazines, etc.; Ford T. Hodson, C. J. Schneider, Ulen Robinson, Lansing 50,000

Earl & Miller, Benton Harbor; to conduct wholesale and retail business in electrical merchandise; Theodore R. Earl, St. Joseph; Emanuel L. Miller, Benton Harbor; August W. Zick, St. Joseph 25,000

Acme Packing & Supply Co., Inc., Detroit; to engage in manufacture, buying and selling soaps, perfumes, toilet and laundry supplies, etc.; Lloyd V. Bartley, 4664 Allendale Ave.; Frederick S. Baker, Tracey Bartley, Detroit 2,000

City Fuel & Supply Co., Detroit; wholesale and retail buying, selling and dealing in fuel and building supplies; William J. Weed, 3935 Helen Ave.; John D. Gibbon, William H. Harmony, Detroit 50,000

Michigan Laboratories, Inc., Detroit; to manufacture and sell "Speed Wonder Tablets" and various other preparations under the trade mark, "Speed"; David O. and Rose Kruger, 1260 W. Grand Blvd.; Nathan Greenberg, Detroit 25,000

Roosevelt Memorial Hospital Corp., Inc., Detroit; to operate and manage hospital for medical and surgical treatment of all kinds; Clayton J. and Anna J. Ettinger, 2920 Mt. Elliott; Earl R. Tromley, Detroit 75,000

Harvey G. Wilson, Detroit; buying, selling and exchanging new and old automobiles of all kinds, accessories, etc.; Harvey G. Wilson, 84 Farrand Park, Highland Park; May Leslie Wilson, James H. Summers, Detroit..... 250,000

Henderson Hardware Co., Detroit; wholesale and retail dealer in hardware, paints, oils, glass, automobile accessories, etc.; Dr. Leslie T. and Don F. Henderson, 215 Iroquois Ave.; Thomas R. A. Rush, Detroit 50,000

Rex Building Co., Manistique; erecting and owning buildings to be occupied or leased for dwelling houses, halls or business; William R. Crowe, C. C. Elstrom, Paul L. Hubbard, Manistique 20,000

Robilson Laboratories, Inc., Detroit; to conduct general biological, chemical and engineering laboratories and experimental research work; Floyd W. and Estelle Ward Robison, 110 Rosedale Court; Wilmer E. Robison, Detroit 10,000

Monroe Realty Co., Monroe; purchasing, holding and dealing in real estate; general insurance agency; Wilma Gildea, James J. Kelley, Herbert H. Baker, Monroe 1,000

Engineering Equipment Co., Lansing; to conduct general sales engineering company; J. C. Gunnell, H. L. Conrad, O. E. Eckert, Lansing 12,000

Detroit International Co., Detroit; to buy, sell, pledge, hold, forward, exchange and deal generally in bonds, notes, mortgages, etc.; George B. Judson, 886 Atkinson Ave., Detroit; George R. Andrews, Highland Park; Christian H. Haberkorn, Jr., Grosse Pointe Park 1,000

W. B. McLaughlin Co., Detroit; to buy, sell and generally deal in capital stock of corporations as brokers or agents; Walter B. McLaughlin, 382 Tuxedo Ave., Highland Ave.; Aurelius Milford Tracy, Cyril Augustus Munro, Detroit 10,000

Muskegon Building Materials Co., Muskegon; to manufacture, buy, sell, deal and trade in brick, stone, cement and building material of every kind; John Mallen, John R. Edelman, George A. McIntosh, Muskegon 50,000

Gray-Kluwe Housing Co., Detroit; real estate; Ernest L. Gray, 4 St. Clair Ave., Grosse Pointe; Charles E. Parkman, Wesley Kendall, Detroit 40,000

Ypsilanti Land Contract Co., Ypsilanti; real estate and real estate securities as agents; Frederick L. Galling, Olin C. Eckley, Maru M. Read, Ypsilanti.. 100,000

Jackson Safety Appliance Mfg. Co., Jackson; manufacturing railroad equipment, safety devices and switches; Frederick A. Traynor, Frederick C. Parsons, John H. Parsons, Jackson 10,0

Zimmerman Bros., Marine City; buying, selling of hardware, merchandise, automobiles and other personal property; Fred W., Charles F. and

THE OLDEST HOUSE IN MICHIGAN

Sterling Bonds

We have a selected list of Sterling bonds which are exceptionally attractive. They will pay the purchaser an annual income of from 6% to 9% and show a profit at maturity as high as 100% on the money invested. The safety of these issues is unquestionable. We shall be glad to send particulars on request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

THE professional gambler "salts" some of his winnings; it is the amateur who pyramids his profits. The proponents of speculation argue that all business is speculative. Granted. Then why risk your speculative business profits in further speculation when a definite assured income of 6% can be obtained with safety from our First Mortgage Bonds?

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164



The Luxeberry Painter Says:

"For every varnish need, home or industrial, there's a Berry Brothers' product made in Detroit and backed by sixty-three years of knowing how."

BERRY BROTHERS
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan — Walkerville, Ontario

C.A. C.C. COREY. C.O.K.E.
1903-4 MAJESTIC BLDG. — DETROIT, MICH.

sell and deal in flour, feeds and grain; general milling business; Wells, Charles R. and Earl S. Parish, Allendale township 30,000

Fulton Realty Co., Ottawa Lake; real estate; Samuel O. Rothuis, Henry F. Davis, Toledo, O.; Charles L. Robertson, Adrian 20,000

Richardson Specialties Co., Napoleon; to manufacture, buy, sell and deal in all kinds of chemicals and do general manufacturing and mercantile business in same; Joseph M. Richardson, Napoleon; Adam L. Gloor, 439 Henry St.; Charles W. Chapman, Detroit.... 25,000

Rogers & Selley, Inc., Detroit; to buy, deal in and sell plumbing and heating supplies; general plumbing and heating business; Walter M. Rogers, Mt. Clemens, Paul L. Selley, Ferndale; Earl D. Burke, Detroit 5,000

U. S. Automotive, Detroit; repairing, altering, rebuilding and storing automobiles; John J. Goldkette, 42 Gratiot Ave.; J. A. B. Madden, Ferdinand Broock, Detroit 16,000

Perch Point Land Co., Detroit; erecting and owning buildings to be occupied or leased for dwelling houses, halls or business purposes; William H. Steffes, 2035 Edison, Detroit; F. A. Schnader, Robert Kaiser, Detroit. 30,000

Cadillac Glass Co., Detroit; to manufacture, buy, sell and deal in sheet, plate and window glass, or any form of glass, wholesale and retail; Ray L. Martin, Fred L. Stoker, Henry J. Berndt, 1147 Marlborough Ave., Detroit 50,000

Great Lakes Fuel Co., Detroit; to deal in fuel, ice and building supplies, wholesale and retail; Joseph M. Mellinoff, Harry and Sam Mellinoff, 1314 Holbrook Ave., Detroit 25,000

Interstate Mausoleum Co., Detroit; financing, promoting and building of mausoleums; Samuel L. and Harold S. Gouison, 46 Kirby Ave., W., Detroit; Oscar B. and Frank J. Herman, Toledo, O. 25,000

Franklin-Rayner Co., Vicksburg; buying, selling and dealing in all kinds of dry goods; general store; John H. and Reid L. Raynor, Loretta L. Franklin, Vicksburg 12,000

King Motor Car Co., Detroit; to manufacture, purchase and acquire, own, sell, trade in and dispose of automobiles, parts, accessories, etc.; Herman Alperin, Charles J. Hines, Franklin R. Brown, Buffalo, N. Y. 1,000

Hodges Chain Co., Gaines burg; to manufacture and sell, wholesale and retail, all kinds of tire chains, automobile appliances and attachments; Chauncey W. Hodges, Gaines burg; Byron E. Shutt, Richard C. Edwards, Kalamazoo 60,000

Perpicus Products Co., Detroit; business of manufacturing and dealing in metal washers, tools, dies and other mechanical devices; G. A. Dean, 65 Lenore Ave.; S. H. Barrett, S. O. Mills, Detroit 30,000

Grand Victory Theater Co., Detroit; owning and operating of theaters and other places of amusement; Abraham Ackerman, 1657 W. Euclid Ave.; Daniel Fidler, Henry C. Keywell, Detroit 200,000

B. B. Denyes & Co., Detroit; to buy, sell and deal in stocks, bonds and securities, as agents; Miles GeBott, 6581 Oregon Ave.; Benjamin H. Cram, Berton B. Denyes, Detroit 1,000

Utilities Chemical Co., Detroit; to manufacture, buy, sell and deal in all kinds of soap, polishes, cleaning preparations, etc.; Charles B. Abraham, 73 Mt. Vernon Ave.; Mortimer Rye, Theodore W. Roach, Detroit. 100,000

United Furniture Co., Grand Rapids; manufacturing, wholesaling and jobbing of furniture and kindred lines; Cash E. Naylor, Addie Naylor, Alvin E. Ewing, Grand Rapids 25,000

Buck & Brown, Inc., Detroit; to buy, sell and deal in stocks, bonds as agent, and conduct investment and brokerage business; George H. Buck, Thomas A. Brown, 1126 Coplin Ave., Detroit; Edward V. Casper, Wyandotte 25,000

Saugatuck Auto Co., Saugatuck; to buy and sell automobiles and accessories, general repair and machine work; Rudolph Zeutsch, H. M. Brackenridge, R. L. Leland, Saugatuck 25,000

Kalkaska State Bank, Kalkaska, Manistee county; commercial and savings bank; Ellsworth Billman, Kaleva; Charles and Elmer Billman, Cedar.. 20,000

CHANGES OF NAME

Summit Exploring, Mining & Mfg. Co. (name changed to Summit Mineral Co.), Ontonagon Co., Oshkosh, Wis.. $1,200,000

John F. Zimmerman, Marine City .. 20,000
Ryerson Co., Detroit; real estate..... 200,000
M. & F. Lincoln Co., Jackson; to manufacture, buy, sell and deal in all kinds of groceries, farm produce, meat, dry goods, etc.; Matthew H. Frederick A., Stephen T. and Charles G. Lincoln, Jackson 100,000
Troy Laundry Co., Port Huron; general laundry business, real estate; H. T., W. T. and Florence T. Smith, Port Huron 75,000
Charles R. Parish Co., Coopersville, Ottawa county; to manufacture, buy,

Digitized by Google

Field Bros. (name changed to Stern & Field Stores of Hubbell), Hubbell.. 25,000
Schueler & Garvey (name changed to Schueler Battery Service Co.), Detroit 4,000

INCREASES

Calumet Garment Co., Laurium, from $25,000 to ..... $ 50,000
Michigan Washing Machine Co., Grand Rapids, from $100,000 to 200,000
John C. Morgan Co., Traverse City, from $50,000 to 75,000
Grange Co-operative Ass'n of Isoco County, Whitemore, from $200 to ... 400
First State Savings Bank of Breckenridge (consolidated with Farmers State Bank of Breckenridge, Mich.), from $20,000 to 30,000
Ortonville Telephone Co., Ortonville, from $3,600 to 10,000
Riverview Furniture Store, Grand Rapids, from $100,000 to 250,000
Lake Odessa Canning Co., Lake Odessa, from $100,000 200,000
Charles W. Warren & Co., Detroit, from $50,000 to 150,000
Westinghouse Lamp Co. (F.) (Pa.), New York City, Detroit, from $5,000,000 to 21,000,000
Briggs Co., Lansing, from $150,000 to.. 400,000
Kelvinator Corp. (F.) (Del.), Wilmington, Del., Detroit, from 10,000 shs. n. p. v. to 200,000 shs. $5.00 par stock all common.
General Machine & Iron Works, Detroit, from $18,000 to 50,000
West Side Industrial Development Co., Detroit, from $45,000 to 75,000
Roseswift Airplane Co., Grand Rapids, from $20,000 to 35,000
Standard Glass Co., Detroit, from $5,000 to 25,000

DECREASES

Detroit Brass Products Corp., Detroit, from $10,000 to 1,000

NOTICES OF CHANGES OF ATTITUDE

Hoag-Brown Co., Ann Arbor..... 16,000
Midwest Finance Corp., Detroit..... 100,000
Boyland & Co., Grand Rapids..... 100,000
Hancock Public Hospital, Hancock.... 20,000
Edelmeir Realty Co., Detroit..... 5,000
Chetwood Farm Co., Detroit..... 1,000
Economy Chemical Co., Eaton Rapids.. 5,000
Forrester Building Co., Detroit..... 1,000
Flint Building Co., Flint..... 50,000
Wolverine Athletic Club, Detroit..... 10,000
Goodyear Lumber Co., Detroit..... 5,000
Ramsdell Hardware Co., Norway..... 20,000
Fairy Phonograph Lamp Co., Inc., Detroit 20,000
Automotive Devices Co., Detroit..... 10,000
Athletic Park Co., Battle Creek..... 9,200
Red Star Oil Co., Petoskey..... 24,000
Clark-Smith Construction Co., Grand Rapids 10,000
Grand Rapids Electric Service Co., Grand Rapids 8,000
Burns Sales and Service Corp., Detroit 20,000
Woodward Paste Packing Co., Owosso 10,000
Mason Motor Co., Flint..... 100,000
Detroit Neal Institute, Detroit..... 10,000
Ever Ready Battery Service, Inc., Detroit 7,500
Z. C. Barber & Co., Detroit..... 1,000

NOTICES OF DISSOLUTION

Glenn Pier Co., Glenn..... 3,000
Thirteen Realty Co., Detroit..... 9,000
King Motor Car Co., Detroit..... 200,000

NOTICES OF WITHDRAWAL

H. & A. Realty Co. (F.) (O.), Toledo, Ohio, Port Huron..... 15,000

TO MAKE LINOTYPE DEVICES

The Box-A-Lyne Company has been organized in Grand Rapids to manufacture linotype devices invented by Clarence C. Gilleo and William E. Borst. The company, which is capitalized at $25,000, has elected the following officers: Clarence C. Gilleo, president; William E. Borst, vice-president; Avery C. Gilleo, secretary-treasurer, and Stanley W. Foran, general manager.

STANDARD PARTS EXECUTIVE QUITS

Ralph W. Leavenworth has resigned as advertising manager of the Standard Parts Company, Cleveland, to join a publishing concern in the same city.

HAYNES GETTING ORDERS

As the result of orders for motor cars, the Haynes Automobile Company, Kokomo, Ind., has increased its factory force. In one day 150 men were called back to their benches and machines.

WINTON SIX

Captivating

A car that rides like an ocean yacht. A motor with magnificent power, equal to any load or climb—as flexible as the hair-spring of a watch and nearly as quiet. And, best of all, a car of exceptional beauty—the kind of beauty that impels people in the street to turn for a second longing look. May we show you? Simply telephone.



THE GEO. H. ZUVER CO.

4465 Cass Avenue

Telephone Glendale 4605

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

Digitized by Google

(Sample Ballot)

STREET RAILWAY SERVICE-AT-COST AND OPTION TO PURCHASE OR LEASE BALLOT

STREET RAILWAY
SERVICE-AT-COST BALLOT

No.

ELECTION OF APRIL 4th, 1921

INSTRUCTIONS: If you favor an ordinance, the title and substance of which are as follows, mark a cross (X) after the words "For the Ordinance." If you do not favor such ordinance, mark a cross (X) after the words "Against the Ordinance." Before leaving booth fold ballot so initials of inspector will appear on the outside.

(TITLE OF THE ORDINANCE)

An Ordinance to authorize and provide for the operation of one complete unified Street Railway System in the City of Detroit furnishing adequate and sufficient facilities and service to all parts of the city and all people in the city and giving Service at Cost and reserving to the City of Detroit the right to purchase or lease the same at the option of the city.

(SUBSTANCE OF THE ORDINANCE)

(1) The city lines are to be operated by a separate company—Detroit Service-at-Cost Railway.

(2) All existing franchises and rights in the city are to be surrendered except a short piece at Fort Street and the Rouge River, a piece out Gratiot Avenue and the Stephenson Line from Highland Park northerly.

(3) As the city limits are extended from time to time within a larger territory defined in the Ordinance the street railway lines in the annexed territory come under the Ordinance and all franchises and rights-of-way therein except those above mentioned are surrendered.

(4) The rates of fare are to continue as they may be on the day on which the Ordinance is voted upon until an inventory and appraisal and audit can be completed. The rates are then to be fixed so as to pay all expenses, costs and charges which the Interstate Commerce Commission in its system of accounts for street railways recognize as proper, and also such expenses, costs and charges as the city under the Ordinance may require the Company to incur and pay. In addition, the Company is to receive six per cent (6%) per annum on the value of its property which shall be used or useful in the public service. The maximum value of the property which was proposed to be transferred by the agreement with the City, of March 17, 1919, is limited to Thirty-One Million, Five Hundred Thousand Dollars ($31,500,000.00). The rates will go up or down from time to time as conditions may require—each change in the price of tickets being exactly one-half cent. If the rates at any time produce more than these requirements, the excess is put into a stabilizing fund and at the end of three (3) months the rates are automatically lowered.

(5) The value of the property and every other question which can possibly arise under the Ordinance is to be determined by a Board of Arbitrators. The Board in the first instance is to consist of five (5) members, two (2) appointed by the City, two (2) by the Company, and one (1) by these four, or if they cannot agree, by three (3) of the Circuit Judges. After the valuing of the property is completed (and it is required to be completed as soon as practicable) the Board will be reduced to three (3) members. A new Board is to be appointed every two (2) years.

(6) Extensions are to be built and additional cars provided to any extent that may be directed by the Common Council, subject to conditions as to purchase if built within the last ten (10) years. If the Company fails to proceed with due diligence and faithful endeavor it loses the six per cent (6%) until it makes the failure good.

(7) Any municipal lines—subways, elevated or surface—may be required by the city to be equipped and operated by the Company, or the Company may be required to purchase any surface lines, or if the City operates the municipal lines the Company may be required to exchange transfers or cars—that is, cars may be routed over both municipal and Company lines. All crossings of Company tracks by municipal tracks are to be constructed by the Company and the cost paid as determined by the arbitrators.

(8) The routing of cars, frequency of service, heating and ventilation of cars and all similar matters are to be prescribed by the Common Council. The Company waives any technical legal rights it may have to question such matters. The City is to have a voice in all future agreements with Motormen and Conductors, as to wages and working conditions.

(9) The City has the right to buy the property at the value shown by the inventory and appraisal at the end of any year. The City also has the right at the end of five (5) years, or of any year thereafter, to lease the property at a rental of six per cent (6%) on the value shown by the inventory and appraisal at the end of such year; the City maintaining the property during the lease which must run for the balance of the Ordinance term—that term being not more than thirty years—but may run for any lawful longer term at the option of the City, but not exceeding ninety-nine (99) years, and the City has the right to assign the lease or sub-let the leased property.

(10) A sinking fund is created out of the revenues—two per cent (2%) on the value of the property each year. This is to be paid into the City Sinking Fund Commissioners each month and is to be invested by the Commissioners in either City or Company bonds. If the City purchases the street railway system payment may be made by converting the sinking fund into cash and turning the cash over to the Company and paying the difference. At the end of the term of the Ordinance the Company is bound to leave its tracks and other property in the streets unless the Common Council requires its removal, and to convey all property to the City which the sinking fund is sufficient to pay for at the value shown in the inventory.

(11) A budget is required to be submitted by the Company to the Board of Street Railway Commissioners early in February of each year. This budget is required to cover all proposed expenditures for operating the system during that year, also all expenditures for new track, equipment, etc. The Street Railway Commission may disapprove any such proposed expenditures. The Company is limited to such expenditures as are set forth in the budget and are not disapproved by the Street Railway Commissioners except the Company may appeal to the Board of Arbitrators.

(12) The City Controller and City Treasurer are to be members of the Board of Directors of the Company.

(13) Mortgages now on the street railway cannot be renewed or extended or new mortgages put on without separating the City lines from the lines outside the City, nor can all new mortgages on the City lines together exceed eighty (80%) per cent of the value fixed by the Board of Arbitrators, and all mortgages must be payable at any time the City purchases the system.

FOR THE ORDINANCE [X]

AGAINST THE ORDINANCE [ ]

Digitized by Google

APR 4 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Public Library

Fifteen Cents a Copy

Five Dollars a Year

APR - 4 1921
UNIV. OF MICH.

Detroit to Build This Year, But--
The Legislature As a Pawn
It Was a Real Business Getter
Planers, Shapers and Slotters
Pity the Poor Meter Man

(Financial Section Starts on Page 22)

DETROIT, APRIL 2, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 14*

EIGHTEEN HUNDRED SEVEN

Aladdin



Aladdin Industrial Houses Pay Manufacturers Big Dividends

THE Aladdin System of Construction saves 18 per cent of the lumber wasted in ordinary building. Standardization and quantity production further reduce the building cost approximately 30 per cent to you. Also you benefit by Aladdin's stupendous purchasing power. Aladdin houses are easily and quickly erected by unskilled labor. Simple, complete instructions are furnished with each house.

THE ALADDIN SYSTEM AND PLAN

Aladdin houses are Readi-cut. Every piece of joists, studs, rafters, sheathing, siding, flooring, interior finish is cut to proper size, marked and numbered ready to nail in place. Sufficient material to complete more than 3000 houses is carried constantly in stock ready for instant shipment. Depending upon size of house, we load from one to three complete houses in each car.

QUICKER DELIVERIES FROM OUR FIVE MILLS

Aladdin houses are manufactured and shipped direct from the Aladdin Company's own mills in Michigan, North Carolina, Oregon, Mississippi and Canada. Aladdin's Industrial Homebuilding Service means shorter routes, quicker delivery and lower freight rates for builders in every part of the United States.

When you are ready to consider your housing problem bear these facts in mind.

Aladdin—

—expedites your building project—
—houses your men well and quickly—
—saves 18% of the cost of lumber—
—save 30% of the labor cost—
—reduces the skilled labor required—
—guarantees complete shipment of material—
—guarantees the quality—
—carries material for 3000 houses in stock—
—ships from the nearest timber region—

—quotes definite prices on any order from one house up to a city of 3,000, including churches, schools, offices, water and sewage systems, electric plants, street and house lights, heating plants, street parks, trees, lawns, etc., complete.

Write, wire or phone for Aladdin catalog No. 2080

The Aladdin Co.

Offices and Mills at

Bay City, Michigan
Wilmington, N. C.
Hattiesburg, Miss.
Portland, Oregon
Toronto, Ontario



Industrial Housing

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Detroit to Build This Year, But–

The Chances Are All Against the Great Boom Some People Have Been Busy Predicting; Why?

By F. W. HERSEY

IF WISHES were fishes we'd have a feast. If all the ultra-optimistic and considerably distorted reports that run something like this—"Detroit to Have Greatest Building Boom in History"—were basically true, with this beautiful weather we are having it would be impossible to walk the streets without tripping over a pile of lumber or getting "beaned" with a falling hammer.

The building boom that so many newspapers are talking about is a state of mind—a wish expressed as a fact with characteristic Yankee exaggeration. It is the kind of a state of mind that is meat for speculation. What Detroit wants now is investors and building investments. The need of the hour is men with faith in the future of the city; men who are keen enough to know that in the future Detroit will be a greater city, a sounder city by reason of the test of economic fire through which she has passed, and knowing that, will put some money into homes for themselves or homes for others, asking only a reasonable return and having a desire to derive a small, though clean profit from what might be an altruistic act.

From such sources must Detroit look for the money that will revive building activities during this spring and summer. On the number of such men available and the amount of money forthcoming from them will depend any "boom" the city will have.

Propaganda Distasteful

Propaganda intended merely to create a phantom out of which to build fictitious values on building materials, wages and speculative investments can but meet the fate of the house built upon sand, and should be disregarded. The actual facts of the case are the rock upon which to build the foundation for the building activities of this season, and there are enough such facts existent today to justify the assurance that considerable building will be done; that there is no better time to build than now, and that money invested in building at this time will, when all business has regained its equilibrium, yield a good, steady return.

A Detroit contractor said the other day: "I do not like this building boom talk. I believe in optimism, and I know there will be a marked improvement in the building situation, but there is this about exaggerated optimism: It sounds too much like propaganda with an ulterior motive. When I hear it, I visualize a rush of building prospects, a demand for materials and labor, an almost immediate increase in the prices of both, and —a dull thud as the beautiful picture drops to the ground. The call is not for a boom, but a recovery, a gradual restoration of confidence on the part of home-owning prospects, industrial leaders with building program, and real estate investors."

This publication prides itself on its conservatism. Since last fall nothing has been said about the building industry, aside from such news matter as justified use. It has waited until this time to say a word about the industry. More than a year ago the subsequent business depression was prophesied, much to the disapproval of business men and bankers who did not believe it, or, if they did, preferred nothing be said about it. Unpreparedness made the decline all the more severe for some persons and some concerns. Those who saw the impending conditions were prepared.

Believing that there are reliable evidences of renewed building activities, the Michigan Manufacturer and Financial Record now undertakes to analyze these evidences and reach a conclusion. A recent newspaper report to the effect that there will be $75,000,000 of building construction done this season is not accepted as of any value. There may be that much construction in various stages of initial preparations, in architects' offices and in the minds of business men who are looking well into the future, but there is no evidence to support any assertion that such an amount of building will be started this season.

That there will be considerable home building, alterations, apartment house construction and industrial development is supported by some facts. There have been reductions of from 35 to 45 per cent over peak prices in some kinds of building materials. Wage reductions have been effected in certain divisions of building labor, and very probably further reductions will be made. Whether the decrease in material prices will hold any length of time depends upon the extent to which prospective builders and buyers rush into the market.

Reports from manufacturers of building materials indicate that no large surpluses have been accumulated. Simultaneously with the stoppage of construction activities, lumber mills and plants, brick works, cement works and other concerns furnishing materials closed down or curtailed production. Some of these could not afford to carry heavy inventories or sustain overhead against a dead market. Others who could have done so did not because it was not good business. Therefore, any sudden stimulation of the market beyond what the occasion calls for will result in immediate price increases, because it will take time to hire men, reorganize forces, overcome labor troubles due to wage-cutting, and get into steady, quantity production. In the meantime such surpluses as there are will be drawn upon, and very probably soon exhausted.

There are few manufacturers of building materials, or of any other products, who have not learned a lesson from over-production. Plant operations will not be entered into with superheated confidence. Instead it will be hand-to-mouth for a while at least. The automotive industry is a good example of this, for all motor plants are today buying for one, two or three months' production. Deliberate effort so to control markets as to maintain prices, on the one hand, and financial necessity, or caution born of industrial wisdom, on the other, will characterize the building development of the present year.

Another problem to be considered is the fruits of speculation. During the last two years real estate, buildings particularly, has been changing hands at a reckless rate. Some of it has been shoe-string speculation. Apartment houses, one, two and four-family dwellings have been sold for the purpose of gambling on equities. Speculative buyers went in at the top of the market and, in many cases, are sufferers thereby. Any person who travels the streets of this city now will notice the large number of homes for sale. There are streets on which almost every other house is on the market.

Sources of Money

The answer to more than a few of these offers is financial trouble. Incomes have suffered considerable defiation and property burdens are becoming heavy, with the result that sale, even at some loss, is desired. Such a condition cannot fail to have an influence on building. While the extreme home shortage in the city has been in no way relieved, the opportunity to buy without the trouble of building has some attractions. The exodus from the city by thousands of unemployed has left property on the market. The return to industrial and business activities of eighteen months ago would obviate all these conditions, but who in possession of their healthy faculties expects such a return? In Detroit there is considerable money for building investment, and there are many persons, comparatively unaffected by the business depression, who have money and definite ideas of building, but the number is not great enough to contribute to "the greatest boom in the history of the city."

There are three general sources of money for building—the banks, building and loan associations and private fortunes. In the financial situation we have a serious obstacle to a "building boom" as conceived by good wishers but slow thinkers. First we have the banks. The charge that they have deserted building, that a better attitude on their part toward the building needs of the city would soon revive construction is, we think, unfair. In the first place, Michigan is one of the few states where the laws recognize mortgages as good collateral for banks, whether the banks do or not. Because of this law, savings de-

Digitized by Google

posits have been tapped as much as safe practice permits for building loans. The best support comes from the savings banks; the commercial and national banks are more limited by law.

To the degree that employment produces savings deposits real estate loans are possible. The Michigan law provides that savings banks must lend at least 50 per cent of their deposits on real estate. Commercial banks largely support business and industry, while national banks can loan on property for one year, if it is within 100 miles of the bank, the aggregate of such loans being limited to 25 per cent of the bank's capital and surplus, or to one-third of its time deposits. These are definite limitations.

The savings banks, on the other hand, must lend up to 51 per cent of deposits, but can exceed that point and do, although it is not considered the best banking practice in all quarters. A review of bank statements shows that the savings banks have done more than their share, more than is required of them by law, and more than would be regarded as good practice in other cities, Chicago for example. One bank in Detroit has deposits of $7,000,000, and of that amount, $5,229,000 is invested in mortgages. Another bank has $3,000,000 out of deposits of $5,416,000 so invested. A commercial bank has loaned $3,466,000 out of deposits of $7,800,000. Still another bank shows mortgage loans to the amount of $24,000,000 from deposits of $54,000,000.

Assuming that the banks have done their full share and more, what can be expected of them as the spring and summer progresses? At present there is a gradual lowering of deposits. Depositors out of work, or on reduced incomes, either are not depositing as much as usual, or not at all. Thus bank income is limited. Those unemployed, or having incomes insufficient for current needs, are drawing on savings, thus increasing bank outgo. The only remedy is stricter economy on the part of depositors, re-employment for those out of work, and revival of business in general sufficient to produce larger income. If we are to accept the theory that profits must be shortened, wages and salaries reduced, then, unless new economies act to offset it, there is bound to be a shortage in deposits, which makes less money available for building.

Mortgages as Collateral

The objection to mortgages as bank collateral is their nature. They are not quick assets. The man who deposits money in a savings bank does so with the understanding that his funds will be available at any time he needs them. If, when in need of money, a depositor presented to the bank with the intention of drawing upon his savings, but instead of cash, he received a mortgage with the explanation that his deposits had been so invested and no cash was available, he might as well not have a deposit so far as his immediate need for cash is concerned. Cash he must have.

The mortgage usually represents a long term loan which the bank must be able to carry and at the same time have available cash on hand. The limitation of one year on city building loans and five years on farm loans placed upon national banks is for no other reason than to keep the banks' funds in an liquid a condition as possible. No such limitation is put upon savings banks, but their need for liquid assets prevents them from freezing too much of their deposits in building mortgages. It is known in financial circles that some of the banks will not be prepared to lend building money for another year.

The second source of money for construction is the building and loan associations, of which there are five or six in Detroit. These associations depend to a large measure upon the savings of depositors having incomes within the $5,000 range, very few above that figure. All the majority of these associations have to lend now is the money reaped on past loans. That is why so little building has been started with the general business depression. An executive of the largest association in the state says that it would be at least a matter of not two months, before loans could be made to any extent for new building. It is apparent that there are not enough of these associations in Detroit. During 1930 these organizations all over the United States financed building to the extent of $500,000,000. There are about 6,000 of them, having a membership of approximately 5,000,000 men and women, and assets totaling about $2,000,000,000.

While Detroit may be in dire need of housing and not have sufficient building loan association capital, another city may have plenty of money thus invested, but the building needs may not require it all. To make such surplus available where most needed it has been suggested that a system of government-controlled Federal Building Loan banks be established, with eleven building loan districts. In fact such a measure has been drafted for legislative action. Bonds issued through this system would be tax exempt, which provision would soon turn money now invested in certificates

(*Continued on Page 28*)

The Legislature As a Pawn

What Is the Purpose of Two Dangerous Bills Affecting Our Now Overburdened Railroads?

IS THE Michigan Legislature being used as a pawn in a larger, national, political game which has for its stake the nationalization of the railroads?" is the question which S. W. Brown, chairman of the Michigan Railroad Association, puts to the people of this state. "Two bills, in particular, are being brought to the fore, with no apparent purpose other than to make further inroads upon the railroad treasuries, already nearly depleted, while similar or related legislation is being introduced in other states," says Mr. Brown. "That the movement is a concerted one is, in my humble opinion, highly probable, and designed primarily to embarrass the transportation lines at a time which is perhaps the most critical in the history of transportation.

"Notwithstanding the fact that everyone of Michigan's railroads—or those operating in this state—has been losing money for several months, two bills, in particular, threaten to cripple these lines further. Senate Bill No. 5, which is known as the 'Full Crew bill,' and which was to come up for consideration this week, promises to add another burden upon the operating costs of the Michigan railroads aggregating an annual charge of $1,061,041, while the Vestibule Cab bill would involve a further expenditure upon all lines of approximately $5,340,156, according to an estimate based upon the provisions of the first draft of the bill, which has since been modified. But the requirements of the new draft leave some doubt, so no fair estimate can be made until the Michigan Public Utilities Commission gives a pronouncement upon what it will expect, should this measure become law.

"The full crew bill for the principal Michigan railroads will involve an additional annual transportation charge as follows:

Michigan Central	$205,158.00
Pere Marquette	162,158.00
Grand Trunk	162,186.00
Ann Arbor	60,000.00
Chicago & Northwestern	54,471.00
New York Central	53,554.00
Pennsylvania	48,000.00
Wabash	42,600.00
Duluth, South Shore & Atlantic	41,954.00
Detroit & Mackinac	36,000.00
Detroit, Toledo & Ironton	22,125.00
Munising, Marquette & Southeastern	19,643.00
Copper Range	8,400.00
Lake Superior & Ishpeming	5,253.00

"Now what does the full crew bill imply? Simply, the employment of an extra brakeman on all freight trains of more than 50 cars and all passenger trains of more than five coaches. The bill allows no leeway in the compliance with its provisions. It is mandatory. The railroads, it must be understood, endeavor to operate their trains safely, and whenever this is required, do put in such an extra man, and if this additional help were necessary at all times, he would be included; but as a matter of fact this additional man is not only unnecessary but at times may be a source of great responsibility. The state of Indiana, after 10 years of this legislation, has just repealed this bill as involving unnecessary expense upon the railroads which in the final analysis is passed on to the farmer, the producer and the consumer, without any compensating benefits. For after all it must be recalled that whatever transportation charges are taken out of transportation must first be put there through charges on the service performed, whether it be passenger or freight. These are the only two main sources of revenue for a railroad. So much for the full crew bill for the present.

"Another bill, known as the steel vestibule cab bill, was introduced at Lansing. After some discussion the bill was redrafted and it is now known as the vestibule cab hill. This, if it becomes law, provides for the installation of special steel cabs for locomotives. Figures were compiled based upon the requirements of the first draft of the proposed measure, which would have involved a capital outlay of $5,340,156. Under the new draft, the bill is indefinite, leaving the specifications to the Michigan Public Utilities Commission, and this body has not pronounced upon what it would require if it were adopted. These vestibule cabs, if constructed of steel and installed at the time a locomotive is being built, cost $2,500, while if they are installed later, the charge runs upward of $3,000 each.

"The outlay for the principal railroads of Michigan, if this measure becomes law, will be as follows:

Michigan Central	$2,604,000
Pere Marquette	1,566,000
Chicago & Northwestern	384,000
Grand Trunk	320,000
Duluth, South Shore & Atlantic	297,000
Wabash	246,000
Pennsylvania	227,000
Ann Arbor	125,000
Detroit, Toledo & Ironton	122,000
Detroit & Mackinac	100,000
Lake Superior & Ishpeming and Munising, Marquette & Southeastern	96,000
Detroit & Toledo Shore Line	66,000
Detroit, Bay City & Western	36,000

"For these improvements, too, if improvements they are, the shippers and traveling public in the end will be required to pay, under

(*Continued on Page 30*)

Digitized by Google

It Was a Real Business Getter

1921 D. A. D. A. Show Very Satisfactory to Dealers, Who Report Sales and Excellent Prospect Lists

By MARC BRAUN

THE ANSWER of practically every automobile dealer or distributor as to what he thinks of the Twentieth Annual D. A. D. A. Show, which ended last Saturday, may be summed up as follows:

It was a good business show.

In many cases sales as well as prospects lined up were far beyond the number the dealers exp.cted.

The prospects listed in the majority of cases are real prospects.

It was the best managed and best arranged show the city ever had, and as for its location, it could hardly have been better selected.

As a stimulus to future business it was held just at the right time.

There is no need for much elaboration. It may be stated, however, that probably never before did this annual event attract so great a number of real prospective buyers. That is one of the outstanding observations made by the salesmen. The percentage of casual visitors and curiosity seekers was unusually low, although previous attendance records were distanced.

Sales of cars during the show are variously estimated, but whatever that number actually was—the estimate runs all the way from 300 to 700 cars—it really has no great significance. It's the sales that will be made from now on that will tell the real story of the success of the exhibit. And from what the dealers say, their prospect lists, by which they are setting unusual store, will keep them busy for several months. April, according to the men in the business, will be a very busy month for the dealers, and unless the manufacturers arrange for increased output some of the retailers venture to predict a shortage of cars some time in May. At least of certain makes.

Here are a few brief statements from dealers:

Nash Distributing Company—"It was a first-class show, a show worthy of Nash—the finest ever held in this country. We recorded 50 per cent more prospects than last year and we are satisfied with the number of cars sold. We did not at all expect the results obtained."

Bemb-Robinson Company—(Hudson and Essex)—"A very good show indeed. We sold 40 cars. Considering present conditions, that is a satisfactory record. As for the number of prospects, it is most gratifying and encouraging. We are confident of the future in our territory. And we are not given to bragging, either."

Detroit Reo Branch—"We are gratified with the show, which was in every respect a fine and dignified event. We sold cars and lined up enough prospects to keep our sales force busy for a long time. The outlook is good."

Thomas J. Doyle—(Dodge)—"Considering the fact that we are not yet back to normal after the months of depression, the results of the show are good. We sold 54 cars and have a good number of possible sales on record. The general outlook is much improved."

Detroit Packard Co.—"Yes indeed we are well satisfied. In fact, the results were better than we had hoped for, and the future looks good. We sold 19 cars and our prospect list is a mighty good one. Our sales have been increasing steadily, and while there was a time when business was rather dull, we cannot say that we ever had to close up our salesroom for lack of prospective buyers. January was a good month with us; February was a better one; March was slow in getting started, probably because of the income tax payments, but during the last ten days business has been brisk."

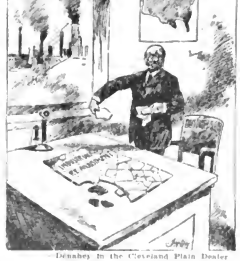
Knight Motors, Inc.—"This was a very, very fine show, both from the standpoint of attractiveness and as a business getter. Sales were



Darling in the New York Tribune

Thank Heavens, Mother Is Back Sooner Than Expected

very fair, and as for prospects, well, we have 409 names to take care of, and while we do not expect to make 409 sales, we figure we will get a very fair percentage. As a matter of fact, we believe that April will be a big



Dunahey in the Cleveland Plain Dealer

Almost Got It Together

month and that by the middle of May it is likely that there will be a shortage of standards cars."

Wm. F. V. Neumann & Sons—(Pierce-Arrow)—"It was a good show, well managed, well arranged, speedily located, and it was favored with what might be called a class of more earnest prospects than in many years. We sold cars and we have a good number of prospects on our books. Just a few minutes ago we sold a car to a prospect who had come to look over our display during the show, and we have another prospect scheduled to come in for a decision this afternoon. We are well pleased."

Baker-Fisk-Mugill Company—(Dort)—"The show was better than we expected. Real buyers and prospects were the majority of visitors. We are well satisfied with our sales, and as to our lineup of prospects, they will keep us hustling for some time. The show was one the city and the dealers may well be proud of."

W. D. Block Motor Company—(Marmon and Lexington)—"The best show Detroit ever had. Well arranged, and cars displayed to great advantage. Sales were made and we have a large number of prospects to look after. Are we optimistic as to the future? Well, we should say we are, and we think we are not the only ones who feel that way."

Chevrolet Motor Company—"It was a real automobile show. We sold a good many cars and we have three times as many prospects to look after as we had last year, and last year's was a good show."

Miller-Judd Company—(Liberty)—"We sold quite a number of cars and have plenty of prospective sales. The general outlook is good—certainly much better than it has been for some time. The show itself was splendid."

Detroit Oakland Company—"We are satisfied. That means a great deal now when conditions are taken into account. We sold cars and we have a fair list of prospective buyers. The show was probably the best ever staged here. May the next one be as fine."

Smith-Glines Sales Company—(McFarlan, Stephens and Kessler)—"In the 15 years we have been connected with the Detroit automobile business we have never seen a better show. Not even the two national shows surpass it. It was an excellent stimulus to the business that is sure to follow."

Simons Sales Company—(Overland and Willys-Knight)—"A fine show it was, and sure to bear fruit. It cannot be said that sales were as numerous as might be expected, but we are still convalescent. We expect, however, a gradual improvement. We have a large number of live prospects on our list now."

The general revival in the automotive industry is reflected in the greater activities in the Detroit manufacturing plants. So far as can be learned, the builders, taken as a whole, have now passed 50 per cent of 1920 average production. Progress is probably most notable at the Ford plant, which is again on a six-day basis and where the output is variously estimated at from 3,000 to 3,500 cars a day, and where, according to an official, a 4,000-a-day output will be in progress within a few weeks.

M. L. Pulcher, vice-president and general manager of the Federal Motor Truck Company, has issued a statement in which he says that the Federal has resumed a full time working schedule and is producing at 56 per cent of normal capacity. Not only that, but more than 40 per cent of the complement of men em-

(*Continued on Page* 18)

Digitized by Google

Planers, Shapers and Slotters

Some Suggestions as to Their Installation and Work; Things to Be Remembered When One Is in the Market

By JOHN J. RALPH.

PLANERS, shapers and slotters are machines for producing flat surfaces with a single point reciprocating tool. In the planer the tool is held stationary and the work is moved in and out horizontally under it. In the shaper the work is held stationary and the tool is moved back and forward, usually horizontally. In the slotter the work is held stationary and the tool is moved up and down.

Roughly, the planer handles the outside of large work, where flat surfaces are to be generated; the shaper handles small work, and the slotter is especially useful in machining inside and end surfaces.

These reciprocating point cutters are essentially building rather than manufacturing machines—for the job that does not come through in large quantities or whose outline is so irregular that even though they come in quantities they cannot be finished on the miller or disc grinder with satisfaction.

With the development of jigs and fixtures there has been an extension of the field they are economical for, and today where there is metal to be removed from three sides of a piece, or where the outline is awkward or where the shape is elongated, with machining to be done only over part of the surface, the planer should be very carefully considered.

Fortunately these machines are made in a great variety of sizes, quality and design, so that it is possible to find just the machine which will fit the manufacturing conditions in your shop.

With all of them there has been a development, particularly marked during the last ten years, toward massiveness of design, direct motor drive, high power, fixtures and attachments to make them more versatile.

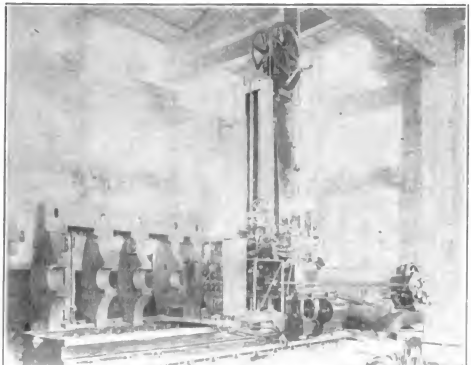
These three machines were developed by the English during the first third of the nineteenth century, so that they are now about a hundred years old. The planer was the first of these surface machining tools and the records do not show any trace of one until 1814. This was during the time that Watt was developing the steam engine and his work was badly held up because of poor or non-existing machine tools.

By 1825 the art of building planers had so far developed that Clement had completed "The Great Planer," which would take in a piece of work six feet wide, six feet high and twelve feet long. This machine was very accurate and was operated by hand power.

The shaper was invented by Nasmyth and was long known as Nasymth's Steam Arm. Six years only had elapsed, yet power drive and power feed for the shaper had been perfected. The slotter was developed before 1850, but records seem a little shy as to just when and by whom it was invented.

These first machines were extremely light, so that the cut taken was very small and the speed slow. Their accuracy, however, was better than might have been expected. It is interesting to note that the facilities in the line of attachments and movements were such that almost any kind of work could be done on them.

In 1912 there was a planer in one of the Lake shops which bore proudly cast in the cross brace the date 1837. Love of beauty and pride of product were greater then than now, for the machine was richly ornamented with roses and leaves and bore traces of gilt and many colored paints! It was actually in operation—in the shop of a company having eight different plants, and several hundred dollars had been spent the previous winter reconditioning it. This machine was the product of one of the New England machine tool manufacturers.



Morton's 84-inch traveling head planer machining a large marine engine bed casting in a Michigan shipbuilding company's plant.

The Modern Equipment

This discussion will be limited mainly to the planer because it is the most important machine of the three and the shaper and slotter have passed and are now passing through the same type of development. The shaper has probably led the way, the machine being smaller and the development costs being less.

Large planers have always been made, but not until recent years have such extreme sizes been built as to take twelve feet square between the housings and a cut fifty feet long. This is not the extreme limit, manufacturers being willing and able to give the purchaser a planer just as big as he may want to buy.

Comparing the modern planer with the old, the first impression is that of the increase in massiveness. The underpinning of the 1837 planer was somewhat similar to that of the modern sewing machine. The bed was light and the platen very thin. The housings, cross bar and cross brace were very light. The pressure on the machine's foundations carried down to the ground, deep internally braced frame, and with housings, cross bar and braces huge in size yet so designed that every ounce of metal contributes to the stiffness.

With this increase in massiveness there has gone a great increase in power. Where the old machines were operated by rather slow running belts which were not very large, today there are moderate sized planers with 25 H. P. motors directly connected and so arranged as to accelerate the cutting stroke after entrance of the tools, and cutting down the speed just before the reversal, and with a return platen speed of 200 feet a minute.

In the old days the tool barely crawled over the surface and left little more than a scratch. Today you may have five or more tools cutting at the same time on three sides of the piece. The cutting speeds may run to 100 feet a minute. The feed may be as high as 1¼ inch on cast iron. The depth of cut may vary from the finishing .010 inch to a full inch in depth. The accuracy possible with these high speeds and feeds is almost unbelievable—if the planer has been set up correctly and is itself accurate.

Choosing the Planer

In looking over the various lines of planers on the market one is particularly impressed with the variety of types and sizes to be had and the varying conditions they are designed for. There is first the standard planer with its two housings and cross bar. This may be had with from one to five toolheads and from sixteen inches to sixteen feet between housings and to take almost any length of bed.

You may buy extension housings which will stand away from the planer proper and do odd jobs, or there are machines in which one of the housings may be removed.

Where the greatest flexibility is desired there is the open side planer, which has but one upright and the cross bar is a cantilever supported from this upright.

Digitized by Google

Before going out into the market it is well to hunt up the answers to a few questions:

Just what material comes through to be planed? What is the size? Is it possible to send it through in groups so that several pieces of a kind can be planed at the same time?

What is the biggest piece that comes through? What is the smallest machine that will take it—in a standard planer—in a convertible open side planer—using an extension head—using an out-board tool post—in an open side planer?

Is the work such that only the highest grade machine can be used?

By the time you have asked yourself these questions and the others which will suggest themselves, it will be time to call in the salesmen of the different companies and see how price ranges for the different makes and what their particular selling arguments are.

The Planer in the Shop

You can put some machines in your shop and they will operate equally well, no matter how mounted. Not so the planer. Probably no other machine is quite so sensitive to the manner of mounting and the way it is handled. If properly set up and properly treated, there is probably no other which will keep in shape for the same length of time.

The setting up of a planer starts right with the foundation. The frame of none except the very smallest is sufficiently rigid to be independent of the foundation, and the alignment and accuracy of the entire machine is dependent upon it.

Taking, as an example, a medium size, such as a 48-inch x 48-inch x 12 feet what is required?

The exact size of the foundation will be given on the manufacturer's drawings. It will be of concrete somewhat wider than the bed and going well down into the earth, perhaps as much as six feet. It is well to have a lot of old railroad rail or other scrap metal, it will not hurt the foundation a bit to throw it into the concrete.

On this foundation there will be adjustable supports, set perhaps every four feet. These lie in pockets in the concrete, but are accessible, so that adjustments can be made without difficulty.

The bed of the planer is then set and so adjusted that both ways are absolutely level, and the ends a very little lower than the middle. This is because there is very much more weight at that point than at the ends and this set-up will bring the bed level when the housings and crossbar are attached.

The uprights must be perpendicular to the bed and parallel to each other. The crossbar must be at right angles to the uprights and parallel to the top of the platen. The sliding fits must be rigid, yet free enough so that there will be no binding.

On the accuracy of the planer depends the amount of fitting that must be done on every machine whose parts are planed on it. To a large extent its inherent quality depends on these adjustments of the planer. Any inaccuracy here must be corrected later by additional machining or by hand labor.

Even though erected in the very finest manner, the planer cannot be neglected and its alignment must be kept checked. Although rather unusual, it pays to have a standard system of testing. This pays two ways, in the increased life and lessened depreciation of the planer and a very material decrease in the cost of planing in the shop.

Some Possible Accidents

It is worth while considering some of the accidents which may occur to this machine.

There is first of all the foundation. Even the heaviest may settle somewhat. The alignment needs frequent checking, both for level and for perpendicularity of parts.

The elevating screws of the cross rail may wear unevenly so that one side or the other of the rail sags and it is not always parallel to the platen surface.

The guides are lubricated by rollers which dip into oil pockets and transfer the oil to them. These have been known to become so blocked with chips that they refused to roll. The guides becoming dry and being under heavy load cut, may necessitate re-scraping.

A chip may raise the platen, become imbedded in it and merrily score the Vee. Guides have been ruined by neglecting to pour oil into the pockets.

Because of the first cost, planer equipment is seldom bought in excess of heavy demands and when anything happens it is usually during such a peak. With modern high production machines it is mighty easy to get chips where they are dangerous and they should be kept well cleared away or they may cause jamming.

Pulley speeds are high and bearings must be watched carefully.

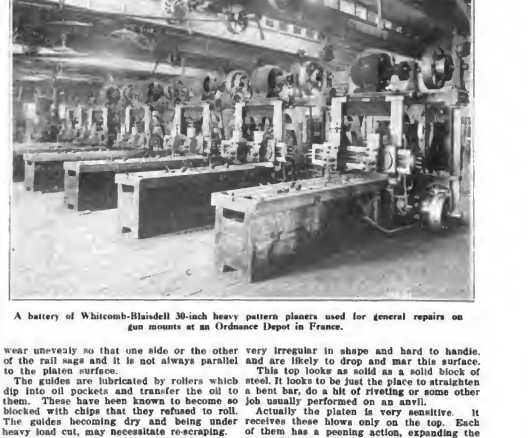
The platen deserves the best of care. It is originally very carefully surfaced and true, in the best of machines, within .001-inch all over. This highly finished surface has holes and slots for fastening the work down. There is placed on this surface pieces weighing in some cases tons. Certain of these pieces are very irregular in shape and hard to handle, and are likely to drop and mar this surface.

This top looks as solid as a solid block of steel. It looks to be just the place to straighten a bent bar, do a bit of riveting or some other job usually performed on an anvil.

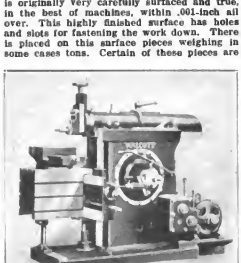
Actually the platen is very sensitive. It receives these blows only on the top. Each of them has a peening action, expanding the top surface and tending to draw the platen up in the center. Driving in the stop pins assists this action and even in a pretty long platen it will in time cause it practically to support itself on the ends.

In correcting this condition it is necessary not merely to take a cut over the top of the platen but to refit the guides to make sure that there is full bearing.

Checking through to find the cause of the assembling trouble in two large shops this was found to be the condition of the planers in each. The cost of overhauling one of them was less than $300 and this amount was saved in the next two weeks in the payroll.



A battery of Whitcomb-Blaisdell 30-inch heavy pattern planers used for general repairs on gun mounts at an Ordnance Depot in France.



A 20-inch Walcott motor-driven shaper.

Getting the Most Out of a Planer

The planer is an expensive machine. In the first place it occupies a lot of space and every square foot in a factory costs money and must earn money. In the second place it takes a lot of power. The planer mechanic should be a very good man, for this is really an individual machine, where the operator and his ability make a lot of difference in the production.

At the best the planer has a very large percentage of non-cutting time. While running it never cuts more than two-thirds of the time. A large part of the time it is not running.

What can be done to bring up this percentage of cutting time? That means a very careful consideration of (A) cutting time, and (B) setting up time.

It is usually considered that a machine tool is to take off metal as its prime aim in life. Not so! They are there simply and solely to give the designed surface, exact to the drawing, having regard to both size and finish. Removing metal is merely a necessary evil.

If there is more metal than is required, it means another cut, with attendant loss of machining efficiency. If the metal is scant or incorrectly added so that the planer man has

Digitized by Google

to go into higher mathematics to get the piece called for on his print out of the casting, this too costs money.

It may be that increasing the size or the speed of the countershaft pulleys will help a lot. It may be that feeds are not as deep and wide as they might be, particularly in the roughing cut so that either another roughing cut or a very slow finishing cut is necessary.

Sometimes dogs get worn and for safety's sake they are set for too great an overrun.

The equipment that goes with the planer has a lot to do with the amount of metal which can be taken off at a time. If there are sufficient dogs, jacks and braces so that the piece can be made practically a part of the planer, cutting speeds and feeds can be made much greater. Parallels should be actually parallel and there should be enough of them.

Setting-up time reduction is equally important whether the planer is old or new. Except on highly jigged work it is seldom that a planer is actually running more than 50 per cent of the time. An old mechanic with brains may easily earn far more money than a new high power planer run in an ordinary manner.

The set-up time naturally divides into three parts: laying off the piece for machining, actually putting the piece on the planer, and fastening it in place.

Where there is a battery of planers, this problem is often solved by installing a large surface plate in the center of the shop and laying off all pieces on this surface plate before it is put on the platen.

On large planers, where there was room for both pieces, the writer has seen cutting being done on one while the other one was being laid off, the planer platen serving as a surface plate, the planer man riding on the planer.

In other cases the planer man is given a helper, sometimes an apprentice, who watches the piece being machined while he lays off and gets the next piece ready for machining.

Getting the next piece to the planer before the last has been finished is good practice. One thousandth of an inch in a precision lathe on a small piece is easy but .001-inch on a casting fifteen feet long, with a surface possibly only two inches thick except where the braces and with from ¼-inch to 1 inch variation in the amount to be removed is a far different matter.

To do this requires an intimate knowledge of metals and the way they act. In an intricate piece this is complicated by the necessity of careful measurement to find just where the metal must be taken off to give the piece the drawing calls for. The more thought put on the problem, the quicker the job and the more satisfactory the result. If this thought can be given while the purely mechanical work of watching the planing of another piece is going on, the total efficiency of the planer is increased.

In some shops there is lots of room for improvement in the arrangements for taking pieces off and putting them on the planer. Where the pieces are very large, the traveling crane is of course absolutely necessary. With the present universal use of electricity and the many forms, both cheap and good, of electric hoisting machinery, the operating efficiency of many a planer could be greatly increased at small cost.

Here an intelligent assistant is of great service, as is also the case in the next step, in the tying down of the piece to be machined. Even if he spends part of his time wheeling away chips, intelligence pays here. There is many a time when he can save the shop considerably, running the planer while the real mechanic is getting ready for the next piece.

Jigs and Fixtures

In the automotive industry jigs and fixtures have had very much attention. It is often not realized that where the quantities are small, just how economical jigs and fixtures are. Of course the smaller the quantity, the less elaborate they may be.

They cut the setting-up time materially, and, being designed to support the piece properly, there is possible the highest machining speed. The simplicity and low cost of really practical jigs are often not realized until a close study is made of the subject.

They have another advantage, in that with their use interchangeable manufacture is promoted. Unless you have some absolute standard to make your piece to, it is very difficult to plane several so that they can be used interchangeably. This means that there must be a lot of fitting, which is very unsatisfactory, for in this country the race of fitters is nearly extinct.

The following list of manufacturers is appended for the convenience of manufacturers who may be in the market for planers, shapers or slotters:

Standard Planers

American Tool Works, Cincinnati; Betts Machine Co., Rochester, N. Y.; Cincinnati Planer Co., Cincinnati; Cleveland Planer Co., 3145 Superior Ave., Cleveland; Cleveland Punch & Shear Works, Cleveland; G. A. Gray Co., Cincinnati; Hamilton Machine Tool Co., Hamilton, Ohio; Hilles & Jones Co., Wilmington, Del.; Liberty Machine Tool Co., Hamilton, Ohio; Morton Mfg. Co., Muskegon, Mich.; Niles-Bement-Pond Co., 111 Broadway, New York, N. Y.; Ohio Machine Tool Co., Kenton, Ohio; F. R. Patch Mfg. Co., Rutland, Vt.; Powell Machine Co., Worcester, Mass.; Rockford Machine Tool Co., Rockford, Ill.; Wm. Sellers & Co., Philadelphia; Simmons Machine Co., Albany, N. Y.; Whitcomb-Blaisdell Machine Tool Co., Worcester, Mass.; W. A. Whitney Machine Co., Rochester, N. Y.; Woodward & Powell Planer Co., Worcester, Mass.

Open Side Planers

Automatic Machine Co., Bridgeport, Conn.; Cleveland Machine Tool Co., Cleveland.

Crank Planers

Cincinnati Shaper Co., Cincinnati.

Open Side Planers and Shapers

Lynd-Farquhar Co., Boston.

Shapers

American Tool Works, Cincinnati; Cincinnati Shaper Co., Cincinnati; Columbia Machine Tool Co., Hanover, Pa.; Davis Machine Tool Co., Inc., Rochester, N. Y.; Gould & Eberhardt, Irvington, N. J.; Hendey Machine Co., Torrington, Conn.; Hollingsworth Machine Tool Co., Covington, Ky.; Jackson Shaper Co., Jackson, Mich.; R. A. Kelly Co., Keeha, Mich.; Milwaukee Shaper & Transmission Appliance Co., Milwaukee, Wis.; Modern Tool & Machine Works, Newark, N. J.; Morton Mfg. Co., Muskegon, Mich.; Niles-Bement-Pond Co., 111 Broadway, New York; Ohio Machine Tool Co., Kenton, Ohio; Osborn & Seaton Machine Co., Columbus, Ohio; Potter & Johnson Machine Co., Pawtucket, R. I.; Pratt & Whitney Co., 111 Broadway, New York; Queen City Machine Tool Works, Cincinnati; Rhodes Mfg. Co., Hartford, Conn.; Sellew Machine Tool Co., Pawtucket, R. I.; Smith & Mills Co., Cincinnati; Springfield Machine Tool Co., Springfield, Ohio; John Stepan Co., Cincinnati; Stockbridge Machine Co., Worcester, Mass.; Streine Tool & Mfg. Co., New Bremen, Ohio; Whips Machine Tool Co., Sidney, Ohio.

Traveling Head Shapers

Boynton & Plummer, Worcester Depot, Vt.; Cincinnati Shaper Co., Cincinnati; Morton Mfg. Co., Muskegon, Mich.

Vertical Shapers

Cochrane Bly Co., Rochester, N. Y.; Pratt & Whitney Co., 111 Broadway, New York; Rhodes Mfg. Co., Hartford, Conn.

Slotters

Baker Bros. Machine Co., Toledo; Betts Machine Co., Rochester, N. Y.; T. C. Dill Machine Co., Philadelphia; Niles-Bement-Pond Co., 111 Broadway, New York; Wm. Sellers & Co., Philadelphia.

HAWKINS WITH GMC

Former Ford Sales Head Will Act in Advisory Capacity on Merchandising



NORVAL A. HAWKINS

Norval A. Hawkins, the man who is credited with having had much to do with the remarkable sales success of the Ford Motor Company, of which for several years he was general sales manager, joined the General Motors Corporation oh April 1. Mr. Hawkins, whose offices will be in Detroit, will act in an advisory capacity as regards sales, advertising and service.

TO MAKE 3,000 HANDLES DAILY

Announcement is made by Joseph Stiglich, owner and manager of the new handle manufacturing concern in Laurium, that operations have begun and that it is expected an average of 3,000 handles a day will be turned out.

MUNICIPAL BONDED INDEBTEDNESS

The following comparative statement of bonded indebtedness of nine Michigan cities has been compiled by Harry Freeman, city menager, and Douglas Turnbull, city auditor of Kalamazoo.

City	Total Bonded Debt	Portion of total bonded debt that represents utility bonds
Flint	$5,715,850.00	$1,654,050.00
Saginaw	2,157,050.00	919,000.00
Pontiac	2,097,500.00	1,083,500.00
Lansing	2,721,000.00	1,095,000.00
Muskegon	1,798,250.00	385,000.00
Jackson	1,251,000.00	110,000.00
Bay City	1,547,061.00	505,362.00
Battle Creek	934,000.00	NONE
Kalamazoo	881,875.00	184,360.00

MASONS DOWN TO $1.12 AN HOUR

Detroit mason contractors and their employes have agreed on a wage scale of $1.12½ cents an hour, effective May 1. The old scale was $1.25 an hour. Some time ago the contractors announced a cut of 25 cents, effective March 3. This the men declined to accept, and the compromise is the result.

DOREMUS ON BANK BOARD

Frank E. Doremus, who retired this year as congressman from the First Michigan district, which embraces the east side of Detroit, has been elected a member of the board of directors of the American State Bank, Detroit.

BACHE ARGUES FOR SALES TAX

Jules S. Bache, of J. S. Bache & Company, New York bankers, addressed the Retail Merchants' Bureau of the Detroit Board of Commerce, last week, urging the enactment of a turnover tax. There will be no real prosperity, he said, until the present inequitable system of federal taxation is replaced by a sales tax. He asked his hearers to write their congressmen and senators in support of the turnover tax. Other speakers were Superintendent Johnson, of the state department of public instruction, and H. M. Nimmo, editor of Detroit Saturday Night.

Digitized by Google

Pity The Poor Meter Man

He Has His Woes, a Good Share of Which, Contrary To the Popular Belief, Are Other Than Electrical

By GEORGE OPP
Safety Engineer, Detroit Edison Company

WE HAVE ADVANCED so far in the study of industrial hazards and modern safety measures that the major dangers incident to the day's work are well catalogued and well safeguarded. Therefore we can now turn to what appear to some people to be little things—the apparently trivial, but nevertheless quite important contributions to the casualty lists.

In the consideration of the electrical phase of this subject, I shall consider:

First, the hazards that are potentially and actually causing the accidents in the varying degrees.

Second, the manner and method of avoiding



FIGURE 1

the occurrence, and surely by all means, the recurrence of all such accidents.

I shall attempt to get a close glimpse of the regular routine of, and to enumerate briefly the various accidents that may befall an electric meter reader, and then also take a glimpse into the lines of their closely associated workers—the meter testers, meter repairmen and meter inspectors, and, finally, to complete the subject, we shall take up the other departments of an electric utility that sometimes work on equipment off the company premises.

Within our own organization there are 31 meter readers, walking upwards of 500 miles in the aggregate daily, climbing up on elevations and hurrrying down-stairs to read on the average of from 800 to 1,000 meters a day. When we consider that each step taken is potential of casualty, whether on icy pavements or in dark and littered basements; whether up or down-stairs that are in all conditions of upkeep and lack of upkeep—sometimes so full of eatables that the ice man would growlingly refuse to go another step; when we think of these men (and due to war-imposed conditions, women as well, because we have had women meter readers in our service) having promptly to adjust their eyes from the glaring sunlight on the shiny pavements and sidewalks, or the glare of winter snows to the darkness of back stairways pierced by the feeble attempts of the "flasher" (i. e., pocket flashlight), and just as readily to meet the physical reaction of extremities of temperature in going in and out of buildings in rapid succession, especially in the winter season; when we stop to consider all of these various possibilities in passing, is it any wonder that there are some accidents occurring these days to the "knights of the tin books and lead pencils"?

We wonder, especially when we realize that the existence and removal of the hazards encountered are beyond the scope of the meter readers themselves, and in most cases beyond power of action by the company, that the number of accidents is not multiplied several times over. It is often a game of politeness to eradicate those points of hazard to the meter readers, and the thing has to be handled, I tell you, in mighty diplomatic fashion so as not to incur, especially at a time like this, when we are somewhat up against it on the proposition of furnishing all the service demanded, to win the co-operation necessary in repairing stairways or cleaning up debris in basements, providing clear passageways to meters, furnishing guards on offsets, removing hazards, etc.

Some of the Hazards

A list of the definite conditions that may be set down as most hazardous to life, health and limb, and most frequently met in the regular routine of the meter readers, would show such items as:

Steps missing in the stairways;
Loose treads on stairs;
Obstacles on stairs, such as foodstuffs, cans, mops, baskets of clothespins being dumped into or stepped into by the men coming in from the outdoor light and finding unable to discern the objects in time;
Poorly constructed platforms;
Unguarded pits and offsets;
Unsanitary and frequently slippery floors in basements left perhaps by some folks who very nicely scatter a lot of water over the high spots to wash all of the debris into the low spots and let it go at that, generally happening shortly before the meter man performs his visit;
Dark and unkempt storage in basements, including rubbish, broken glass, rusty nails, unsparing bits of wire and the like;
Oftimes the meters are located, against all requests to the contrary and contra-wise to all reason and logic, apparently, in such almost inaccessible places as over icebergs, in close contact with the ceiling over stoves and ovens that are invariably hot when the reader appears to give the dinin the "once over"; and sometimes in cubby holes that require the agility of a house cat, the slenderness of a Venus and the native training of a mouse to ferret into and extract oneself from.

It is funny how the attempt is made, in many cases, to "hide" the little pulsating box.

These unfavorable conditions of meter location, of course, lead in turn to climbing and straining that oftimes involve physical peril by reason of the lack of a suitable ladder or safe substitute; and certainly we cannot expect our meter readers always to carry their own ladders!

Surely these conditions compel the undesired, yet sometimes necessary, use of such expedients as boxes and tables and chairs or stoves to build up a mount to the zone of vision of the dials of the pulsating meter which the contractor or owner seems to think of such minor concern when he allots the space for its presence, and which sometimes—happily infrequently, however—he later considers so seriously when he orders the "miscreant racer" out of his premises by reason of the "ridiculously high bill this time."

We attempt to discourage that thoughtless practice of placing the meter "just anywhere," but we find that it is being done in some cases.



FIGURE 2

There is where we need, once in a while, to exercise a little bit of diplomacy in getting the change which ofttimes can be made, and generally is made, quite readily, when called to the attention of the proper persons.

Sometimes, of course, due to foresight on the part of architect, builder, owner, or due to the provisions of building code and ordinances, in some localities the meters are quite properly located, but the customer unthinkingly and quite unintentionally blocks the passageway to the meters by articles of storage, ranging from small boxes and pails in the basement or discarded hoopskirts in the attic at home, to automobiles in the garage, or huge store boxes that resemble elephants in repose, down at the business places. These conditions lead to possibilities of accidents.

Man's most faithful animal friend, the dog, presents for the apparent stranger-reader a considerable bit of worry, torment and even menace. Some dogs show so much faithfulness—

Digitized by Google

faithfulness to devitry—as they come rushing upon the unsuspecting meter man from an obscure hiding place and attack an unguarded flank. Yes, dog bites contribute quite a goodly share to our meter men's accidents.

Then, too, there is the moral hazard that is often encountered by men who have the occasion and the privilege of entering all manner of homes, hovels, stores and hostelries, but very fortunately, and proudly too, we can say that for some time our company has not received a complaint of even a pin having been stolen; nor has there been experienced any of the other salacious circumstances you may know are occasionally encountered. Sometimes, too, a meter reader has been the unfortunate passerby or bystander at an altercation, arriving at the scene of a domestic quarrel probably just in time to receive a shoe, a broom or a flatiron. We have had instances of that kind.

Meter Installers' Troubles

We may next consider the accident experiences of the members of the meter installation department, who logically precede the meter readers in the rotation of work, but who, as a class, slide considerably behind them in the results of hazards encountered.

In addition to nearly all of the aforementioned risks that fall to the lot of the readers, the installers have a few that are peculiar to themselves. Their work takes them into partially completed structures where overhead clearances are reduced by carpenters' scaffold and "horses," or where as yet mayhap no housewife's broom or carpet sweeper has cleaned up the debris of construction work. In this situation frequently are found nail-punctures, strained knees, scraped shins, bruised bodies and bumped heads. Of course we infer that we have such competent men engaged in this class of work—that such things as smashed fingers, pinched and battered thumbs and badly scratched hands are almost unknown and surely very infrequent happenings among our meter installers. Nearly all the conditions of hazard which they encounter are, in the instance of the meter readers, quite generally beyond their own or even the company's legal powers to correct physically. The meter readers have only one rule of safety—one try to simplify comprehensively these days when the "world is growing tired of codes and rules" —and that rule reads: "Use the utmost care in moving around on other people's property and report at once any unsafe condition in getting to a meter."

Closely associated with the meter-readers and installers are the meter testers. They may be grouped in two classes:

First, as shop and laboratory men who aside from the shop hazards of pinched and scratched fingers and hands—I pass by the electrical hazard because in the case of meter testers in our shops that sonnee of harm has been obviated by reason of the impact-meter test panels, carefully labelled, well insulated cables and contact clips—flush receptacles eliminating exposed contact surfaces and loose wires—has been reduced, I say, to such an extent that, to my knowledge, a meter tester has not met with an electrical injury for the last two years.

Second, as outside testers. These men perfodically test sub-stations, meters on 500 volt direct current railway service, and meters measuring service supplied to primary (4,600 volts) customers. Electrical hazards are ever present but are largely under the control of the testers. Special cables with convenient and positive connectors are furnished. Tools are carefully selected and inspected to insure all possibilities of harm due to mechanical defects. Some of the tools are given additional insulating qualities. Insulated stools, rubber gloves, goggles, etc., all play parts in reducing the possibility of accident to the very minimum.

In going off company premises the meter inspector sometimes meets such other peculiar risks as faulty grounds of meter cases, electrically-charged metal doors or doorknobs and keyholes of primary service houses or industrial shb-stations.

Meter men are instructed to report immediate] any unsafe condition. Their department's safety rule Number 1 emphasizes this by saying: "If the apparatus to be worked on

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912, of

Michigan Manufacturer and Financial Record

Published weekly at Detroit, Michigan, for April 1, 1921.
State of Michigan,
County of Wayne—ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared Ira W. Welbon, who, having been duly sworn according to law, deposes and says that he is the manager of the Michigan Manufacturer and Financial Record and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor and business manager are:

Publisher—Manufacturer Publishing Company, 611 Free Press Building, Detroit, Mich.

Editor—Ira W. Russell, 611 Free Press Building, Detroit, Mich.

Managing Editor—Harold High, 611 Free Press Building, Detroit, Mich.

Business Manager—Ira W. Welbon, 611 Free Press Building, Detroit, Mich.

2. That the owner is: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding one per cent or more of the total amount of stock): Manufacturer Publishing Company.

John A. Russell, Ira W. Welbon, Edward R. Grace, Harold High, all of 611 Free Press Building, Detroit, Mich.; Mrs. Earl Woodburn, 200 Harmon Avenue, Detroit, Mich.; W. W. Mooney Estate, Arts Building, Detroit, Mich.; Alfred Fischer, 611 Free Press Building, Detroit, Mich.; F. Arnold, Geddes Road, R. 11, Ann Arbor, Detroit.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are (if there are none, so state): None.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only)

(Signed) IRA W. WELBON,
Business Manager.

Sworn to and subscribed before me this 23rd day of March, 1921.

(Seal) CHARLES COHN
My commission expires April 14, 1922.

is in a dangerous condition, or if it is located in a dangerous place, do not work on it, but make a complete report to your foreman."

The testers are fully instructed in the right way of testing all installations and the fallacies and serious results of the wrong way are pointed out. Figure 1, for instance, shows the correct way of testing an outdoor direct current meter installation. Figure 2 shows how an extremely hazardous situation can be created from what is ordinarily a harmless installation. These two pictures tell a story that is found well worth repetition to meter testers and applies in part to meter readers and installers as well.

Other Dangerous Situations

I want to touch briefly, if I may, entries here to recite the circumstances of a condition which had strong accident possibilities—one apt to be encountered at any time.

Recently a call of our inspectors was sent to a primary meter installation, at the State Fair grounds, to replace a number plate on the meter connecting box. As the customer was through with this service, the high tension disconnect switches had been opened. While at work on the meter connection box, the inspector discovered evidence of current at the terminal board. Further investigation it was found that this installation was being energized due to a back feed from another meter installation on the ground. This created an extremely dangerous condition about the primary house, reversing the current through 250 K. V. A. transformers and stepping up the potential to 4,600 volts. This was a startling condition on some of the lines about the fair grounds, but was not known to any of the electricians who were about to take down some temporary wiring from these lines. The inspector immediately disconnected the circuit which created this condition and advised the construction foreman of his finding. The condition was quickly remedied. The man who called this condition to our attention was given a money reward as a token of appreciation. I might further state that in our practice every safety suggestion received is promptly acknowledged and acted upon, and where adopted, a check is given to the man who suggested same—a thing that may not prove worthless in a short while, but something that is of some intrinsic value to the man.

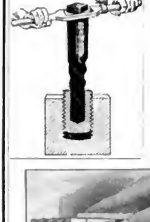
We recently had one of our boys take a blacksmith's course in correspondence. Sometimes when he touched a key to the lock of a transformer house at an industrial plant. It appears that the wiring in the lighting conduit was sometimes in the conduit to the door. The inspector was obliged to stand in a puddle of water while opening the door and when he touched the lock he received a rather severe shock from the voltage of 110 volts. I might be well at this point to say that 110 volt circuits demand respect.

Another source of danger in the industrial power end lies in the growing complexity of dual or multiple source of potential, use of dynamotor sets, gas engine set-ups and steam turbines, and the past, present and future potential power plants. All contribute to the possibility of back-feed from other connections to lines which may be presumed to be "dead" for tests and repairs. There is, of course, the complication of some of the industries, by reason of the contingency that they feel they cannot always depend upon the central power stations, as they do to a large part, and thus go into their own industrial power plants and generating equipment feeding to common buses, permitting chance over for power requirement. In forgetting property to handle their switches or on account of inadequacy of control, permitting potential, at unsuspected places and intervals, there is quite a serious hazard to our meter-readers and testers, opening up a prolific source of accidents if action were not taken along definite lines of switching control in charge of the company's system operator and of providing adequate locking and safeguarding of disconnect switches and buses.

In Other Groups

Then there is the utilization department, another group of employes who operate on "foreign soil" as far as encountering conditions which may be otherwise than we would like

Digitized by Google



"EZY-OUT" Screw Extractor

"The Tool to Use on Broken Screws"

When a screw breaks off—any sort of a screw—deep down in a hole, don't bother with files, punches, cold chisels and similar make-shift tools. Drill a hole in the broken screw, insert "EZY-OUT" slap on a tap wrench and twist—and "EZY-OUT" backs the crew out *on its own threads* as easily as if it never had been broken at all. No re-tapping required, because there is no danger to threads of original hole. "EZY-OUT" is furnished in three handy sets, each made to cover a certain field. "EZY-OUT" saves time and profanity. It's as easy as winding your watch. We have them in stock.



They cost you little.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

them to be "at home." I speak of the inspection and service division, which has to contend with such conditions as electric hazards in changing fuses; stair hazards; street hazards—driving automobiles, temptation to speed for "service first" when it is thought that "safety first" is not appreciated by the irate and momentarily anxiously waiting customer who may have tried to patch up his old lamp cord or lamp socket and after an intense flash finds himself in darkness that gives him thoughts only of Hades when he finally stumbles to the telephone to summon the "minute men light restorers."

"Our sales engineers are deserving of a comment and in their behalf I might say that they oftimes get into rather unpleasant places in the performance of their scouting duty for the advance of the company. I might refer here to such a predicament as standing under a leaking steam pipe in a run-down privately-owned plant that the owner is trying to show to the sales engineer with perfect equanimity and saying, "You see, I don't need your service as bad as you might surmise. Oh, excuse me, sir, you better step out this way. Oh, look out for that pump there; it isn't guarded. Look out for that hot pipe; it isn't insulated. Look out, there goes a part of the rim of that roll-darned flywheel!" Yes, these are cited from actual happenings which sales engineers of central stations have had to face in their quest of selling "service."

Of course we might refer also to the experiences of linemen, both overhead and underground, who handle equipment and lines outside of the company's premises, strictly speaking; of garage and truckmen who are handling equipment outside of the bounds of company's property, furnishing repairs and service to vehicles totaling more than 600 automobiles and trucks; and of inspection and test operations performed by the purchasing department and construction engineering bureau on equipment before acceptance and arrival on company premises, or of the many peculiar plights which our customers' accounts department and claims division of legal department get into regarding such bits of illegally-used equipment as jumpers and meter offsetting devices—all off company's premises.

It's a Personal Matter

You will note an almost complete sparsity of mention of electrical hazard in these various phases of work—not because it is not there, for just last week I read of the case of a man who was shocked to death in the simple operation of handling a defective extension cord on a wet basement floor—but because, I believe, our men are constantly warned to be on the alert and their familiarity with the "silent juice" has bred respect and not the oft-mentioned contempt that is cultivated with familiarity.

In the departments which I have here discussed from the phase of accident hazards, I believe we have struck the real keynote of the success of safety work anywhere—we make the proposition of safety a personal obligation of the man himself. We stand ready, yes eager, to co-operate with him in any way that he may designate. The special educational training of the meter men, especially, is considered to be of importance. The trifling and coaching bestowed upon the man before he is assigned to a place of responsibility inculcates in him the alertness and regard for accident prevention that grows to be a matter of personal pride.

We try to get our employes to see what the practice of safety means for them—not only for the company. We try to make safety a personal matter in their own individual cases, getting them to respond in the altruistic spirit of suggesting, and working for the elimination of the countless hazards that keep creeping into the company of the size, rapid growth and scattered nature of our own.

RESEARCH CONFERENCE APRIL 6

Prof. A. E. White, of the department of engineering research of the University of Michigan, addressed the Detroit chapter of the Society of Automotive Engineers, Friday evening, March 25, outlining in a general way the plans of the University to co-operate with the manufacturers of the state in research. Mention was made of an item of $1,500,000 included in the institution's budget to defray the expense. A committee of 17 manufacturers will meet at the University, April 6 and 7, to draft the research program.

AHMEEK'S 1920 DEFICIT

The Ahmeek Mining Company reports a deficit of $741,919 for the year 1920, as against a deficit of $709,535 in 1919.

BUILDERS' SHOW A RECORD SUCCESS

The Detroit Builders' Show closed Sunday evening with a reported total attendance of 80,000 during the week. Exhibitors were well satisfied with the results so far as attracting attention to their wares and prospective buyers. Financially the show is said to have been a complete success, which was not the case last year. Officials believe now that a larger exhibition should be planned for next year, for which the Larned street Armory will not be large enough. That there is a strong building desire in Detroit was evident from the large number of calls at the information bureau by persons seeking information regarding the best methods of financing the construction of a home. This bureau and the extensive nature of the exhibits made this year's show more informative and interesting than any previous effort of the building industry.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

State Cartage Interests Organize

Lansing Meeting to Protest Tax Legislation Results in Formation of a Michigan Ass'n

MICHIGAN'S cartage industry is to be given a statewide organization. Preparations now under way will be completed when the commercial haulers meet in Grand Rapids, Wednesday, April 6.

At a meeting in Lansing March 23 to protest against some legislation, previously reported in these columns, the trucking men who met for that purpose discussed and unanimously favored a state association, composed exclusively of cartage operators. E. N. Radcliffe, Grand Rapids, was named temporary chairman and F. L. Hiser, secretary of the Detroit Transportation Association, temporary secretary, to send out the call for the Grand Rapids meeting and to prepare a constitution and by-laws.

It developed at the meeting that there were many avenues of activity for a strong state association. The commercial hauling industry in Michigan is new since the war and the conditions under which it has been continued are most unfavorable for successful development. The state body will be called upon to do much educational work among cartage men, in the direction of good operation, cost keeping, co-operation in highway transport with local officials, development of routes, terminals, legislative action and clearing technical information.

According to latest available records there are approximately 2,500 truck and team operators in the state. They work under a wide range of conditions. In the Upper Peninsula the highways are passable only about eight months in the year, owing to the long winters. This creates one set of problems. Then there will be development of routes in remote sections where rail and interurban transportation is not far along.

One of the most important activities of the proposed state association is to promote the handling of perishable goods by truck, a service still in its infancy. It will be necessary to co-operate with farm associations and county agents in order to meet local conditions. The idea would be to supply the transportation equipment which is inadequate every autumn.

Motor truck operators' meetings also pay much attention to truck sales methods and policies and it is likely that this will take a place in the program of the state body, with the idea of having truck sales at the highest possible level for the protection of buyer and seller.

Dump truck operation probably will be covered, in the light of informal discussion held at the Lansing meeting, and it is also probable that bus operators will be permitted membership.

The members of the state association will be invited to attend the annual convention of the National Team & Motor Truck Owners' Association, to be held in Detroit in June, with the Detroit Transportation Association as host.

The following individuals or representatives of companies registered at the Lansing meeting and supported the movement for a state body:

Detroit Transportation Association, representing 500 operators of motor trucks; L. J. Flanara, Marquette; G. D. Merrick, Fenton; F. W. Richmond, Lakeview; Ira Wilson, Detroit; Lee H. Bierce, Grand Rapids Association of Commerce; E. C. Dunbar, Detroit; W. G Moon and Charles Foster, Cadillac; John W. Frantz, Sonth Haven; Booth Bros. Transfer & Storage, Sault Ste. Marie; Hastings Truck Company, National Storage Company and Kalamazoo Storage & Transfer Company, Kalamazoo; Brown Garden Company, Lansing; City Dray Company, Independent Dray Company, Kalamazoo; Owosso Truck Company, Owosso; Alden & Aiden and Green & Company, Benton Harbor; M. Burkey, St. Joseph; S. A. Elsifor, O. E. Godfrey, D. J. Jeanette, William Fraser, C. B. Rhodes, W. B. Waterman, F. & L. Cartage, F. H. Horton, F. E. Dingman, F. G. Ash, Weinberg & Kratz and Michigan Furniture Company, Ann Arbor; Associated Truck Lines, Grand Rapids; Charles P. O'Hara, St. Joseph; Frank W. Peterson, Rockford; E. N. Radcliffe, A. D. Groot Storage Company and Osemund Iron, Grand Rapids; International Storage Company, Jackson; F. N. Rounsville, Lansing; G. Shierp, Republic Motor Truck Company, Alma; G. F. Downing, Lansing; F. C. Schneider, L. H. Tanner, Tanner Cartage Company, C. & H. Neilson, L. J. Gardner and Fred J. Baier, Detroit.

REPLACING AUTOMOTIVE GLASS

A new automotive convenience has begun operations in Detroit, known as the Auto-Glass & Manufacturing Company, at 48 Watson street, specializing in replacing broken glass in windshields, door or body. W. H. Flooding, formerly superintendent of the Van-Guard Manufacturing Company, is general manager. The very best of equipment has been installed and a large stock of glass is kept on hand.

FUNDS NEEDED FOR CHINESE RELIEF

The Michigan Manufacturers' Association, through its general manager, John L. Lovett, has addressed a communication to its membership asking them to co-operate in every way possible with the Michigan Committee for China Famine Fund, which is endeavoring to raise money to help alleviate the suffering of 15,000,000 people starving in China. Edwin Denby, Secretary of the Navy, is honorary chairman of the Michigan committee; Charles H. Campbell, Detroit, is chairman; Dr. M. L. Burton, president of the University of Michigan, and Prof Henry C. Adams, of the University, vice-chairmen, and Allen B. Crow, of the Detroit Y. M. C. A., secretary. Representatives of the committee have been appointed for each county in the state. The need is urgent and the committee therefore hopes that the manufacturers will respond. Woodrow Wilson in the closing days of his administration issued a proclamation urging support of the work of the national committee, of which Thomas W. Lamont, J. P. Morgan Company, is chairman, and President Harding, as one of his first official acts, concurred in Mr. Wilson's appeal. Gov. Groesbeck, of Michigan, likewise has made an appeal for funds. Communications should be addressed to Mr. Crow, at the Detroit Y. M. C. A.

AUTO BODY CAPITAL INCREASE

Stockholders of the Auto Body Company at a meeting last week adopted a resolution authorizing an increase in common stock of $600,000, to be sold at not less than par. This increase makes the total authorized capitalization of the company, $2,300,000 common, with $600,000 preferred. The company has retained $50,000 of the preferred in the treasury with a like amount of common to offset the preferred at conversion period. The company has $2,000,000 of business on the books, but this has not all been released. Large contracts are released for April, however, which assures employment of a large force.

REPLACING AUTOMOTIVE GLASS

A new automotive convenience has begun operations in Detroit, known as the Auto-Glass & Manufacturing Company, at 48 Watson street, specializing in replacing broken glass in windshields, door or body. W. H. Flooding, formerly superintendent of the Van-Guard Manufacturing Company, is general manager. The very best of equipment has been installed and a large stock of glass is kept on hand.

Digitized by Google

Grist of the Week In the Legislature

[By Staff Correspondent]

LANSING, March 28.—Of considerable importance to industry and labor of the state was the passage by the House last week of Governor Groesbeck's measure to create a department of labor and industry. This department will combine into one department the present state industrial accident board, labor department, commissioner of labor and the industrial relations commission. The commission would comprise three members to be appointed by the governor with a salary of $4,000 per annum.

The battle on the Osborn bill giving the public utilities commission full control of utilities opened at a public hearing of the railroad committee of the upper house. Those favoring the plan emphasized the necessity of removing utilities from politics and giving a body of state experts the power to fix rates. Municipal authorities opposed the loss of local control.

Permission for the state to issue $10 000,000 of bonds annually for highway construction instead of the present limit of $5,000,000, and to increase the interest from 5 to 5½ per cent is the substance of the Evans highway bill considered by the House.

Rep. George Lord's bill which recodifies the laws governing corporations in Michigan was passed by the House and sent to the Senate. Two changes remove the present $50,000,000 limit in capital stock and permit corporation to organize on a non-par basis.

The income tax amendment to the constitution was defeated in the House, failing by three votes, the final vote being 64 to 30 in favor, with six members absent, a two-thirds vote being necessary. By resolution the amendment was laid on the table so it may be taken up again later.

Among the other new bills introduced are: By Rep. Robert McDonald, Laurium, giving the utilities commission power over rates of carriers by water; Rep. Charles Evans, Lenawee, requiring railroads to maintain crossings at certain standards; Rep. Dacey, Detroit, to prevent persons who are refused applications for automobile drivers' licenses from obtaining a chauffeur's license from the state department, and to prohibit combination of drivers' and chauffeurs' licenses; by Senator George M. Condon, Detroit, authorizing counties, townships, cities, villages and school districts which can borrow money payable in one year to issue and sell negotiable bonds for the payments of their debts, no bonds to be for more than 20 years, nor bear higher than 6 per cent interest.

F. H. ELLSWORTH RESIGNS

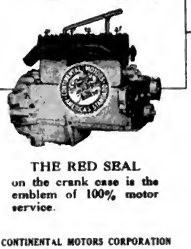
Frank H. Ellsworth has announced his resignation as insurance commissioner of Michigan after four years in office. It will take effect April 30. Mr. Ellsworth resigns at the same time as president of the National Association of Insurance Commissioners of the United States. He will become vice-president and agency director of the Detroit Bonding & Mortgage Guarantee Company, Detroit, assuming his new duties at once. Mr. Ellsworth's term as insurance commissioner had still two years to run. He was appointed to the position twice by former Governor Sleeper. Mr. Ellsworth was instrumental in organizing the Berrien County State Bank, of which he was chosen the first president and which office he still maintains. He practiced law for years.

The Detroit Bonding & Mortgage Guarantee Company was incorporated under the laws of Michigan in June of last year and has an initial authorized capital of $1,000,000 and a contributed surplus of like amount. More than 40 per cent of the outstanding stock is owned by bankers. Archibald F. Bunting is president; Walter J. Hayes, president of the American State Bank, treasurer, and E. E. Englehart, president of the Englehart Audit Company, secretary.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

D. D. Shelhamer
PHOTOGRAPHER
STUDIO BUILDING
4939 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

CHERRY 6788
The Photo-craft
1262 GRISWOLD ST.
GROUND FLOOR NEXT TO FRIEDBERG'S
Commercial Photographs, Portrait

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

MAXWELL-CHALMERS UNIT READY

Announcement is made by W. Ledyard Mitchell, president of Maxwell-Chalmers, that the corporation's pressed steel plant, which has been under construction for some months, is now ready for operation. The unit has 217,000 square feet of floor space and will take care of all pressed steel work for Maxwell and Chalmers. It is said to be one of the most modern and efficient in the industry.

ACCEPTANCE CORP. DIRECTORS

J. J. Schumann and Albert L. Deane have been elected directors of the General Motors Acceptance Corporation, succeeding W. C. Durant and H. F. du Pont, resigned. The General Motors Corporation meeting scheduled for March 31 was postponed to April 5.

DURANT PLANT FOR JACKSON

Each assembly plant in the chain of those affiliated with Durant Motors, Inc., will be separately controlled, but will be under contract with Durant Motors, it was announced in New York last week in connection with the purchase of the Long Island City plant of the Goodyear Tire & Rubber Company. The purchase price of the Goodyear plant was $2,000,000, it is said.

Report current in Jackson is that negotiations are in progress between Durant Motors and the Briscoe Motor Corporation for the acquisition of the latter's factory. The report has not been confirmed. Carroll Downes, vice-president of Durant Motors, is quoted as having made the statement that one of the Durant plants would be located in Jackson. Others probably will be at Flint, Saginaw and Lansing.

HIRSHFELD TO ADDRESS S. A. E.

C. F. Hirshfeld, chief of the research department of the Detroit Edison Company, will address the next meeting of the Detroit Engineering Society, April 14, in the auditorium of the Detroit Board of Commerce. His subject will be Industrial electrical heating. The society's twenty-seventh annual banquet will be held at the Hotel Cadillac, April 29.

PIERCE-ARROW RUMOR DENIED

There has been a rumor in certain financial quarters to the effect that new interests are to come into the Pierce-Arrow Motor Car Company, Buffalo, and that the company intends to discontinue the manufacture of trucks. Vice-President Geo. M. Graham, of the Pierce-Arrow company, in reply to a letter from this publication, writes us as follows:

"We beg to state that there is nothing whatever in the story that we will discontinue the manufacture of commercial vehicles, nor have we any knowledge of any new interests to be connected with our company."

AUBREY HEADS PACKARD ADVERTISING

James T. Aubrey, who has been western manager for the Cosmopolitan Magazine, became advertising manager of the Packard Motor Car Company, Detroit, on April 1, succeeding W. H. Holmes, who has returned to the agency field. Mr. Aubrey has had a long and successful experience in advertising business.

NEW AIR-COOLED MOTOR PROMISED

The Victor Page Motors Corporation has been organized under the laws of Delaware with capital of $5,000,000 to manufacture a new type of four-cylinder air-cooled motor which will propel a motor car to be known as the Victor Page Aero Type four. Maj. Victor W. Page is president and chief engineer. The car will be light in weight and of moderate price, says the announcement in New York. Headquarters are at 309 Lafayette street, New York. The factory will be at Farmingdale, L. I.

INTERNATIONAL MOTOR TRUCK

The statement of the International Motor Truck Corporation, New York, for the year ended December 31, 1920, shows total assets of $33,050,477, as compared with $25,561,458 in 1919; $15,346,235 in 1918, and $12,704,572 in 1917. Net profits for the year amounted to $2,644,013 after all charges and taxes, as compared with $1,983,469 in 1919. After deducting preferred dividends the net surplus was $1,128,781, or $143,369 in excess of the total at the end of 1919. The total surplus at the end of the year was $10,823,422, as compared with $3,525,070 in 1919; $2,539,659 in 1918 and $1,192,575 in 1917.

In the course of his statement to the stockholders President A. J. Brosseau says: "During the first nine months of the year orders were far in excess of the capacity of plants. During the last three months orders fell off and production was reduced to about 500 trucks a month. Orders on hand and prospects for business justify the statement that the sale of Mack trucks this year will not be less than the rate of production which obtained the last quarter of 1920. During the year $2,371,315 was added to the plant account. No further extension is contemplated at this time."

COURT ORDER AGAINST STRIKERS

The Fisher Body Corporation, Detroit, has been granted a court order requiring Local 127, United Aircraft, Automobile and Aircraft Workers, to show cause why its members should not be restrained p rmanently from interfering with workmen at the Fisher plants. The union has been on strike sometime and the Fisher corporation alleges that pickets are exerting pressure on workmen to make them quit their jobs.

DURANT STOCK OFFERED

Lansing investors were given their first opportunity to purchase stock in the Durant Motors, Inc., last week, when Carroll Downes, vice-president of the Durant corporation, was in the city and authorized G. N. Murchey & Company to sell the security. Mr. Downes emphasized the desire of the corporation to dispose of the stock in small lots, rather than to a few large investors. The stock was offered at the opening at 21¾. Glenn Murchey reports numerous sales to small investors, many paying for the stock on installments.

MOTOR VEHICLES IN CANADA

During 1920 the number of passenger cars and trucks registered in the Dominion of Canada increased 70,012 over the total for 1919. The number at the end of 1920 was 402,929, of which between 26,000 and 27,000 were trucks. The largest number of vehicles were in Ontario, there being 155,861 passenger cars and 16,204 trucks in that province; in Saskatchewan there were 60,325 passenger cars and trucks; in Quebec, 49,450 passenger cars and 3,000 trucks; in Alberta, 36,515 passenger cars and 1,000 trucks; in Manitoba, 34,817 passenger cars and 1,638 trucks; in British Columbia the combined total was 28,136; in Nova Scotia, 11,156 passenger cars and 1,300 trucks; in New Brunswick, 10,442 passenger cars and 658 trucks; in Prince Edward Island, 1,375 passenger cars and 10 trucks.

Digitized by Google

Ford Carries the Battle To Germans on Own Soil

Foreign newspapers, and especially the European trade publications, have given considerable space for some months to the efforts of Henry Ford, to introduce his tractor into Germany, and the opposition he has encountered at the hands of German manufacturers. In some of the Teuton papers it is said that the intention of the Detroiter is to put up a huge plant at an early date, after the Fordson tractor has been well introduced by a number of samples, which are to be used for demonstration purposes in the agricultural districts. The price at which the tractor will be sold eventually is said to be so low as compared with German-made tractors, as well as other imported similar equipment, as to cause not a little anxiety among the German manufacturers.

The most recent information on the subject is contained in a copywrited cable from Berlin to the Philadelphia Public Ledger. It follows, in part:

"Henry Ford has emerged victorious from his first encounter with the union of German motor plow manufacturers, whose objections largely were responsible for the government's refusing to grant permits for the importation of eight sample Fordson tractors that had been in a warehouse in Hamburg for three months.

"The economic committee of the Reichstag, after making a detailed investigation, overruled the objections of the German manufacturers and recommended that the federal government grant permission to import four tractors for demonstration purposes.

"They reported that the two contradictory protests, first, that the Fordsons, judging from reports from other countries, would prove of little use in Germany, and second, their importation or manufacture here would cause German firms too much competition, were insufficient for further preventing the bringing of the machines into the country.

"The committee further says German tractors generally are considered the best in the world, but might be improved by the study of one of America's latest productions. Another reason, and this is the chief one given for the action, was that this may make possible more intensive agriculture, which is much needed.

"Ford's plans, announced in dispatches last fall, to erect a factory in Germany and assemble parts manufactured by the Berlin firm of Ehrich & Gratz, according to original specifications, is beginning to take definite form. The action of the Reichstag committee is interpreted as indicative that the government no longer will prevent Ford from carrying out his project and that pressure applied by farmers' associations, whose members have placed hundreds of orders for German-made Fordsons, has at last been effective.

"One of the Detroit managers is expected in Berlin in April, and Henry Ford in May, according to one of the Berlin partners. Lars Jacobson, from the Detroit factory, now is exhibiting a borrowed machine, the only one in Germany, at the Leipsig fair."

MORTON SALT PLANT RESUMING

Resumption of work at the plant of the Morton Salt Company at Ludington was announced a few days ago. The company suspended operations some time ago, having its warehouse filled with salt, but no call for it. Now, however, the steamer Marion is being filled and will carry a load to Chicago. The normal working force includes about 100 men.

LAST OF MINE PLANTERS FINISHED

The last two of the eight junior mine planters made by the Defoe Boat Company, Port Huron, were completed and inspected a few days ago, and the entire fleet is now in the waters at Bay City.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins — Valve Roller Pins — Roller Clutch Pins — Dowell Pins (Hardened Straight) — Oil Pump Plungers — Roller Bearing Rolls (Straight) — Differential Gear Pins — Headless Shackle Bolts — Universal Joint Pins — Small Gear Shafts

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 575

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

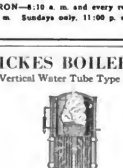
FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

WICKES BOILERS

Vertical Water Tube Type



Great Height of Steam Room Insures Dry Steam

Ask for Bulletins:

Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler Saving Coal in Steam Power Plants.

THE WICKES BOILER CO.

SAGINAW, MICHIGAN

Michigan Sales Office

1116 Penobscot Bldg. - DETROIT, MICH.

MAIN 1491

SPRUNK ENGRAVING CO.

Commercial Artists and Engravers

700 MARQUETTE BLDG. DETROIT

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Washington—Announcement is made by Gen. Lansing H. Beach, chief of government engineers, that the Government has appropriated $518,000 for improvements to the Detroit river this season. The greater part of the money, it is stated, will be expended for better lighting facilities to guide ships up and down the river. No other Great Lakes bodies are mentioned in the major's announcement.

Adrian—Surveys for projected short-cuts on the D. T. & I. right-of-way in this county have been made as part of the plans of Henry Ford, owner of the road, to improve service on the line. Mr. Ford, who recently was elected president of the company, made a tour of the line last week, part of the way in the new Ford internal combustion engine driven car and the rest of the way on a steam locomotive, the gasoline car having encountered an accident.

Grand Rapids—In the complaint of the National Spring & Wire Company et al. vs. the director general of railroads, as agent, the Grand Rapids & Indiana Railway Company et al., the Interstate Commerce Commission has decided that the refusal of the defendants to absorb, on Interstate carload traffic to or from complainants' plants located on the tracks of the Michigan Railroad at Grand Rapids, the switching charges of that road, while contemporaneously absorbing one another's switching charges on like traffic to or from industries located on their tracks at that point under substantially similar circumstances and conditions, is unjustly discriminatory. The unjust discrimination was ordered removed and reparation denied. The case, which was No. 11029 on the Commission's docket, was submitted October 14, 1920, and decided March 5, 1921. The decision has just been made public.

Romeo—A motor bus line is now being operated between St. Clair and Romeo. For the present only one vehicle, seating 22 persons, is being used. Two trips are made daily. If business warrants, another bus will be added.

Grand Rapids—Motor bus lines have been started out of Grand Rapids on five routes, as follows: to Lakeview via Rockford and Greenville; to Lowell via Ada; to Belding; to Fremont via Sparta, Kent City, Casnovia, Bailey, Grant and Newaygo, and to Hastings by way of Cascade, McCords, Alto and Freeport. Five buses are used. Other routes are being mapped.

Port Huron—A new organization in Port Huron is the Local Freight Agents Association, which has succeeded the Traffic Club. The object is about the same, namely to bring together freight agents, chief clerks, accountants, cashiers and others connected with the railroad and steamship companies. The officers are: President, H. B. Wilson; vice-president, W. W. Shingle; secretary-treasurer, C. A. Wisdom. The first membership check showed 55 names.

Escanaba—The Soo Line has filed a petition for permission to buy the Wisconsin & Northern Railroad with the Interstate Commerce Commission. Ownership of this road by the Soo line would shorten its line between Chicago and Michigan points more than 100 miles.

Detroit—Amendments modifying the terms of the Seaway Act in favor of Great Lakes shipowners will be discussed in conferences April 8 and 9 at the Detroit Board of Commerce. Vessel owners, shippers and union representatives will attend.

A RECORD INHERITANCE TAX

Charles L. Freer, Detroit, who died September 25, 1919, leaving an estate valued at $3,523,278.74, bequeathed to the Smithsonian institution, a government unit, a good part of his famous Whistler collection, including the noted Peacock Room. The bequest represented a value of $2,859,850.25, on which the state of Michigan will collect from the Government an inheritance tax of $400,000, the largest tax of this character ever paid to the state. The Detroit Trust Company, Col. Frank J. Hecker and Dr. Charles D. Wolcott, executors, have paid the Wayne county treasurer $200,000 towards the inheritance tax. While the Government exempts from taxation gifts to religious, charitable and educational institutions, Michigan does not unless such institutions are under the state laws. Consequently the Government must pay this tax to the state of Michigan for the privilege of having the Freer gift.

MONROE COMPANIES IN MERGER

The Monroe Binder Board Company and the Boehme & Rauch Company, manufacturers of paper and paper board containers, Monroe, are agreed upon a merger to become effective May 4. The new company will issue $5,000,000 in common and $2,500,000 in preferred stock. L. W. Leather is president of the binder board concern, and E. C. Rauch is president of the other company.

WATERWAYS BODY IN LAST SESSION

Obadiah Gardner, reappointed chairman of the American section of the International Joint High Commission on the Great Lakes-St. Lawrence route to the sea, reappointed by President Harding, presided at the last hearing before the whole commission to be held in the United States, which opened in Detroit Board of Commerce, Wednesday morning. Following this hearing the commission will proceed to prepare its report on the project.

A CORRECTION

In the March 5 issue of this paper it was stated that Ward H. Marsh had resigned as advertising manager of the Burroughs Adding Machine Company to become sales and advertising manager of the Lincoln Motor Company, Detroit. This was in error. Mr. Marsh having joined the Lincoln sales and advertising department in an advisory capacity only. The management and personnel of the department remain the same.

FISHER FOR RESERVE BOARD

Edmund D. Fisher, formerly vice-president of the Bank of Detroit, has been mentioned as a prospective member of the Federal Reserve Board. Mr. Fisher has had a long line of banking experience, both practical and theoretical. He gave valuable testimony before the National Monetary Commission in 1913, when the present Federal Reserve Act was being framed, and possesses an unusually intimate knowledge of that law.

M. B. A. CONVENTION JUNE 6-7-8

The thirty-fifth annual convention of the Michigan Bankers' Association will be held June 6, 7 and 8, Monday, Tuesday and Wednesday, at Hotel Statler, Detroit.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

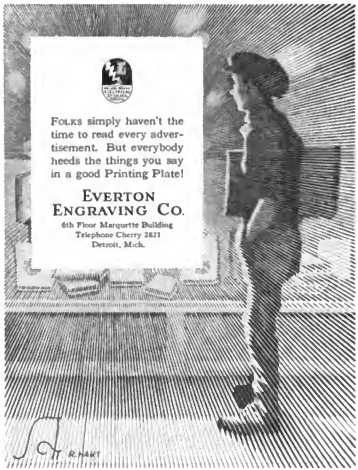
"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton
SALES REPRESENTATIVES: Atlanta Denver Portland
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700



MOTCH AND MERRYWEATHER MACHINERY CO

THE METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

Digitized by Google

An Engineering Service

This organization is composed of men whose experience embraces years of practical association with all branches of manufacturing in the metal and wood-working industries.

Our laboratories, associated factories and personnel are at the disposal of manufacturers who are confronted with a production, patent development or sales problem.

Wright-Fisher Engineering Company
3087 E. Grand Boulevard
DETROIT MICHIGAN
Market 3930

Need an Elevator?
Ask LEITELT

Modern Designs
Superior Construction

LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—Announcement has been made from the offices of the Wayne County Medical Society that in the near future an office building, probably eight stories high, will be erected in the neighborhood of Grace and Harper hospitals for the exclusive use of physicians and dentists. Mounting values of downtown real estate was given as the reason for the location of the new building somewhat off the beaten path.

Lansing—This city is planning to draft a uniform building code and has obtained copies of the South Bend, Ind., code upon which to model the local regulations. Several amendments to the present code were made by the council last week.

Detroit—The building owned by the Independent Brewing Company, at Springwells avenue and the M. C. R. R., has been completely remodeled by its new owner, the Detroit Packing Company, which this week started the construction of two other plant units on the site. The packing company, recently organized, has capital of $3,000,000 and is headed by Edward F. Dold, who is president and general manager.

Cheboygan—The Cheboygan Tile & Brick Company expects to erect a plant. Dr. A. M. Gerow is president of the company and Herman Sheitley, secretary.

Detroit—Directors of the Michigan Mutual Life Insurance Company, meeting in Detroit late last week, recommended to the executive committee that it purchase the property at the northwest corner of John R. street and Madison avenue as the site for a new office building for the company. On the site is a three story building occupied by the training school of the Cadillac exchange of the Michigan State Telephone Company. The property belongs to the Detroit-Biltmore Hotel Company, of which the Union Trust Company is trustee. The consideration is said to aggregate $575,000. The Michigan Mutual is located at Jefferson avenue and Griswold street.

Lansing—Because of the lower prices at present, City Engineer Otto Eckert has advised the city council to arrange for building several bridges in the city this year. Bids have been received for the construction of a bridge at Elm street, but no decision has been reached.

Big Rapids—If the farmers of the neighborhood of Big Rapids pledge sufficient acreage, a canning factory involving an expenditure of $125,000 may be put up, according to the information given out a few days ago by E. S. Frey, representing the Michigan Canned Food Company.

Lansing—The Briggs Company has begun the erection of a warehouse here on land leased from the New York Central Railroad. The building will provide for the expansion of the company's wholesale building material business. The company will store in the new structure, steel bars, steel for reinforcements, sewer pipe and other stock.

Detroit—Bids on the pile construction for a loading dock at the foot of Orleans street in this city have been asked by the park commission. A dock large enough to accommodate two 125-foot barges is required.

It Was a Real Business Getter

(*Continued from Page 5*)

ployed when the factory was at peak production are at work. The demand, says Mr. Pulcher, is about evenly distributed among the five truck and two tractor models the company manufactures. There are no vehicles on hand and all that are being turned out are being loaded promptly. If orders continue to grow as they have during the last 30 days, it will not be long before the Federal is back to normal.

Roy D. Chapin, president of the Hudson Motor Car Company, which makes the Hudson and Essex cars, says the company is experiencing a "genuine spring opening of trade" and that production is being expanded daily. "The Hudson plant," says the statement, "is now working on a full time basis and every effort is being made to speed up shipments to match the great increase in orders now being received."

At the Stud baker, Paige, Columbia, Packard, Cadillac, Maxwell-Chalmers and Hupp factories production is said to be increasing.

SITE FOR NEW UNIT PURCHASED

The Mendel & Duel property, adjacent to the plant of the Baker Company, Allegan, has been purchased by the latter, in preparation for plant expansions.

O'CONNOR JOINS U. S. C. OF C.

J. J. O'Connor, formerly in charge of publicity of the First & Old Detroit National Bank, left this week for Washington, where he becomes manager of the finance department of the United States Chamber of Commerce.

Mr. O'Connor performed important services for the American Red Cross during the war, having superintended the administration of $2,000,000. He was educated at the University of Chicago and received a law degree from Kent College. The new finance department, according to the announcement, will give immediate attention to taxes and a national budget system.



America's Headquarters for
Second Hand Electrical Machinery
Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

The Bellefontaine Bridge & Steel Co.
Engineers, Fabricators and Erectors
STEEL BUILDINGS AND BRIDGES
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6588.

Digitized by Google

WHEEL TRUEING OFFICE MOVED

The Wheel Trueing Tool Company, importer of industrial diamonds and manufacturer of diamond-pointed tools, with general offices in Detroit, announces the removal of its western office from the Wells building, Milwaukee, to its branch office in the Great Northern building, 20 Jackson Boulevard West, Chicago. Wm. J Sansom will be in charge at the new location. The change was effected April 1. Mr. Sansom has been representing the western office for the last three years. Because of his former experience as night superintendent of the Milwaukee works of the International Harvester Corporation, and prior to that as instructor of mechanical practice, University of Wisconsin, he is well equipped to give the kind of service in grinding wheel trueing practice which is characteristic of the Wheel Trueing Tool Company.

MORE SPACE FOR LUPTON CO.

Announcement has been made by Malcolm J McLeod, Michigan manager for the David Lupton's Sons Company, Philadelphia, that the Michigan business of the company has developed to such a degree as to warrant immediate expansion of warehouse facilities in Detroit. The company will lease 40,000 square feet of floor space as soon as practicable, pending the building of a permanent warehouse, which will be 200 by 200 feet in plan and one story high. This announcement follows closely upon the completion of the new Lupton warehouse in Cleveland, which is of the same size. A third warehouse will be built in Chicago this year or early in 1922. This will enable the Lupton company to serve the entire Middle West directly and at the same time give it distributing points for the Far West.

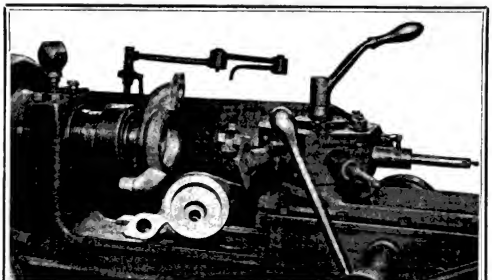
The Lupton company manufactures practically every type of steel window and factory sash now made. In recent years it has developed a complete line of steel shelving and factory equipment which is in wide use in Michigan. The largest steel sash contract in the world, that of the Ford foundry and power house at River Rouge, is just being completed by the Lupton company.

FORMER BREWERY TAKEN OVER

The former Eckhardt & Becker brewery, at Orleans and Winder streets, Detroit, vacant since prohibition put a stop to its activities, has been leased by the King Coffee Products Corporation, Detroit, as a coffee refinery. The corporation is a new one organized by Detroit men to manufacture a new beverage known as coffee pep, and other coffee products. John E. King, president of the corporation, has spent a number of years in experiment in conjunction with the Mellon Institute of Industrial Research at the University of Pittsburgh. After exhaustive tests he is said to have arrived at a method of producing coffee products which is a departure from anything previously developed. Machinery is now being installed and alterations to the building completed, and it is expected that operations will be under way by July 1. Jess H. Wilson, formerly sales manager of the Pompeian Company, has been retained as sales manager of the King Coffee Products Corporation.

NEW HANDLE COMPANY

A handle manufacturing concern is being organized in Manistique by E. C. Coerper, Judson Hollenbeck and Ernest Knuth, the corporation to be known as the Manistique Manufacturing Company. Operations will begin next month. Besides making canthook and peavy handles, the company will bring out other wood novelties. The members of the company are all well known in the county and have had considerable experience in the business in which they have now embarked.



The hub of this Cast Iron Water-Circulatng Pump-Body has been turned and drilled on another No. 4 Turret Lathe. The tools on this No. 4 rough bore and true up for shaft, ream to size, counter-bore for clearance and finish bore and face large diameter—all in 5½ minutes. Most of these tools are standard.

Proper Tools for Turret Lathes

To do work well
a turret lathe must be equipped
with the proper tools.

Tools make or mar
a good turret lathe.
Re-tooling a turret lathe
often doubles its production.

In our catalog
we illustrate turret lathe tools
for all kinds of work,
bar or chucking,
and if you desire,
we help you select
the right tools for your work.

Send for our Small Tool Catalog.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company

CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

MICHIGAN MANUFACTURER FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Pitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, APRIL 2, 1921

Relief for the Railroads

IN SPITE OF THE FACT that the tonnage being carried by American railroads today is four times what it was in 1886 and that the rates have been increased seven times, the carriers never were nearer bankruptcy than now. Relief must be afforded at once, no matter how radical the method, if industry in this country is not to be paralyzed by a general breakdown of the transportation system. One of the very first things, if not the first thing, to be taken up by the new Congress when it meets in April should be ways and means of enabling the roads to meet expenses. Otherwise there will be chaos. This is more important than taxes and the tariff.

When President Harding; Secretary Hoover; Chairman Clark, of the Interstate Commerce Commission, and R. M. Barton, chairman of the Railroad Labor Board, went into session early this week to consider the railroad problem, they were in possession of a mass of figures which showed in a startling way the plight in which the roads find themselves. The figures showed, to begin with, that the carriers were operating at a loss of $700,000 000 a year. They showed, in the second place, that rates and fares had reached a level so high that not only had they taken domestic business by the throat but were making it impossible for American manufacturers to compete abroad because of the expense of getting their goods to seaboard. Consideration of higher tariffs in such a situation is out of the question.

The President and his advisers had before them two recent reports, one dealing with railroad revenues for the month of January, 1921; the other with income and wage payments for the third quarter of 1920, both prepared by the Interstate Commerce Commission. The January report, which covered the operations of 202 railroads, showed a combined deficit of $1,167,800, and that 109 of the 202 roads had failed to earn their expenses and taxes during the month. The operating revenues had increased 5 1-5 per cent as compared with January, 1920, but expenses had grown 6 3-5 per cent. The net operating income had fallen off 120.6 per cent. As partly indicating the results of the present inordinately high rates and fares, the report showed that the bulk of freight carried had decreased 14.7 per cent in net ton miles and that passenger miles had fallen off 6 1-2 per cent. This report is serious enough, considered alone, but it is much more serious in that it is only a repetition of what other months have been showing. The net operating income of the carriers for the five months beginning with September 1, 1920, when the federal guaranty period ended, totals $225,167,000, which is at an annual rate of return of 2.81 per cent on their tentative valuation.

The other report was significant in that it embodied an analysis of the railroad operating costs which suggested the quickest way out of the difficulty. It revealed that of the total operating revenues for July, August and September, 1920, payrolls alone consumed 62 per cent. In 1917 the payroll was only 43 per cent of the earnings. The total payroll for this quarter, during which the increased rates of pay—from 25 to 40 per cent—were in effect, was $1,052,109,451 for an average of 2,157,989 employes, as compared with $801,063,938 for the second quarter of 1920 for 2,004,760 employes and $795,616,330 for the first quarter for 1,993,324 employes. The wage award was made retroactive to May 1, but the Commission's statistics did not include the back pay for May and June. This latter figure would amount to about $150,000,000. The increase in payroll for the third quarter over the second quarter was $251,000,000, or 31 per cent. Dividing the total compensation by the number of employes gives an average of $162 a month for the third quarter, as compared with $133 for the second quarter, an increase of 22 per cent. For the year 1917 the total payroll for 1,732,876 employes was $1,739,482,142, an average of $83 per man.

It was reported that the President and Mr. Hoover were prepared to impress upon Judge Barton that it was the opinion of the administration that the national agreements between the roads and the shop crafts should be sufficiently modified to cut $500,000,000 a year off the payrolls. To do that it would be necessary to scale wages down to where they were previous to last May, when the increase referred to in the quarterly report cited above went into effect. Mr. Hoover, it was said, had made a close study of possible economies all along the line and had come to the conclusion that nowhere could such a saving be effected as by reducing wages. This latter having been done, relief in the way of combinations of lines so that the stronger could take care of the weaker, would be considered. He was of the opinion that 62 per cent was too great a portion of earnings to go into wages.

Naturally, should such a course be decided upon, we may expect opposition on the part of the employes, who charge that they are being made the "goat," whereas alleged abuses on the part of the railroads, such as the payment of excessive salaries to high officials, the expenditure of far too much money for repair work to concerns allied financially with the roads, awkward and circuitous competitive routings and other mistakes in management are allowed to go unpunished.

Be that as it may, the carriers are up against a condition which demands prompt and effective action, and the quickest way must be followed. It would seem, therefore, that in view of the fact that there has been a decrease in living costs averaging between 15 and 20 per cent, as shown by the Department of Labor, the Railroad Labor Board could well order the wage reduction. This, as has been estimated, would save the roads half a billion dollars a year, leaving a deficit of $200,000,000 which could be cared for by further operating economies to be directed after the Congressional investigation which appears certain in view of Senator Cummins' desire to amend the Esch-Cummins law.

Fifty-Fifty

MAYOR COUZENS has resigned from the Detroit Board of Commerce because, he says, it does not agree with his policies.

Well, there probably are a lot of good people who would like to resign their Detroit citizenship as a mark of their disapproval of these self-same policies. But these folks do not enjoy the freedom of action that is the mayor's, and possibly, too, they feel it might not be a bad idea to stick to the ship.

Mr. Hays Makes a Start

WILL H. HAYS attacks the problem of the rehabilitation of the Post Office Department in a way so original that it must surprise, not to say startle, official Washington, accustomed as it is to red tape. In the first place he calls in a commission of business and professional men to tell him what is the matter with the postal service and what they would do about it if it were their own enterprise—which it is—and then he jumps

Digitized by Google

on the President and cabinet, demanding that they post their mail two or three times a day, instead of dumping it all in the hopper at 5 p. m. and adding to the confusion.

Now the amount of mail that must be handled by the Washington post office daily from the government buildings isn't going to clutter up the service all over the United States, even if it isn't handled till night. If Mr. Harding and Mr. Hughes and the others follow Mr. Hays' suggestion and carry their letters to the mail box two or three at a time, twenty or thirty or two hundred or three hundred times a day, it won't solve our postal problems here in Michigan, or California's problems, or Idaho's. What Mr. Hays has done is to call to the attention of the country, in a way so whimsical as not to be forgoten, the fact that it should help the Department solve one of its 4,114 problems by mailing three or four times a day and thus assisting local post offices to keep the grist moving. We have an idea that the average business man, remembering that Mr. Harding is taking care of his mail promptly, is going to put up a sign in his mailing room that letters and packages are to be sent to the post office a little at a time.

Mr. Burleson, with all his faults, recognized prompt mailing as one of the ways out of the Department's difficulties, but he hadn't the knack of "getting it over the footlights." Mr. Hays has that knack. If he will keep it at work, he will get us all thinking about how we can "help lighten the postman's pack." When we do, the results will be surprising.

The State Department Goes United States

MEMORIES of those stirring days when American diplomacy "spoke softly, but carried a big stick" are recalled by the documents Mr. Hughes has been drafting since he became Secretary of State. His communications to some of our recalcitrant international brothers remind one of that classic demand made when the Moroccan bandit kidnaped the American woman missionary and held her for ramson, "Miss Stone alive or Rasuli dead," and of President Roosevelt's notice to the Kaiser to get out of Venezuelan waters in thirty-six hours or be chased by George Dewey.

One of the first situations the new Secretary of State was called upon to meet when he assumed his portfolio was a two by four, but nonetheless earnest and dangerous scrap between Costa Rica and Panama—earnest because both sides had been heating their Latin blood over a slow fire until it had reached the boiling point, and dangerous because it promised to embroil the whole of Central America. What did Mr. Hughes do? He sent to both governments an identical demand, characterized not by its particular elegance of diction, but by the "wallop" it carried, that they call off their forces immediately, on pain of feeling the American foot on their necks. Did they obey? They did, and immediately.

Next the Secretary took his pen in hand and indited a little message to the Russian soviet government in which he made it so clear that even Lenine could understand, that the soviet outfit could not expect the United States government to have any official dealings with it until it gave convincing evidence of a respect for persons and private property. Mr. Hughes said it politely, but in a way that gave the world to understand that this was all he had to say.

Then he informs Lenine, Trotsky, et al., that the United States government is expecting them without parley to release some 500 Americans incarcerated in soviet prisons, many without the formality of trial. The message displayed a full set of teeth. The soviet government comes back with the reply that it will liberate our citizens as soon as we turn loose the Russian reds whom we had to lock up for our own safety during the period of the war. We have an idea, however, that after they have had opportunity to examine Mr. Hughes' answer to that, they will not wait for us to open our prison gates to their hired assassins.

Mr. Hughes is running the State Department just as all good Americans want it run. The Department "went United States" when he was appointed.

A year ago there were 800 families in Detroit on the books of the poor commission. Today there are more than 9,000. Yet the Detroit city government wants to make it harder for the poor to pay rent by spending money recklessly in buying street railways.

Short Measure Stuff

WE ARE GOING TO SCOOP the news department this week, just to make it jealous. The other day, while in Lansing, we learned that one of the representatives was planning to introduce a bill permitting search of laundries operated in the state and the seizure of towels and linens that have been taken from hotels and restaurants by patrons and guests and kept as souvenirs. We are pledged to secrecy as to the author of the measure until it comes out. He assures us that if, on advice of counsel, it is held unconstitutional, he'll amend the old constitution.

• • •

WATCH FOR THIS ONE
TRY THIS SPRING POEM ON YOUR VACUUM CLEANER

(From the Liner Column of a Contemp.)

"Goodbye Winter"

Early last fall you spread your pall,
Of gloom and want and woe,
You seared our sight with depression's fright,
And now we're glad to see YOU GO.

But the call of spring is a glorious thing,
To the salesman in the realty line,
And he forgets what's past,
And his heart beats fast,
For the good old summertime.

He knows the game will be good this year,
And he's aching to get a start,
But how to tell just what will sell,
Is the question that's in his heart.

Don't let this worry you any more,
Just come up and knock on our door.
Selling is easy under our plan,
The buyer pays just as he can.

See our Love Nests cosy and bright,
Handy for workers and a home of delight.
Through the summer and into the fall,
Our Love Nests will sell to one and to all.

Ask about our salesmen's school,
Maybe you don't know all the rules,
Of salesmanship and how to sell,
And of HUMAN NATURE how to tell.

If you've been knocked about,
And your heart's still stout,
If your shoes are thin,
But you're not all in,
And you still can grin,
Then, come in and talk it over.

The above was published under Help Wanted, Male. We'll say so.

• • •

X. Haust says that the saturation point is much more likely to be reached in automobile plants than in automobiles.

• • •

President Harding won't be a very popular man if he keeps on calling special sessions for the week the baseball season opens.

• • •

HOW PARLIAMENTARIANS SAY "KEEP QUIET"

(From the Congressional Record)

Mr. King—Mr. Speaker, I ask unanimous consent to extend my remarks in the Record on the subject of rescue work on the Mississippi River.

Mr. Rayburn—Are these the gentleman's own remarks?

Mr. King—Yes, sir.

Mr. Rayburn—I shall have to object.

Mr. King—What is the purpose of the gentleman's objection?

Mr. Rayburn—Because everybody else's remarks are objected to.

Mr. King—I wish the gentleman would let me in on that.

The Speaker—The gentleman from Texas objects.

—A. F.

Digitized by Google

FINANCIAL NEWS AND COMMENT

CITIZENS TELEPHONE COMPANY

The annual report of the Citizens Telephone Company, Grand Rapids, came to hand this week. It covers the year ended December 31, 1920, and was presented to the stockholders at the annual meeting, March 22. Excerpts from the statements of General Manager C. E. Tarte follow:

"It had been thought from time to time that the territory served by the company had about reached the point of saturation and that there would be practically no increase in the number of telephones for some years to come, and yet the year just ended shows the largest net gain in the company's system since 1906, the net gain for 1920 being 2,916, of which 1,271 were in Grand Rapids. There is now in the entire system 41,486 telephones and we switch for 3,883 roadways."

"Conditions in Grand Rapids are quite badly congested on account of the great difficulty in getting material and equipment of all kinds, and the result has been that there occurred an unprecedented delay in filling new orders. There would have been several hundred more installations if they could have been taken care of more promptly."

"Considerable progress has been made toward converting the Grand Rapids Exchange to automatic ringing."

"The increased rates were of assistance, but were not sufficient to pay expenses and earn a fair return on the investment. For some years dividends of 8 per cent were paid on the company's stock. In 1911 it was found necessary to reduce the dividend rate to 6 per cent, and in 1916 it was again found necessary to make a further reduction to 4 per cent."

Secretary A. B. Wheeler explains the $227.17 compensation covering the period of government control was received in July, 1920, and credited to surplus account, inasmuch as the payment represents previous years' earnings. Notwithstanding the additional funds which this payment gave the company, Mr. Wells points out that bills payable show an increase of $80,985.34, due principally to the purchase of $150,000 additional automatic central office equipment and instruments. It is stated further: "During the year authority was received for the issuance of an additional $200,000 bonds, making the total outstanding in the hands of the public $931,000, the increase of $106,500 being occasioned entirely by the exchange of this company's bonds for like amount of bonds of subsidiary companies, the Citizens Telephone Company, Jackson, and Citizens Telephone Company, Battle Creek. This exchange was made in anticipation of early maturity of these bonds. During the year the Jackson and Battle Creek companies defaulted on their bond interest and on such bonds as have been previously guaranteed by this company the interest coupons have been purchased.

A relatively small amount of the company's stock has changed hands during the year. There being a total of 3,000 stockholders, as compared with 3,024 of the previous year. The comparative statement of earnings and expenses, and a comparative balance sheet follow:

	Year Ended Dec. 31, 1920	Year Ended Dec. 31, 1919	Increase or Decrease
Earnings and Expenses			
Operating Revenue....(Exchange Service & Misc. Opr.)	$1,422,010.06	$1,183,208.06	+$238,771.43
Operating Expenses (Maintenance, Traffic, Commercial and General)	795,307.67	630,234.48	+165,567.19
Depreciation of Plant and Equipment.....	270,121.16	219,754.97	+ 50,366.19
	$1,064,687.83	$ 850,129.45	+$214,933.38
Net Operating Rev....	$ 357,377.23	$ 333,168.31	+$ 24,513.92
Taxes and Uncollectible Operating Revenue...	160,827.44	88,873.05	+ 35,758.79
	$ 267,089.91	$ 252,585.56	+$ 14,603.35
Non-Operating Rev. less deductions	$ 7,292.72	$ 7,305.63	— $ 12.91
Gross Income.....	$ 274,382.63	$ 259,940.19	+$ 14,622.44
Deductions from Gross Income	$ 42,529.99	$ 10,027.47	+$ 32,502.41
Interest	62,897.14	54,000.00	+ 8,897.14
	$ 85,413.25	$ 65,660.98	+$ 19,797.27
Net Income	$ 179,861.38	$ 204,295.21	—$ 24,433.83
Dividends on Stock	154,000.00	154,000.00	
Carried to Surplus.....	$ 25,861.38	$ 50,295.21	—$ 24,433.83

	Dec. 31, 1920	Dec. 31, 1919	Increase or Decrease
Resources:			
Exchange and Toll Line Investment, including Mat. & Sup.	$4,879,413.26	$4,626,689.69	+$252,846.54
Cash	325,134.47	113,891.40	+ 160,871.88
Stocks of Other Co's..	136,350.07	136,350.07	
Bonds of Other Co's..	149,000.00	97,488.00	+ 51,512.00
Liberty Bonds.....	12,786.00	15,000.00	— 2,214.00
Invest. in Sub. Co's....	535,797.93	466,971.94	+ 68,825.99
Bills and Accts. Rec.	80,662.79	75,788.01	+ 4,874.78
Prepayments	10,666.65	4,988.46	+ 5,677.19
Unamortized debt, discount and expense....	62,490.02	41,973.16	+ 20,516.86
Cash	17,000.00	16,582.14	+ 417.86
	$6,136,020.81	$5,437,561.32	+$447,471.49
Liabilities:			
Capital stock	$3,861,700.00	$3,861,700.00	
Bonds outstanding in hands of public	931,000.00	824,500.00	+$106,500.00
Bills payable.....	182,753.22	101,767.88	+ 80,985.34
Accts. payable.....	13,439.99	12,772.18	+ 5,666.81
Rentals & Toll Paid in Advance	9,479.85	9,514.06	— 34.21
Audited vouchers and wages accrued (Payable Jan. 1)....	42,281.23	23,313.16	+ 18,974.25
Other Liabilities	8,008.27	2,160.79	+ 5,847.48
Interest Accrued.....	4,111.47	3,961.30	+ 149.17
Taxes Accrued.....	9,006.83		+ 9,006.83
Dividends declared (Payable Jan. 20)....	39,117.75	32,317.95	
Reserve for Accrued Depreciation	464,114.34	395,253.19	+ 138,861.15
Miscellaneous Reserves	29,675.71	21,615.53	+ 7,952.18
Surplus	351,625.15	227,734.37	+ 82,887.48
	$6,136,020.81	$5,437,561.32	+$447,471.49

J. W. MURRAY MFG. CO.

The J. W. Murray Manufacturing Company, Detroit, has favored this paper with copies of the balance sheets of December 31, 1920, for both the parent company in Detroit and the Murray Ohio Manufacturing Company, Cleveland.

The parent company shows a growth in total assets, compared with balance sheet, December 31, 1919, of $659,861.25, and a total increase in net surplus account of $79,826.92 after payment of dividends and taxes. Current assets total $1,019,465, against current liabilities of $421,525. The exact holdings of the Ohio company's stock by the Detroit company is not explained in the information furnished, but it is noteworthy that whatever that interest may be is carried as $1. Below is given a condensed comparative balance sheet of the Detroit company and a condensed balance of the Murray Ohio company:

J. W. MURRAY MFG. CO. STATEMENT

ASSETS	Dec. 31, 1920	Dec. 31, 1919
Real estate, buildings, machinery and equipment, less depreciation	$1,480,174.75	$ 808,224.29
Contracts and processes, nominal value	1.00	1.00
Investments	*200,001.00	224,256.00
Bills and accounts receivable	179,699.82	434,487.04
Inventories	651,911.47	432,319.29
Cash	176,552.64	146,009.43
Deferred charges	19,980.17	13,982.15
Marketable securities	11,201.60	.....
	$2,719,634.45	$2,059,772.20

*Murray Ohio Co. at Cleveland carried at $1.00. Property in St. Louis, Mo., carried at $200,000.00.

LIABILITIES		
Preferred stock	$ 475,000.00	$ 500,000.00
Common stock	980,000.00	733,450.00
Bills and accounts payable	341,500.13	302,044.52
Purchase money obligations	425,000.00	.....
Accrued liabilities	20,025.39	51,660.08
Accrued dividends	.....	16,324.50
Reserved for Federal taxes	60,000.00	131,000.00
Surplus	418,108.93	328,744.10
	$2,719,634.45	$2,059,772.20

Changes in Surplus, 1920

Balance Jan. 1, 1920...*$	328,782.91
Plus net profits after taxes	230,054.42
	$558,336.43
Less dividends paid	150,227.50
Surplus Dec. 31, 1920.$	418,108.93

*Discrepancy with balance sheet Dec. 31, 1919, not explained.

MURRAY OHIO COMPANY
Condensed Balance Sheet, Dec. 31, 1920

ASSETS	
Land, buildings, machinery, equipment, tools, etc., less depreciation	$444,569.22
Contracts and Processes..	250,000.00
	$ 694,569.22
Current assets —	
Inventories at cost or market	$179,641.78
Notes receivable	33,580.07
Accounts receivable	33,576.50
Cash	5,372.91
	252,581.26
Deferred charges	53,081.66
	$1,000,232.14
LIABILITIES	
Preferred stock	$ 500,000.00
Common stock	250,000.00
Land contract payable	225,000.00
Current liabilities —	
Accounts payable	$ 14,485.75
Reserved for Federal taxes	7,000.00
	21,485.75
Surplus —	
Net profits after taxes.$	45,413.06
Less dividends paid	41,666.67
	3,746.39
	$1,000,232.14

E. W. BLISS CO. REPORT

The E. W. Bliss Company, Brooklyn, N. Y., and Hastings, Mich., during 1920 earned a profit of $2,376,338 after depreciation and federal tax deductions. This compares with $1,855,524 in 1919, $1,271,353 in 1918 and $2,339,925 in 1917. After taking care of dividends, net surplus for the year ended December 31 was $1,646,838, as compared with $1,192,024 in 1919, $577,603 in 1918 and $1,614,295 in 1917. Including previous surplus, the company's total surplus on January 1, 1921, was $18,925,133, while a year ago it was $17,274,080.

In the report to the stockholders it is announced that the company has $2,500,000 of machinery orders on its books, not including special work for the Government, which consists of making torpedoes. This Government work amounts to about $1,000,000 a month. It was also stated that the business is improving, owing to the pick-up in the automotive industry.

COMMONWEALTH POWER REPORT

Net earnings for the month of February, 1921, reported by Hodenpyl, Hardy & Company, for the Commonwealth Power Railway & Light Company and subsidiaries, were the largest of any February of the last four years. Out of gross earnings of $2,633,699 there was paid operating expenses, taxes and maintenance of $1,748,422, fixed charges of $613,099 and dividend on preferred stock of $89,765, leaving a net of $182,412, compared with $91,147 in 1919 and $102,909 in 1918.

The burglar-proof vault in the Maynard-Allen State Bank, Portland, has been completed. The vault is equipped with two alarms, which, if sounded, will arouse the town.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Bankers Land & Inv.	3½	4
Burroughs Adding Machine	137	145
Columbia Nat. Fire	16	17
Commercial Fin.	15	20
Detroit Mortgage, com.	3¾	4½
Detroit Mortgage, pfd.	5½	6¼
Detroit Copper & Brass	13	20
Detroit National Fire	25	35
Detroit Life	55	65
Federal Bakeries Co.	26	32
Federal Discount Co.	7	7¼
Fisher Body	87	87½
General Necessities Corp.	10½	11½
Gladys Belle Oil, com.	52	65
Gladys Belle Oil, pfd.	49	52
Great Lakes Engineering, new	11	14
*Great Lakes Engineering, old	56	65
Hoover Steel Ball	14	16
Hayes Wheel Co.	13	15
Interstate Fire	25	26
Invader Oil	145	148
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com.	7	7¼
Kelsey Wheel	52	53½
Little Wonder Stove	1½	2
Monroe Binder Board	39	41
Detroit Motor Bus	6	6
McCord Manufacturing, com.	5	5½
McCord Manufacturing, pfd.	35	45
Michigan Copper & Brass	15	17
Noble Oil, com.	54	56
Petoskey Portland Cement	11	11½
Peninsular Fire Ins.	31	60
River Raisin Paper	12	16
Trippensee Mfg. Co.	6¾	7¼
Union Mtge. 100% com.	9½	10½
Union Mtge. 50% com.	7½	8½
Range During 1920, Approximate		
Hoover Steel Ball	24½	13
Columbia Motors	4¾	5
Noble Oil, com.	130	.53
Mich. Copper & Brass	24	19½
Detroit Mtge., pfd.	6¼	5½

Motor Stocks	Bid	Asked
Briscoe Motors	17	16
Columbia Motors	1¾	2
Chalmers	1	3
Chevrolet	165	190
Cole	230	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	3	5
Denby Truck	1	2
Doble Steam	1¼	1¾
Elgin Motors	6¾	7
Harroun	¾	1¼
Haynes	170	175
Hupp	14½	15
Jackson, com.	...	1¼
Jackson, pfd.	...	2½
Keystone Tire	14¾	14¾
Lafayette Motors	40	75
Liberty Motors	5¼	6
Liberty Motors, pfd.	50	70
Lee Tire	23	26½
Locomobile	2	6
Maxwell Motor	6	6
Mercer	4½	6
Mitchell Motor	6	9
Motorbus	3	5
Nash	290	335
Pierce-Arrow Truck	30½	34
Republic Truck	16	17
Saxon Motors	5¼	6½
Scripps Booth	25	35
Stearns	24	26
Stevens Duryea units	70	90
Stromberg Carburetor	67	68
Studebaker	76	78
Willys-Overland	12	12¾
Wilson Truck	4¾	5¾

Grand Rapids Stocks

American Public Utilities, Common	7	- 13
American Public Utilities, Preferred	17	- 21
Commonwealth Power Railway & Light, Common	12¼	- 14
Commonwealth Power Railway & Light, Preferred	34	- 35
Citizens Telephone Company	4¾	- 4¾
United Light & Railways, Common	24	- 26
United Light & Railways, Preferred	60	- 62
Cities Service, Bankers' Shares	28	- 28½
Cities Service, Common	233	-237
Cities Service, Common	250	-260
Cities Service, Debenture "B"	158	-160
Cities Service, Debenture "C"	92	- 94
Cities Service, Debenture "D"	66	- 68

Quotes by Howe, Snow, Corrigan & Bertles, March 23.



HARRIS, SMALL & LAWSON
150 CONGRESS ST., W.
DETROIT

RAILROAD BONDS



Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.
Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit
Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

TRADING DEPARTMENT
Detroit Edison 8's, 6's and 5's.
Detroit City Gas P. L. & G. M. 5's.
D. U. R. 4½'s and Subsidiary Lines.
Detroit City 5's, 5½'s and 6's.

JOEL STOCKARD & CO., INC.
DETROIT

A Bank with a Reputation, 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
MAIN OFFICE AND BRANCH
45-47 Fort St. West, Penobscot Building
14 Branches

Digitized by Google

MICHIGAN TAX EXEMPT
SCHOOL BONDS

City of Three Rivers and Lockport Township, St. Joseph County, Michigan
School Building 5½% Bonds
Due February 1, 1926
Price to net 5.75%

Plainwell, Michigan, School District No. 2, Township of Gun Plains, Allegan County
6% School Bonds
Due April 1, 1926 to 1936. Price to net 5½% to 5.85%, according to maturity

Descriptive Circulars of the above and other Municipal Bond offerings sent on request.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

MANAGED BY MEN YOU KNOW

Why Stake Your Family's Security on Human Frailty

Not a week passes but fresh evidence appears of the imprudence of appointing an individual executor or administrator.

Friends, though well-intentioned, often make costly mistakes through inexperience. Some prove subject to influence, and prejudice creeps into the management, with resultant quarrels.

Far better, mature business men decide on consideration, to appoint an impartial, trained agent such as the Grand Rapids Trust Company, proof from human ills.

A booklet prepared on this subject will prove interesting. Send for copy.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan

CAPITAL AND SURPLUS $450,000.00

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED

Resources	Mar. 25, 1921	Mar. 18, 1921	Mar. 26, 1920
Total gold reserve—see note	$2,210,566,000	2,206,339,000	1,934,765,000
Legal tender notes, silver, etc	211,212,000	209,250,000	122,400,000
Total reserves	2,421,977,000	2,414,789,000	2,057,165,000
Bills discounted—			
Secured by U. S. Government obligations	1,010,372,000	1,000,266,000	1,441,015,000
All other	1,276,276,000	1,224,823,000	1,008,215,000
Bills bought in open market	123,068,000	123,780,000	481,879,000
Total bills on hand	2,409,704,000	2,347,699,000	2,931,109,000
U. S. Government bonds	25,847,000	25,845,000	26,793,000
U. S. Victory notes	19,000	19,000	48,000
Total earning assets	2,892,435,000	2,658,514,000	3,191,031,000
All other resources	636,755,000	762,966,000	799,585,000
Total resources	5,758,167,000	5,836,269,000	6,047,771,000
Liabilities			
Capital paid in	101,113,000	101,058,000	91,059,000
Surplus	202,036,000	202,036,000	120,120,000
Government deposits	114,685,000	58,789,000	27,711,000
Due to members—reserve account	1,474,686,000	1,477,774,000	1,867,125,000
Other deposits, including foreign government credits	51,666,000	38,073,000	100,160,000
Total deposits	1,840,887,000	1,774,635,000	1,994,996,000
F. R. notes in actual circulation	2,939,729,000	2,982,886,000	3,048,039,000
F. R. bank notes in circulation—net liability	178,480	179,280,000	201,352,000
All other liabilities	502,212,000	516,410,000	592,165,000
Total liabilities	5,758,167,000	5,836,269,000	6,047,771,000
Ratio of total reserves to deposit and F. R. note liabilities combined	50.8%	51.0%	*42.7%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against deposit liabilities	60.7%	60.6%	*47.1%

Michigan Bond Items

Sixty thousand dollars of sewer, water works extension, highway improvement and drainage improvement bonds will be sold to the highest bidder by the city of Bad Axe, at 7:30 p. m., April 18, at the council rooms. Sealed bids, accompanied by a certified check for $500, will be received up to that time. Circulars will be furnished prospective bidders on application to James A. Burgess, city recorder.

Frank F. Rogers, state highway commissioner, will receive bids up to 1:30 p. m., April 6, for the sale of road assessment district bonds as follows: Road assessment district No. 177 in Barry and Kalamazoo counties. Approximately $60,000 worth, maturing serially in from two to seven years. Bonds are the obligation of Prairieville and Barry townships in Barry county; Richland township, Kalamazoo county; the counties of Barry and Kalamazoo and an assessment district. The bonds are being issued under the Covert Act. Interest will be payable semi-annually on the first day of May and November in each year. Each bidder will be required to name the rate of interest, not exceeding 6 per cent and premium for each thousand dollars he will pay, in his bid. A certified check in the sum of 2 per cent of the amount of the bonds bid on, payable to the order of the state highway commissioner, will be required with each bid. The right is reserved to reject any or all bids.

The Lansing city council has been requested to withdraw the bond issue of $3,825,000 to be voted on this spring to provide equipment and build an electric light and power plant. The request was made by Otto Ziegler, president of the board of water and electric light commissioners, in view of the failure of the legislature to pass the bill making it legal for the city to bond for such a large amount.

Howe, Snow, Corrigan & Bertles are offering $50,000 first mortgage 5 per cent bonds of the Kanawha & West Virginia Railroad to yield about 7 per cent. These bonds mature July 1, 1955, and are represented as legal for Michigan savings banks. Principal and interest are guaranteed by the Kanawha & Michigan Railway Company, a subsidiary of the New York Central system.

George M. West & Company have $12,000 Highland Park, Mich., 4½ per cent school bonds maturing July 15, 1924, for sale on a basis to yield 5% per cent.

Bonbright & Company are offering $1,000,000 Denver Gas & Electric Company 25-year general mortgage 7½ per cent gold bonds due in March, 1946, at 96, to yield more than 7.85 per cent.

Detroit Stock Exchange

During the week of March 24 to 29, inclusive, 19,194 shares of listed stock and 85,833 shares of unlisted stock were traded in. Sales of Detroit Edison debentures due in 1940 were $3,000 at 79¾, and of Detroit Edison debentures due in 1931, the most recent issue, bearing 8 per cent, were $1,000 at 102. This latter figure is a high mark. Detroit & Port Huron Short Line 5s of 1950 are in somewhat better position, being quoted at 75 bid 75 asked, as compared with 62-68 last week. Detroit, Ypsilanti & Ann Arbor 6s due in 1924 are 79 bid, 85 asked, as compared with no bid and 100 asked last week. Eastern Michigan Edison 5s due in 1931 have advanced from 78 bid to 81 bid. Detroit & Suburban Gas 5s due in 1928 are up to 81 bid, as compared with 78 bid the previous week.

Liberty bonds have not changed appreciably since last week with the exception of the second 4¼s, which sold at $87.02, March 29, as compared with $86.82, March 22.

Paige-Detroit made a new high of 25¼ during the week under review, climbing from 23¾ a week ago, and Packard common made a new high of 13 over previous high of 12. Charcoal preferred dropped to 2¾ from 3, the last low for 1921, and National Grocer stepped down to 7⅝ and 8¾ the last previous low sale.

Bank stocks have been very inactive.

Digitized by Google

Capital Assets Sales Held Subject to Income Tax

The Government, by a decision of the Supreme Court this week, won one of the big suits growing out of the income tax laws. One hundred millions will be kept in the Treasury as a result. The court held constitutional a provision of the law providing that a profit derived from the sale of capital assets—stocks, bonds or other securities—is income and therefore taxable.

The court's decision was given in the appeal of David M. Goodrich from a ruling of the Internal Revenue Bureau assessing him on the increased value of stocks bought prior to 1913. Action of the revenue officials was affirmed by the Supreme Court.

Increase in the value of corporate bonds originally acquired and held for investment is taxable under the Revenue Act of 1916, the Supreme Court also ruled.

Profits realized from the sale of assets of a trust fund are taxable under income and excess profits law, the Court also held. The decision directly affects several cases not in litigation and indirectly affects thousands of trust funds. It was given in the appeal brought by the Merchants Loan & Trust Company as trustees of the estate of Arthur Ryerson, a citizen of Illinois.

Ryerson left as part of his estate capital stock in the firm of J. T. Ryerson & Sons, valued at $560,000. Four years after his death this stock was sold for $1,780,000, and the cash obtained was added to the estate. The Government imposed a tax of $311,000 on the increased value.

COMPANIES AND DEALERS APPROVED

The following companies and dealers were approved by the Michigan Securities Commission at its meetings February 3, 10 and 24:

Companies—Superior Combustion Engine Corp., Detroit; Northeast Lumber Co., Detroit; Lahontan Valley Sugar Co., Bay City; Grand River Washed Sand & Gravel Co., Ann Arbor; Belik Brothers, Inc., Detroit; Sterling Finance Corp. of Michigan, Flint; J. W. Bailey Co., Lansing; Hudson Mutual Oil Co., Adrian; West Indies Fruit Importing Co., Chicago; Great Lakes Finance Corp., Detroit; Dalrymen's Milk Co., Kalamazoo; Lincoln Housing Trust (certificates), St. Louis, Mo.; American Isle Stock Co. (bonds), Menominee; Zalantis Fixture Co., Detroit; Central & Gulf Co., Detroit; Franks Manufacturing Co., Grand Rapids; National Grocer Co., Detroit; Federal Petroleum Co., Birmingham; Hoskins Mfg. Co., Detroit; Harrison Corp., Detroit; Harlan Consolidated Coal Co., Lexington, Ky.; Mott Wheel Works (bonds), Jackson; Utah-Idaho Sugar Co. (bonds), Salt Lake City, Utah; Hinckley-Myers Co., Jackson; Morris & Co. (notes), Chicago, Ill.; Michigan Elevated Railway Co., Detroit; American Standard Tool Works, Inc., Detroit; Roto Pump Mfg. Co., Detroit; Gillette Safety Razor Co., Boston; Merco Engineering Co., Ann Arbor; Willite Road Construction Co. of Michigan, Detroit; Glen Lewis Avenue Realty Co., Toledo; Steel & Tube Co. of America (bonds), Chicago; Watling, Lerchen & Co., Detroit; Nathan P. Levin (bonds), Detroit; Monroe Foundry & Furnace Co., Monroe; Great Lakes Transportation Co., Ltd. (bonds), Midland, Canada; Deere & Company (notes), Moline, Ill.; Dionol Co. (certificates), Detroit; Vulcan Engineering Co., Jackson; Kenneth M. & Mary Atlee DeVos (bonds), Detroit; Barnsdall Corp. (bonds), New York; Frank J. Whitney (bonds), Detroit; Angle Steel Stool Co., Otsego; Great Lakes Engineering Works (bonds), River Rouge; Acme Industrial Supply Co., Chicago; Douglas Lake Hotel Association; Owosso Packing Co., Owosso; Universal Body Co., Jonesville; Wagner-White Co., Jackson; Mid-Co Petroleum Co. (bonds), Tulsa, Okla.

Dealers—Buxton, Foley & Co., Detroit; Simons, Agnew & Co., Detroit; G. H. Downes & M. A. Bonnefond, Grand Rapids; Thornburg, Robinson & Withey, Detroit; Howell & Wales, Detroit; W. A. Low & Co., Detroit; Sidney W. Keller, Saginaw; Wallace & Co., Detroit; E. H. Clarke & Co., Detroit; George C. Humston, Goodland, Ind.; Walter L. Williams, Grand Rapids; Wilson Investment Co., Grand Rapids.

The applications of the First Detroit Commercial Corporation and the Maurice Film Company, both of Detroit, were disapproved.

The Germain Manufacturing Company, Detroit, was suspended.

THE OLDEST HOUSE IN MICHIGAN

Sterling Bonds

We have a selected list of Sterling bonds which are exceptionally attractive. They will pay the purchaser an annual income of from 6% to 9% and show a profit at maturity as high as 100% on the money invested. The safety of these issues is unquestionable. We shall be glad to send particulars on request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Circuitous Routes Avoided

In this great field, embracing all of Michigan and much of the territory adjacent, the DIME SAVINGS BANK'S connections are complete and extensive. These enable it to avoid circuitous collection routes and also assures the most expeditious handling of other requirements which banks and business houses entrust to us.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit. Mich.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE . CLOSE MARCH 29th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd			100			6%		Quarterly	Jan. 3, 1921	1½%		1½%		$3,000,000
Am. Ld. & Trac. Co., com	102	104	100	111 - 99	204 - 55	6%	4%	Quarterly	Feb. 1, 1921	1½%	1¾%	1½%	1¾%	$23,271,800
Do., pfd			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$4,296,.00
Auto Body Co	*		10	8½ - 4½	12½ - 6½				Jan. 20, 1917		25%			$1,074,000
Do., pfd			10		10¼ - 10½	6%		Semi-Ann	Jan. 1, 1921	3%		3%		$527,.00
Bower Roller Bearing Co			10	17½ - 17	29½ - 16	*			July 1, 1920	10%				$630,000
Charcoal Iron Co. of America, com	2¼	2½	10	2¾ - 2	6¼ - 1¾				Apr. 1, 1919	2%				$2,880,350
Do., pfd	2¼	2½	10	3½ - 2¾	6¼ - 3½				July 1, 1919	3%				$5,217,250
Cities Service Co., com	249	251	100		358 - 250½	*6%		Monthly	Mar. 1, 1921	1½%	1¾%	1½%	3¾%	$42,977,866
Do., pfd		67½	100		70 - 65	6%		Monthly	Mar. 1, 1921	1½%		1½%		$78,625,499
Coahuila Lead & Zinc Co			10	16 - 12⅝	25 - 6				Nov. 15, 1917	5%				$500,000
Columbia Sugar	11½		10	14½ - 10¼	20¼ - 11½	12%		Quarterly	Jan. 2, 1921	3%		3%		$3,000,000
Commerce Motor Car Co			10	15½ - 8¼	15½ - 6¼				July 1, 1920	10%				$560,000
Com. Pw. Ry. & Light Co., com			100	16 - 12⅝	48¾ - 10½				Nov. 1, 1917	3%				$18,585,900
Do., pfd			100	35 - 24	38 - 23	16%		Quarterly	Feb. 1, 1921	4%		1½%		$17,833,000
Continental Motor Co., com	6¼	6½	10	7¾ - 5¼	14½ - 6¾				Dec. 20, 1920	1%				$7,295,369
Do., pfd., XD			10		10½ - 10	7%		Quarterly	Jan. 14, 1921	1¾%		1¾%		$1,181,700
Detroit Brass & Malleable Works			100	98 - 98	98 - 93	6%		Monthly	Mar. 1, 1921	1½%		1½%		
Detroit & Cleveland Navigation Co	72	75½	50	75¼ - 71	100 - 67	8%		Quarterly	Feb. 1, 1921	2%		2½%		$6,037,500
Detroit Creamery Co	21	22	10	23¾ - 22¼	30¾ - 16	8%		Quarterly	Dec. 24, 1920	2%				$1,400,000
Detroit Edison Co., XD	91½	91¾	100	98 - 92½	114 - 92½	6%		Quarterly	Jan. 15, 1921	2%		2%		$27,855,200
Detroit Fished			100			8%		Quarterly	Mar. 1, 1921	2%				$15,000,000
Edmunds & Jones, com		14¾	None	14½ - 9¼	34 - 9¼	$2.00			Jan. 1, 1921		50c			$ 40,000 shs
Do., pfd			100		78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$ 843,200
Federal Truck	21	23	10	23½ - 18	82 - 16¾				Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	277	280	100	296 - 217	405 - 216	Varies		As Dec'd	Jan. 15, 1920	10%				$7,000,000
General Alum & Br. Mfg. Co., com			10	13⅝ - 10⅜	28 - 11	Varies		As Dec'd	Oct. 1, 1920		5%			$1,962,750
General Motors	13½	14	10	16 - 12¾	39¾ - 11⅝	$1.00		Quarterly	Feb. 1, 1921	25c		25c		20,463,.00 shs
Goddehus Sugar, com			None		59¾ - 39½									70,000 shs.
Do., pfd			100			7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$5,500,000
Hanes Furnace, com		27	10	26 - 25										$1,985,000
Do., pfd	XD		10			2%		Quarterly	Mar 15, 1921	2%		2%		$250,000
Hall Lamp Co			10	13 - 12¾	32½ - 16	Varies		As Dec'd	Dec 24, 1920	5%				$750,000
Hayes Mfg. Co., com	3½	3¾	10	3¾ - 2¾	8½ - 2¾	Varies		As Dec'd	Feb 15, 1921	1½%				$1,500,000
Holland-St. Louis Sugar Co			10	10 - 7	19½ - 7¾				Oct 15, 1920	6%				$2,000,000
Iron River Mining Co	40	60	20		50 - 30				Dec 24, 1914	10c				$2,500,000
K. B. Kresge, com	134	140	100	96½ - 90¾	151 -100	6%		Semi-Ann	Jan 2, 1921	3%		3%		$16,000,000
Do., pfd			100			6%		Quarterly	Jan 2, 1921	1½%		1½%		$2,000,000
Linderman Steel, com			10		24½ - 13¼	6%		Quarterly	Jan 2, 1921	1½%		1½%		$1,968,000
Lincoln Motors, Class A	18½	19¼	50	21½ - 17½	50½ - 18½				July 30, 1920	$1.25				$8,000,000
Negaunee Crude Rubber Co			10	6¼ - 6¼	13¾ -				May 1, 1920	5%				$750,000
Michigan Drop Forge, com			None		50 - 38¾	$3.00			May 1, 1921	25c		75c		112,500 shs.
Do., pfd			100		96 - 90	7%		Quarterly	Jan. 1, 1921	1¾%		1¾%		$250,000
Michigan Stamping Co., com	17½	18½	10	18½ - 17½	30 - 16½	9%		Monthly	Mar. 25, 1921	1½%		3¾%		$1,300,000
Michigan Sugar Co., com	8	9	10	9 - 6¼	12¾ - 7½	4%		Quarterly	Jan. 1, 1921	1%		1%		$7,421,.00
Do., pfd			10	8¾ - 8	9¾ - 9¾	8%		Quarterly	Dec. 15 1920	1½%				$3,703,500
Midwest-Detroit Theater Co	16	19	10		21 - 16¾	*10%		Quarterly	Jan 10, 1921	4%		4%		$350,000
Motor Products			None	43 - 37¼	60¾ - 37¼				Feb. 2, 1921	$1.25		$1.25		1 100 0.00 shs
Motor Wheel	97½	103½	10	113½ - 84½	133½ - 83½	*8%		Quarterly	Mar 21, 1921	2%				$4,700,000
Murray Mfg			10	33 - 33					Oct. 1 1920	1%		3%		$733,450
National Grocer Co		75	100	95½ - 75	95½ - 75	*8%		Quarterly	Jan. 1, 1921	2%		2%		$2,000,000
Do., pfd			100		157 - 90	8%		Semi-Ann	Jan 2, 1921	3%		3%		$1,500,000
Chas F. Noble Oil & Gas Co., pfd	112	115	100	1 26-1 00	2 00-1 15	8%		Quarterly	Jan 31, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com	11½	12½	10	13 - 9¾	28½ - 9½				Oct 31, 1920	2½%				$11,883,100
Do., pfd	XD	74½	100	79 - 69¾	99 - 69	7%		Quarterly	Mar 1, 1921	1¾%		1¾%		$15,223,500
Paige-Detroit Motor Car Co		21½	22½	10	23½ - 12	45½ - 12			Monthly	Dec 10, 1920	1%			$2,000,000
Parke, Davis & Co		89	90	25	98¾ - 89	119½ - 95	*16%		Jan 3, 1921	4%		8%		$11,841,.98
Penberthy Injector, pfd			100			8%			Jan 1, 1921	2%		2%		$500,000
Roo Motor Co		21¼	22	10	21¼ - 17½	36½ - 16¾	10%		Jan 1, 1921	2½%		2½%		$6,937,200
Scotten-Dillon Co		18¾	18¾	10	21 - 18½	35 - 20	8%		Jan 3, 1921	2%	50%	2%	50%	$1,500,000
Timken Axle, com., XD		32	34	10	34¾ - 26½	*8½ - 26	12%		Bi-Month	Jan 15, 1921	2%			$3,000,000
Do., pfd			100			8%				Jan 1, 1921	2%	1¾%		$5,000,000
Tran-Con Steel Co., com., XD			10	28⅜ - 27⅜	29½ - 29¼	16%		Quarterly	Jan 15, 1921	4%		4%		$1,450,250
Do., pfd			100		97¾ - 97¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,652,200
U. S. Radiator, com			100		31½ - 20									$4,000,000
Do., pfd		90	100		93¾ - 80	7%			Jan. 25, 1921	1¾%		1¾%		$2,900,000
Waring Hat Co., com			None											
Do., pfd			100			8%		Quarterly	Jan. 1, 1921	2%		2%		
Western Knitting Mills	11½	13	None	11 - 8¼	30¾ - 8¼				Nov 25, 1920	50c				$ 140,650 shs
White Star Line			50		53½ - 37½				Aug. 25, 1920	3½%				$750,000
Wolverine Portland Cement Co			10		55¾ - 23½				Dec 15, 1917	1½				$1,000,000

Quotations show foreign equivalent of $1 in dollars or cents

*(Mi 900-570) new 6½% 27 $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend ‡Scrip § Book value, $959,409, Ed. & J. ¶ Book value, $3,219,327, Goddehus. Book value, $2,377,604.00. Western Knitting Mills. ‖ Book value $5,094,450, Motor Products. ¶Old ††Taken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, Feb. 2, 1921 1921	Mar. 30, 1921
Canada			$0.8378
London	4.8665	$3.8278 $3.8500	3.9125
Switzerland	.1930	.1529 .1642	.1724
Paris	.1930	.0599 .0706	.0625
Belgium	.1930	.0625 .0742	.0722
Holland	.40196	.3162 .3375	.3440
Italy	.1930	.02165 .0266	.0491
Greece	.1930	.0263 .0235	.0245
Spain	.1930	.1328 .1392	.1398
Vienna	.20263	.0023 .0023	.0026
Berlin	.2382	.01315 .0158	.1585
Denmark	.26799	.1505 .1910	.1755
Norway	.2667	.1585 .1860	.1805
Sweden	.2680	.2015 .2190	.2320

Liberty Bond Range

LIBERTY BONDS	Mar. 28, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
Closing New York Bid Prices								
U. S. Liberty 3½s	$0.08	$8.50	90.00	91.06	99.20	99.76	99.86	98.84
U. S. Liberty 1st 4s	87.16	86.50	85.22	85.60	93.00	94.90	95.00	94.12
U. S. Liberty 2nd 4s	87.04	86.30	84.10	85.00	91.58	92.84	92.04	84.10
U. S. Liberty 1st 4½s	87.50	86.35	85.50	85.18	93.46	95.14	96.50	....
U. S. Liberty 2nd 4½s	87.02	86.20	84.34	85.00	93.20	94.06	95.70	....
U. S. Liberty 3rd 4½s	90.36	90.04	87.20	86.22	91.68	94.10	94.44	....
U. S. Liberty 4th 4½s	87.18	86.46	84.86	85.56	99.75	100.10	....	....
Victory Bonds, 4¾s	97.60	96.48	94.90	98.50	94.00	95.08	95.32	96.32

Digitized by Google

Current Investment Offerings

	Rate	Maturity	Price Yield
A. B. LEACH & CO., DETROIT			
Cincinnati Gas & Elec. 1st mtge.	5	4-1-39	84.00 6.10
Columbia Gas & Elec. 1st mtge.	5	1-1-27	89.00 9.00
Virginian Ry. Co. 1st & Col. Trust mtge.	5	12-1-42	75.00 7.90
United Fuel Gas Co. Series A	5	1-1-36	90.00 7.10
Ohio Power Co. 1st & ref. mtge.	7	1-1-51	95.28 7.40
Pub. Service Co. of N. Ind. conv.	7.50	3-1-39	99.00 8.10
FENTON, DAVIS & BOYLE, DETROIT			
Chicago & N. W. Ry.	6.20	2-1-29	.... 8.53
L. & N. Ry. Equip. Tr.	4.50	Serial	.... 6.00
Prov. of Ontario	4.50	5-1-25	.... 7.28
Empire Dist. Elec. Co.	5.00	11-1-49	.... 5.00
Oklahoma Gas & Elec.	7.50	2-1-41	.... 8.00
Calco Chemical Co.	6.00	10-1-40	.... 8.20
PAINE, WEBBER & CO., DETROIT			
L. I. R. R. Equipment	5.00	8-1-22	99.00 6.90
Merchants Heat & Light (Indianapolis)	7.50	2-1-38	99.67 8.00
Hayes-Ionia Co. (Mich.)	6.00	8-1-27	87.25 8.50
Sam. Sattovsky	6.00	1926	.... 8.00
Morris Schnabel	6.00	1924	.... 8.00
HALSEY, STUART & CO., DETROIT			
Det. City Gas Co. gen. mtge.	5.00	7-1-28	94.00 7.70
Joint Stock Land Bk. Bonds	5.00	Varies	94.00 9.80
Pub. Service Co. of N. Ill., conv. deb.	7.50	3-1-35	95.00 8.10
Vt. Hydro-Elect. Co. 1st mtge. bonds	6.00	10-1-29	86.00 8.30
So. Ind. Rural Credit	5.50	1-15-41	100.50 5.50
San Paulo, Brazil	8.00	1-1-36	97.50 8.47

TIMKEN-DETROIT AXLE STATEMENT

ASSETS

	Dec. 31, 1920	Dec. 31, 1919
Current assets—		
Cash	$ 671,150.88	$ 1,459,728.46
Customers' notes	29,371.86	26,121.88
Customers' accounts, less allowances	718,189.80	2,919,156.77
U. S. securities and call loans	.....	1,866,920.00
Inventories, cost or market	10,982,521.29	10,214,203.22
	$12,386,849.91	$16,392,730.25
Other assets—		
Sundry securities	$ 234,083.47	$ 111,071.47
Miscellaneous notes and accounts	47,817.12	60,999.54
Unpaid emp. stock subscribed	320,206.32	427,689.57
	$ 601,903.91	$ 600,049.98
Land, buildings, machinery, equipment	$ 8,857,282.58	$ 9,384,668.82
Prepaid expenses, etc.	198,768.88	319,700.45
Good will and patents	1.00	1.00
Total assets	$21,494,883.39	$22,897,210.64
LIABILITIES		
Current liabilities—		
Bank loans	$ 8,000,000.00	....
Accounts payable	387,480.15	$ 2,214,369.19
Payroll's	71,186.65	.....
Accrued dividends and expenses	80,572.78	327,949.89
Estimated Federal tax	79,581.25	1,989,414.38
	$ 8,574,801.28	$ 4,528,823.26
Reserve for contingencies	$ 100,000.00	.....
Preferred stock	4,975,000.00	$ 5,000,000.00
Common stock	7,878,460.06	7,983,000.00
Surplus	9,866,662.16	10,175,579.72
Total liabilities	$21,494,883.39	$22,897,212.64

Changes in Surplus, 1920

Balance Jan. 1, 1920	$10,175,579.72
Plus adjustments	80,829.57
Plus net profit for year	712,506.87
	$10,858,010.16
Less dividends	1,091,348.00
Balance Dec. 31, 1920	$ 9,866,662.16

Note—Contingent liability on notes and acceptances discounted, $789,884.25.

Price Range Detroit Bank Stocks

Detroit Stock Exchange

Name	Range 1921 High	Low	Range 1920 High	Low	Mar. 29, '21 Bid	Ask
American State	221	215	226	200	*221	....
Detroit Savings	260	258	259	250	*260	....
Dime Savings	258	258	259	258	*258	....
First and Old Detroit Nat'l	273	271	278	268	*273	....
First State	....	....	....	....	*200	....
Highland Park State	260	260	298	295	*260	....
Merchants National	149	149	163	142	149	....
Nat'l Bank of Commerce	210	210	210	195	*210	....
Peninsular State	....	....	220	215	*220	....
Security Savings	360	355	353	345	*355	....
United Savings	208	208	215	200	*208	....
Wayne County Home	....	....	347	306	347	....
American Loan and Trust	....	....	155	155	*155	127
Bankers Trust	....	....	....	....	....	....
Guaranty Trust	....	....	148	145	1	160
Detroit Trust	295	295	....	....	*295	300
Security Trust	....	....	....	....	1200	....
Union Trust	180	180	197	185	*180	190
Commonwealth-Federal	....	....	130	....	105	107
Bank of Detroit	....	....	....	....	1102	200
Continental Bank	....	....	....	....	1125	....

*Last Sale.
†Nominal Quotation.

Cleveland Stocks

	Bid	Asked
March 29, close:		
American Multigraph	....	20
Dew Chemical	....	200
Firestone Tire & Rubber	70	90
Do, preferred	84	90
Fisher Closed Body	17	18
Do, preferred	89	97
Goodyear Tire & Rubber	13	14
Do, preferred	21	32
Grant Motor	2	4
Interlake Steamship	190	210
Jordan Motor	....	19
Miller Rubber	64	68
Murray Ohio	....	9
National Acme	34	38
Paragon Refining	22	23
Peerless Motor	25½	27½
Prod. & Refg. Corp	4½	5
Do, preferred	7	7½
Portage Rubber	18	20
Do, preferred	20	24
Standard Parts	1	2
Do, preferred	3	4
Stearns Motor	25	27
Victor Rubber	30	40
White Motor	40	41
Youngstown Sheet & Tube	64	69
Do, preferred	....	102

Quotes by Otis & Co.

Detroit Listed Bonds

Name	Mar. 29, 1921 Bid	Ask	Last Sale
Consp. Pow. Co.—1st	81	....	81
Detroit & Flint—5s, 1922	97½	98½	97½
Det. Ft. W. & B. I.—5s, 1927	89½	89	....
D., M. & T. Short Line—5s, 1932	80	81	....
Det. & Northw'n—4½s, 1911	82	99	82
Detroit Edison 1st Ry.—5s, 1922	99	99½	....
Detroit & Pontiac—4½s, 1928	84	....	....
Det. Ft. Huron & L.—5s, 1950	95	....	....
Detroit Railway—5s, 1924	78	80	....
Det., Ypsi. & A.—5s, 1924	79	85	....
D. Y. & A. A., Jackson—5s, 1926	25½	....	....
Det. United Ry.—4½s, 1932	60	68	....
Detroit Ed. Co.—5s, 1933	87	89½	....
D. Ed. Co.—1st & ref. 5s, 1940	78½	79½	....
East Mich. Edison—5s, 1931	81	....	....
Detroit Edison Deb. 7s, 1938	99½	88	....
Detroit Edison 7s, 1929	96½	96½	96½
Detroit Edison deb. 7s, 1940	95½	96½	94½
Detroit Edison deb. 5s, 1931–1941	....	....	102
D. C. Gas Co., C. M. & St. P. 5s	92	93	93½
D. C. Gas Co., P. L.—5s, 1928	91	99	....
Detroit & Sub. Gas Co.—5s, 1933	94	....	....
Mich. State Tel. Co.—5s, 1924	87	....	....
Tol., Peoria & Northw'n—1926	....	....	....
Wyan. & Det. River—5s, 1918	....	....	....
Ry.-Prod. Coke Corp.—5s, 1934	....	....	....
Detroit Rock Salt 6s, 1932	....	....	....

Sales During Week

Det. Edison Deb., 1940, $2,000 at 79¾.
Det. Edison Debs., 1931, $1,000 at 102.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	....	6
Economy Baler Co. com	9	10½
King Trailer Co., pfd	....	15
Hoover Steel Ball, com	14½	15½
Mich. Milling Co., com	....	7½
Motor Products Co., com	42	44
Prod. Foundries, com	7½	8
C. A. Sauer Co.	25	30

Quotes by Langley, Hildner & Co., March 30.

Kalamazoo Stocks.

Paper Companies

	Bid	Ask
American Box Board, com	19	21
American Box Board, pfd	9½	10
Bardeen	....	19½
Bryant	19¼	....
Eddy, com	4½	5¼
Eddy, pfd	19	20
Hawthorne	11	12¾
Kalamazoo, new	30	35
Parchment, stock	12½	13½
Parchment, rights	....	1¾
King	13½	19½
Lee, units	125	130
Mac Sim Bar	12¾	14¼
Michigan	18	19
Monarch	13¾	14¼
Nay	15	16¾
Northern Michigan Pulp	100	125
Standard	19½	20½
Sutherland	10	12
Watarvliet	20	21
Western Board	20	21¼

Banks

First National	225	....
Home Savings	170	180
Kalamazoo City Savings	180	200
Kalamazoo National	190	192

Miscellaneous

Barley Motor, com	25	90
Parley Motor, pfd	....	85
Hayes Wheel	14	16
Kazoo Loose Leaf	13	19
Kazoo Corset	....	10¼
Utah-Idaho Sugar	8	8½
Kalamazoo Sanitary Mfg	....	10¾
Limousine Body	10	12

Quotes by Olmsted & Mulhall, March 29.

Lansing Stocks

	Bid	Asked
Auto Body Co.	4½	5½
Auto Body, pfd	....	7
Dupley Truck	6	8½
Bates & Edmonds Motor Co	....	15
Motor Wheel Corp	19	19¾
First Bond & Mortgage Co	....	10¾
Michigan Mortgage Co	3	10
Michigan Screw Co. (ex. stock div.)	28	28
Lansing Co	32	42
Reo Motor Car Co	25	28½
Federal Force Co	3¾	10½
Nove Electric	23	28

Quotes by G. M. Murchey & Co., March 29.

ANOTHER BANK FOR DETROIT

The Merchants & Mechanics State Bank is the latest prospective addition to the financial family of Detroit. This institution, which is in process of formation, is now building a handsome structure on Michigan avenue, near Junction. The creative energy behind the movement is Wayne C. Plummer, formerly assistant cashier of the Federal State Bank and later of the Commonwealth-Federal Savings Bank.

NOBLE EXPLAINS NOTE ISSUE

Charles F. Noble, president of the Charles F. Noble Oil & Gas Company, addressed a meeting of Detroit brokers last week at the Detroit Athletic Club, discussing the company's plans for issuing $3,000,000 of first mortgage, 10-year, 8 per cent bonds, the proceeds of which he says, are to be used in purchase of oil properties on which the company holds options. It is planned to retire the bonds $600,000 annually, beginning October 1, 1923.

BOND OFFERING

The city of Bad Axe, Michigan, will offer $60,000.00 of sewer, water works extension, highway improvement and drainage improvement bonds to the highest bidder at 7:30 p. m., April 18, 1921, at the council rooms. Sealed bids accompanied by a certified check for $500.00 will be received up to that time. The bond proceedings are approved by Miller, Canfield, Paddock & Perry, Bond Attorneys, Penobscot Bldg, Detroit. Bond circulars furnished on request. James A. Burgess, City Recorder.

Digitized by Google

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

W. J. PEOPLES & CO.
STOCKS
BONDS
FOREIGN
EXCHANGE
First Floor Penobscot Bldg. Phones Cherry 8640
We solicit your inquiries

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit.
W. K. Dunham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

FREE FACTORY SITES
At Harbor Springs, Michigan.
On Railroad and Water. Ideal Health Conditions and Pure Water. Write the Chamber of Commerce for Particulars.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Phone: 4483 Main 6602
680 Fort St., E. DETROIT

Detroit to Build This Year, But–

(*Continued from Page 4*)

of indebtedness and other tax-exempt securities into building channels.

This brief reference to tax exemption of profits accruing from building investments brings us to the third of the trinity of financial sources for building loans. Considerable private money finds its way into building activities through mortgage investment houses and individual loans to preferred creditors. Taxation is the main reason why more does not go into this channel.

Sometime ago a loan association operating in Michigan proposed to a number of Detroit capitalists that they invest from $25,000 to $50,000 in the association at 5 per cent interest so that there would be more money for home building. The proposal was treated coldly for the very reason that tax-exempt securities offered better investments. it was pointed out to these men that their aid would go a long way toward relieving the housing shortage, but apparently they were not interested in the home problem. Much more could be said regarding the financing problem, but it is the opinion of the writer that what has been said must show that the money phase of this subject is the most important, and its character militates against any possible "building boom."

The Other Side of the Picture

So far it may seem that we have been striking a rumor key in this discussion, but the scheme has been to produce the cloud in its darkest aspect before pointing out the silver lining.

In 1920 the total building program of Detroit, as represented by permits issued, called for an expenditure of $61,895,860 for new structures of all kinds. Of this amount, $25,837,130 was invested in construction of buildings either only for homes or having home facilities attached. This provided 5,826 homes in a city where the estimated need is 25,000. The building program for industrial purposes laid out for the year would have involved about $20,000,000, but in reality about $12,000,000 was done.

Judged by the 1920 schedule, there remains more construction work to be done than has been done in any year. It has been reported that soon there will be released $10,000,000 of construction work. This may or may not include the $8,000,000 left over from last year. When an investigator goes out to round up actual figures, he can have his choice of any number of estimates, but it is difficult to get an agreement, or proof to support any of the claims.

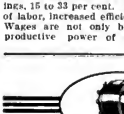
Of the $8,000,000 of industrial construction left over from last year, how much will be continued this year is an open question. One can say, for the sake of being optimistic, that all of it will be done, while another will ask why it is necessary in the face of present and future industrial activities. No one who has studied the industrial situation can disregard the fact that in a great many lines of industry the facilities expanded during and immediately after the war are more than adequate for any potential demand that may come with the revival of business. This being the case, how many plants will proceed to increase their floor space with no certainty of demand for more than present facilities can produce?

In a city like Detroit, industrial building continues year after year, even in such periods as we have with us now, but the kind of development we refer to is normal as judged by the mean of the building volume over a period of years—say 10 years. When one year's construction exceeds every other year, and any one year by a large margin, then the term "building boom" may be applied. The year 1920 started out to exceed 1919, but the collapse in the last few months brought it below 1919. All that can be looked for now is a gradual recovery, which will take five years, according to some builders.

Something Tangible Here

When we get into the home building phase of the problem we have something tangible and certain to deal with. Despite the exodus of the unemployed, there still remains a large percentage of the 25,000 homes as an imperative need. The cry has been: "Down with building costs!" And they have come down. Rough lumber has dropped from $75 to $45 a thousand feet. A review of the quotations of other materials shows from 35 to 45 per cent decreases. Labor has dropped. Plasterers and bricklayers were cut April 1 from $1.12½ to $1 an hour. Common labor is offered now at 40 cents an hour.

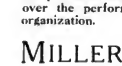
One builder estimated that a $20,000 house of last year could be duplicated this year for $17,000, and gave as an approximate decrease in the construction costs of all types of dwellings, 15 to 33 per cent. In considering the cost of labor, increased efficiency must be included. Wages are not only being lowered, but the productive power of labor has increased.



SIX feet of earth conceals the errors of many a physician. Several feet of masonry may hide the defective work of an electrical contractor.

No post-mortems need be held over the performances of this organization.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT



C. M. SMITH MANAGES BRANCH

The Peoples Savings Bank, Grand Rapids, which recently opened a branch in the building formerly occupied by the Farmers & Merchants Bank of Madison Square, has appointed C. M. Smith, a member of the bank's staff, as manager of the new office.

NEW PEOPLES STATE VAULTS

On Thursday, March 31, the Peoples State Bank, Detroit, opened to the public its largely increased safety deposit vaults, which are said to be the largest in the city.

A. A. McPherson is a new assistant cashier of the Bank of Detroit.

Digitized by Google

Naturally when materials cost less and labor costs less and is more efficient, that is the time to build. When building activities are lessened, then is the time to proceed with construction plans, for the reason that the pick of contracting ability is to be had and a higher quality of work is certain. Contractors have time and desire to give a greater value in attention to service than is possible with such competitive buying conditions as we have recently witnessed.

The tendency to think in extremes may lead many prospective builders to believe that by waiting a while prices of materials, labor and professional service will go "way down, but in so figuring they are not considering the position of Detroit in the galaxy of great cities. It is well to remember that Detroit today occupies third place in building; that it leads Philadelphia and is not far behind Chicago. It is recognized as one of the first large cities to show marked evidence of recovery from the general slump, and that despite the fact that it is largely a one-industry city. If a city with an industry that has received such a setback as the automotive business can start on the journey back to health, there is something beneath the surface of that city's economic life that is quenchless.

Railroad Rates a Factor

There is a large question of just how far the prices of any commodity can fall in view of the present railroad rates. Here we have a situation in which one bad condition gradually is being improved as another shows itself. The revival of industrial and commercial activities largely dependent upon revision of prices, wages, profits and production would be speeded up ordinarily because of the improvement in transportation and the plentiful supply of cars, but the cost of carrying all kinds of building materials will be far greater than ever before. Such reductions in the cost of production at the plant, and the resultant cut in prices, will be offset to a certain extent by the higher freight rates.

Here again Detroit occupies a favorable position, inasmuch as considerable building material is produced in the state, and while the freight rates are just as great here as elsewhere, the distances are not, and if there is any margin of saving Detroit can get it.

Referring again to materials prices, not all of them have shown marked decreases. Brick, for instance, is offered at $18 a thousand, lower than formerly, but not low enough, in the estimation of builders. Plumbing supplies show little or no decrease. Some electrical goods are cheaper. A real estate man calls attention to one improvement, which is the return to flat estimates after a long period of cost-plus figuring. If it is possible now to get a contractor to set a figure at which a building can be constructed, prospective builders will go ahead. With a cost-plus proposition staring him in the face the humble builder of a roof tree cannot be expected to sit in the game.

To sum up, then, the building industry has in its favor lower materials prices, lower labor costs with increased productive desire, the imperative need of more homes, some industrial building, the usual volume of repair and alteration work that comes every season, sources of supply near enough to offset to some extent the increased railroad rates, and a field of effort so large and so rich that, whereas financial limitations may affect a certain percentage of potential builders, there still remains a large class of prospects with the accumulations of a highly profitable two years, sufficient to provide a surplus for building.

But as to a building boom and another period of price-kiting—one is a state of mind; the other would be suicide.

Hudson has a new industry. It is the Southern Michigan Brass Foundding Company, capitalized at $15,000. The incorporators are Richard Allingham, William O'Brien and G. G. Taylor.

(*No. 4 of a Series of Examples*)

Is a Corporation Liable for Fraudulent Over-Issues of Stock?

Yes. A corporation is liable to a bona fide holder of forged certificates of stock, legal on their face, but fraudulently issued by an officer of the company acting as its Transfer Agent and who countersigned them in his official capacity after forging the signature of the President.

It is also liable when its Transfer Agent fraudulently issues stock without requiring the surrender of the old stock certificates.

We will be glad to explain the precautions we take as Transfer Agent to guard against fraud, mistake or any irregularity that might affect the validity of a transfer or result in loss to our principals.

SECURITY TRUST COMPANY
FORT AND GRISWOLD STS. CAPITAL AND SURPLUS $1,000,000.00 DETROIT

Is Your Money Efficient?

Mechanical efficiency is defined as the "ratio of energy-obtained to energy-exerted." Apply this definition to your investments. If the dollar you invest requires energy disproportionate to the money returned, your investment is inefficient. If you are receiving less than 6%, your investment mechanism needs lubrication. If you are striving for more, you are racing your motor.

Our First Mortgage Bonds offer a perfectly balanced ratio.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

C. C. COAL COKE OREY

1908-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

The Legislature As a Pawn in a Game

(*Continued from Page 4*)

the existing conditions, in freight charges or passenger fares, and under government operation. If that is the eventuality—forcing the railroads into the hands of the Government—either in freight charges and passenger fares, or perhaps partly in taxes to make up the deficits.

"I have before me the statement of the gross revenues, operating expenses and fixed charges of the principal lines operating in Michigan for the months of January and an estimate of what they will amount to in most cases for the month of February, which are taken, in the case of the former from the compilations for the Interstate Commerce Commission. These give us some idea of the precarious conditions the transportation lines have come into under the multiplicity of laws, national and state, national wage agreements, etc., at this time, when there is a decided recession from normal economic conditions. They are as follows:

Pere Marquette—January

Gross revenue	$ 2,494,553.72
Operating expenses, taxes, etc..	2,615,077.51
Deficit for January	$ 210,523.79

February

Estimated earnings	$ 2,186,556.00
Estimated expenses, taxes, etc...	2,760,000.00
Estimated deficit for February..	14,000.00

Grand Trunk—January

Gross revenue	$ 2,086,648.00
Operating expenses, taxes, etc..	2,529,007.02
Deficit for January	$ 442,361.02

February

Estimated earnings	$ 1,519,266.00
Estimated expenses, taxes, etc...	1,809,420.00
Estimated deficit for February..	$ 290,154.00

Detroit & Mackinac—January

Gross revenue	$ 133,929.87
Operating expenses, taxes, etc...	176,100.53
Deficit for January	$ 42,170.71

February

Estimated earnings	$ 130,000.00
Estimated expenses, taxes, etc...	167,000.00
Estimated deficit for February..	$ 37,000.00

Duluth, South Shore & Atlantic—January

Gross revenue	$ 352,938.97
Operating expenses, taxes, etc-..	488,968.10
Deficit for January	$ 136,123.13

February estimates are not available.

Minneapolis, St. Paul & Sault Ste. Marie—January

Gross revenue	$ 3,212,514.87
Operating expenses, taxes, etc...	4,187,023.94
Deficit for January	$ 574,614.57

February

Estimated earnings	$ 3,047,000.00
Estimated expenses, taxes, etc..	3,847,000.00
Estimated deficit for February	$ 800,000.00

Mineral Range—January

Gross revenue	$ 38,278.30
Operating expenses, taxes, etc...	69,070.26
Deficit for January	$ 30,791.90

Estimate for February is not available.

Chicago & Northwestern—January

Gross earnings	$11,789,895.98
Operating expenses, taxes, etc...	12,968,798.70
Deficit for January	$ 1,179,302.16

Estimate for February is not available.

Lake Superior & Ishpeming—January

Deficit for January	$ 53,258.16

Manistee, Marquette & Southeastern—January

Deficit for January	5,604 67

February estimates for the above two roads are not yet available. These roads are ore roads and their business is largely during navigation, so their winter operating ratios are necessarily out of balance with other railroads of the state at this season.

Ann Arbor—January

Gross revenue	$ 447,344.66
Operating expenses, taxes, etc.	457,996.56
Deficit for January	$10,651.90

February

Estimated deficit for February..... $10,000.00

Michigan Central—January

Deficit for January	$ 109,000.00
Estimated deficit for February..	$85,000.00

"I have the complete figures before me for the Pennsylvania and the New York Central Lines, but it is a known fact that both of these railways lost heavily in both January and February.

"Now, since it is seen that all of these railroads have lost heavily for several months, it can readily be appreciated that any adverse legislation such as is proposed will only serve to add further burdens, which in the end must mean receiverships or the taking over of the lines by the Government. If the taking of these lines into government control is the end and aim of the measures, why hide their real motive? The alternative is to come out in the open and allow the people of the United States to decide the issue whether government ownership is desired. Let us get a clear-cut pronouncement upon this question, if that is what is so heartily wanted in certain quarters.

"It seems to me, therefore, that the Michigan Legislature and many other of the state legislatures are being used as pawns in a great national chess game with government ownership as the goal."

STATE-WIDE AIR SERVICE

The Michigan Aero-Service Corporation, which was recently organized in Lansing to give state-wide commercial service, will start operations about May 1. The company has purchased 15 airplanes and eight of these have been shipped. The corporation is headed by Beirdt P. Ayres, Lansing, and, with headquarters in Lansing, branches have been established in Detroit, Jackson, Battle Creek and Muskegon. The corporation is the largest of its kind in the state and will handle passenger traffic, express service, aerial photography, advertising and stunt flying, and in addition will supervise a sales organization. Only pilots and mechanics of at least three years' service will be employed.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

STEEL STAMPINGS OUR SPECIALTY
STEEL STAMPING AND SHEET METAL PARTS FOR AUTOMOBILE AND OTHER USES
QUALITY AND SERVICE
STEEL FURNITURE CO., Grand Rapids, Mich.
Detroit Representative E. H. WELKER CO., INC. 222 W. Larned St. DETROIT

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

THE NATIONAL PARK BANK OF NEW YORK

A BANK for those who produce and distribute, and for banking houses engaged in financing the commercial life of the nation.



Established 1856

Safe Deposit Vaults

Financial Strength

When the Michigan Mutual started business in 1912, it had nothing to offer its prospective patrons but a sound insurance plan to supply compensation insurance at actual net cost.

Today it offers YOU that same sound plan, backed by resources of MORE THAN TWO MILLION DOLLARS to guarantee you perfect security.

The following figures show the company's growth in this vitally important element of financial strength:

ASSETS	
Dec. 31, 1912 -	$6,799
Dec. 31, 1913 -	$74,573
Dec. 31, 1924 -	$133.760
Dec. 31, 1915 -	$139,003
Dec. 31, 1916 -	$282,821
Dec. 31, 1917 -	$533,735
Dec. 31, 1918 -	$1,155,192
Dec. 31, 1919 -	$1,725,245
Dec. 31, 1920 -	$2,516,880

Write for "The Motive of the Mutual," a booklet giving full information about the company. A postal will do.

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit Michigan

New Corporations

FOR WEEK ENDED MARCH 26, 1921.

Colon Booster Corp., Colon; purchase and sale of real estate and improving village of Colon; D. L. Akey, Charles Maurer, J. A. Karchner, trustees, Colon ..... $

Dohany Drug Co., Detroit; to buy and sell drugs, toilet articles and conduct general drug business; Thomas T. E. Wood, 7441 Grand River ave.; W. James Dohany and Margaret E. Dohany, Detroit 7,000

People Finance Corp., Detroit; buying, selling and dealing in stocks as agents; to deal in bonds; Louis G. Burgess, 2667 Lothrop ave., Elizabeth R. Little, Detroit; Edward Wagner, Ann Arbor 10,000

Naumann-Routt Co., Detroit; to conduct general merchandise brokerage business; Herman C. and Arthur P. Naumann, 2215 Canton ave; Carl S. Routt, Detroit 20,000

Universal Beverage Corp, Detroit; to buy, manufacture, sell and distribute apple juice and all kinds of non-intoxicating soft drinks; Harry L. Montee, 4852 Seminole ave.; Philo D. Bates, J. Faye Scudder, Detroit..... 30,000

Standard Fiscal Agency, Grand Rapids; to deal in stocks, bonds and other securities as brokers or agents; Lewis A. Geistert, James C. Everett, Edward F. Perkins, Charles F. Hillicker, Grand Rapids..... 2,000

Kibbie Fruit Exchange, Kibbie, Van Buren county; buying, packing, selling and shipping of fruit and farm products; E. D. Lyman, C. W. Johnston, J. C. Johnston, Kibbie..... 15,000

Miller Auto Sales Co., Jackson; to buy and sell at wholesale and retail, new and second-hand automobiles and trucks, general garage business; Francis P. Miller, Margaret E. Miller, Frank A. Hall, Jackson..... 150,000

Brown-Graff Co., Grand Rapids; buying and selling at wholesale and retail waste materials of all kinds, including paper, rags, rubber, metals, etc.; Joe Brown, Grand Rapids; Eldore H. and Samuel L. Graff, Kalamazoo 75,000

Bangor Canning Co., Bangor; growing, canning and packing of fruits, vegetables and produce; marketing and selling of same; Dalton F. Carpp, Ruby Traxler Carpp, Millard F. Mosher, Bangor 150,000

Muskegon Hardware Co., Muskegon; buying at retail and wholesale of hardware sporting goods, automobile accessories, toys, etc.; Nicholas J. and Jessie Werkman, Christian A. Broek, Muskegon 12,000

United Development Co., Detroit; organization and development of plants fully equipped for wholesale and retail distribution of motor fuels, lubricants, etc.; Den G. McAfee, Fred S. Grimes, Harvey F. Johnson, Grand Rapids 25,000

Rural Sales Corp., Ionia; to distribute as agent manufactured goods or other commodities to consumers in rural districts; L. A. Winchester, Byron Center; H. D. Gwin, Lawrence; Harry L. Carr, Ionia..... 1,000

St. Clair Studios, Detroit; to conduct general photographic and development business; Carl R. Yatin, 1658 Buena Vista; M. W. McGee, Frank C. Sibley, Detroit 10,000

Dan Soli & Company, Ludington; to conduct business of buying and selling fuel; L. G. Johnsy, Daniel Soli, Marie A. Johnsy, Ludington..... 10,000

Hi-Brite Truss Co., Detroit; to design manufacture and deal in braces, trusses and instruments, appliances and supplies used by medical and surgical profession; John H. Pickering, Forest, Ont.; Robert R. Grant, 525 Linwood ave.; C. G. Todd, Detroit 10,000

Modern Picture Co., Inc., Detroit; to manufacture, sell and deal in hardware, plumbing and builders' supplies; David E. and Elsba Sundberg, 188 Cooper ave., Detroit; G. A. Hemple, Rochester 2,500

Great Lakes Lumber Co., St. Clair; to manufacture, buy, sell and deal in lumber, timber and all kinds of builders' supplies and coal; Pete Smith, Detroit; Ernest N. Laing, Hugh N. Hart, James E. Scott, St. Clair 25,000

Erickson Drug Co., Detroit; to maintain and operate drug stores and deal in drugs, medicines, soda water, ice cream, confections, cigars, etc.; Ralph C. Greisinger, 4071 Virginia Park; George G. Steeleman, Clarence L. Fox, Detroit; Edwin C. Erickson, Highland Park 25,000

Superior Spark Plug Co., Detroit; to manufacture and sell spark plugs, own real and personal property sufficient for purposes; George Hedrich, 1001 Bewick ave.; Ira J. Pettiford, % W. Laskalin, Detroit..... 25,000

(*Continued on* Page 34)



Purchasing Agents' Association of Detroit, is composed of men, big enough in vision to make a study of the guiding factors in their work.

Publicity Office 49 Garfield Building Glendale 3819

Digitized by Google

MEMBER A. S. M. E. CHERRY 3096 CADILLAC 5877 MEMBER A. S. T. M.

W. C. DU COMB, JR.

FROM STOCK

THE JOHNSON FRICTION CLUTCH

SINGLE AND DOUBLE



COUNTERSHAFT EQUIPPED WITH THREE JOHNSON CLUTCHES

THE BEST CLUTCH ON THE MARKET FOR LIGHT POWER

SMALL—COMPACT—NEAT—ROUND—SMOOTH—FEW PARTS—POWERFUL—BALANCED—ADJUSTABLE

USED ON ALL KINDS OF MACHINERY—LINE SHAFTING—COUNTERSHAFTS

137-141 WOODBRIDGE ST. EAST DETROIT, MICH.

STEWART
INBUILT OVEN FURNACES



Embody the latest and best in this class of equipment. Ask for Special Bulletin No. 75 describing not only the above but also the entire Stewart line of *Heat Treating Equipment*.

McMULLEN MACHINERY COMPANY

"Everything in Shop Equipment"

66 Ionia Avenue S. W.

GRAND RAPIDS - - MICHIGAN



U. S. Rubber Co. plant, Indianapolis

The complete solution

of your problems is covered in Lockwood, Greene & Co. service.

Plant layout, supervision of construction, inspection, auditing, appraisals and reports.

LOCKWOOD, GREENE & CO.

1227 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK

CLEVELAND CHARLOTTE PHILADELPHIA

LOCKWOOD, GREENE & CO. OF CANADA, LTD., 285 Beaver Hall Hill, MONTREAL, P. Q.

CONSULTING ENGINEERS, C. Avenue de l'Opéra, PARIS, FRANCE

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL — Hot and Cold Rolled

SHEETS — Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA, District Sales Manager

DETROIT OFFICES, 523-524 Ford Building

PHONE, Cherry 1354

Stampings and Plumbers Supplies

PROMPT SHIPMENTS — ACCURACY — RELIABILITY

The Bettcher Stamping & Mfg. Co.

CLEVELAND, OHIO

Detroit Office:

The H. B. Kendal Company

1404-5 Real Estate Exchange Building

L-XX

HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

Detroit, Mich.

Digitized by Google

NOT AN AGENT BUT A MANUFACTURER

I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.

TELEPHONE MAIN 845

MAY I SERVE YOU?

CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES

Production Machine Work

PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS

SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES

CAPABLE OF PRODUCING $500,000.00 WORTH OF WORK PER MONTH

LOCATED IN U. S. AND CANADA

METALLURGISTS—



Rotary Continuous Heat-Treating Furnaces.
Used in Quantity Production of Pressed Steel Parts.

W. S. ROCKWELL COMPANY
Furnace Engineers and Contractors
50 Church St. (Hudson Terminal B'dg.), New York.

We Make Industrial Heating Furnaces for Every Requirement.
"FURNACE AND FUEL TO SUIT CONDITIONS"
Branches: Chicago Cleveland Detroit
Ellsworth Bldg. Hickox Bldg. Majestic Bldg.

The following advantages are secured by the Continuous Method of Heat-Treatment:

Bringing material up gradually to the final temperature.

Utilizing heat in spent gases to pre-heat material.

Exposing each piece to heat in same manner, to same temperature, for same length of time.

Uniformity not only of the individual pieces but of the sections thereof as compared with the corresponding sections of other pieces.

Do these advantages appeal to you?

Write nearest branch for Bulletin 217-B and learn whether the continuous method is adaptable to your product and manufacturing conditions.

W. S. ROCKWELL CO. CONSTRUCTION ENGINEERS NEW YORK

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

O'Connor & Smith, Detroit; to engage in public accounting and auditing in all branches, conduct general insurance agency business; Eugene A. O'Connor, 7309 Harper ave.; William L. Smith, Raymond H. Roach, Detroit Motor Owners Service, Inc., Detroit; to buy, sell and otherwise deal in automobile accessories and conduct automobile garages and supply stations; Orville E. Putnam, 2393 Hazelwood ave.; Kenneth L. McCuaig; Lorne A. Putnam, Detroit... 2,000

Saginaw Clay Products Co., operations in Paines, Jamas township, Saginaw county; office in Saginaw; manufacture and sale at wholesale and retail of clay products; F. J. Lohman, Henry W. F. Goetz, J. Fred Goetz, Saginaw 50,000

Gunsberg Packing Co., Inc., Detroit; buying, selling and killing of live stock and packing of meats, foodstuffs and provisions; Louis, Ignatz and Paul Gunsberg, 2074 Virginia Park, Detroit 750,000

Thomas W. Parker Co., Grand Rapids; to manufacture, buy, sell and market saws, knives and mill supplies; Alice Van Ewen, P. A., Hackett, Thomas W. Parker, Grand Rapids... 50,000

Overbrook Co., township of Clinton and Harrison, and Detroit; to develop and operate well or spring business for table, domestic, medicinal and commercial purposes; Barker F. Claiu, 111 Forest ave., E.; Milton D. Goff, Harry A. Pratt, Detroit..... 50,000

West Michigan Oil Co., Saugatuck, Allegan county; wholesale and retail dealer in gasoline, kerosene and other petroleum products; Melbourne R. Powers, Lemuel H. Brady, William R. Takken, Saugatuck 10,000

Dominion Construction Co., Inc., Niles, Berrien county; to conduct general contracting and constructing business; George S. Deeks, Toronto, Can.; Howard Streeter, Clara E. Schwarm, Detroit 150,000

Riverside Lumber Co., Grand Rapids; buying and selling of lumber and building materials and forest products at retail; Joseph and Adrian Noordheck, Grand Rapids..... 50,000

Norway Garage, Inc., Norway, Dickinson county; general automobile garage business, automobile sales and service station; Richard Simon, Norway; Edward G. and E. S. Klingsford, Iron Mountain..... 20,000

Benjamin Bons Clothing Co., Benton Harbor; carrying on retail clothing business; Hyman, Henry and Alfred Benjamin, Benton Harbor..... 25,000

Service Construction Co., Detroit; real estate; George A. Drummond, 1081 Sheridan ave.; Maurice D. Smilansky, Isaiah J. Woods, Detroit..... 100,000

Cadillac Square Hotel Co., Detroit; to operate hotels, restaurants, apartment houses, etc.; William B. Thompson, William Grover Thompson, 4223 Trumbull ave.; John J. Barlum, Detroit 30,000

CHANGE OF NAME.

Scandinavian Hospital Co. (name changed to Westerlin Hospital), from Mountain ..... $ 16,000

CHANGE OF OFFICE.

Wallin Leather Co., office moved from Grand Rapids to Comstock Park.... 150,000

Michigan Bean Co., office moved from Port Huron to Saginaw 100,000

INCREASES.

State Savings Bank of Nashville, Nashville, from $25,000 to..... 30,000

Bush & Lane Piano Co. (F.), Chicago, Ill., Holland, from $700,000 to..... 1,000,000

Harriman Hatter Co., Harriman, from $15,000 to 30,000

Litscher Lite Corp. (F.) (D.), Grand Rapids, 10,000 shs. com. n. p. v. and 5,000 shs. pref. 6%, each, to 50,000 shs. com. n. p. v. and 5,000 shs. pref. $100 each.

D. A. C. Garage, Detroit, from $30,000 to 100,000

Auto-Body Co., Lansing, from $2,200,000 to 2,800,000

Keratoo Composition Products Co., Grand Rapids, from $2,000 to..... 10,000

Peerless Stamping Corp., Ypsilanti, from $10,000 to 60,000

Windsor Upholstering Co., Grand Rapids, from $16,000 to 50,000

Bloomfield Hills Land Co., Pontiac, from $50,000 to 75,000

Huron Clay Products Co., Croswell, from $50,000 to 70,000

Kriegkoff Co., Detroit, from $25,000 to 100,000

DECREASES.

Michigan Acceptance Corp., Detroit, from $100,000 to 50,000

Economy Gage & Mfg. Co., Detroit, from $100,000 to 40,000

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

GENERAL LIBRARY
APR - 9 1921
UNIV. OF MICH.



Five Dollars a Year

Detroit's Future Money Supply
Research, the University and Industry
The Real Battle Is Yet to Come
How Detroit Is Putting On Men

(Financial Section Starts on Page 26)

DETROIT, APRIL 9, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 15*

HOOVER STEEL BALLS





INTERNAL transportation gains in speed and flexibility when bearings built on Hoover balls are used on shafts and axles to defeat the effects of friction.

Polished to a flawless gleaming finish and each an absolutely perfect sphere, Hoover balls permit each precious ounce of power to function gainfully. Then, too, their life is limitless, for after being hardened the Hoover process, they exhibit a rare ability to withstand the grueling test of heavy load combined with unexpected thrusts and sudden shocks.

HOOVER STEEL BALL CO.
ANN ARBOR, MICH.

Branch Offices:
Chicago Cleveland New York San Francisco
Southern Representatives
Sanford Brothers, Chattanooga, Tenn.



Hoover balls are counted mechanically to prevent their highly polished surfaces from becoming rusted by being handled. Each stroke of the counting plate withdraws 100 balls from the hopper. Subsequently the balls are packed in non-oxide grease and securely boxed for shipment. (S)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Detroit's Future Money Supply

Why Funds Are Not Flowing Into This Metropolis In As Great Volume As They Should; the Remedy

By PHIL S. HANNA

[*Financial Editor, Michigan Manufacturer and Financial Record*]

NOTWITHSTANDING the potency of things in Detroit generally and the fact that millions are being spent by many firms and institutions and individuals, the so-called "open market" for money for building houses and like private enterprises is going to need attention. Every large country and every new city during its development period has had to rely on outside sources of money supply. Now of course Detroit is far from being a new city in point of years, but it is new industrially and it will be some years, no doubt, before the savings and investments of the home people are sufficient to furnish capital for the entire needs of the city.

Aside from capital raised by the municipality and corporations privately, all during the war and for several years prior thereto there was a considerable influx of new money into Detroit. Some of it came in the pockets of laborers, some was left by tourists who were impressed with the speculative possibilities of Detroit real estate, but of course the largest source of saved-up funds was brought along by newcomers in the form of transferred savings deposits from their home banks. And to these funds were added the normal savings of thousands who were profitably employed, so that the money supply for the city kept pace with the demand until inflation set in along in 1919, and the city, through the medium of the Reserve banks, borrowed heavily.

Although the figures have not been made public, well informed bankers know that the banks in the district served by the Detroit branch of the Federal Reserve Bank of Chicago have been borrowing more, for some time, than their quota of Reserve Bank credit as based on the reserves which banks in this district keep on deposit with the Reserve institution.

Slow Postal Service a Handicap

Now, the point needing emphasis is this. Detroit as a bank reserve city occupies a peculiar position. In many respects the position is very advantageous and again there are drawbacks in the way of obtaining as great a proportion of the bank reserve deposits of the surrounding country as Cleveland, Pittsburgh, Chicago and other such reserve cities control in their districts. Cleveland, for instance, has for years had the benefit of an enormous inflow of outside money, due to the "bank by mail" activities of what used to be her largest bank, now consolidated into the Union Trust Company. Furthermore, Cleveland draws intensively east, west and south for more than a hundred miles on the reserves of the country banks in that semi-circle. Detroit, unfortunately, has no such unmolested advantage. Toledo cuts into the country bank business on the southwest and it draws business away from Detroit, starting at a line drawn from Monroe westerly to the Ann Arbor railroad. Owing to the directness of postal service on the Ann Arbor, many towns up in central Michigan make the Toledo banks their main correspondents. In the southwestern, western and northwestern part of the state the railroad connections with Chicago draw much of the bank business to the Windy City, and in the Upper Peninsula the business is very largely shared among Chicago, Duluth, Minneapolis and Milwaukee.

We don't often hear in mind the important part which railroad service plays in determining the flow of country bank money to reserve cities. Along the Grand Trunk main line Chicago pulls heavily as far east as Port Huron because of quick overnight service in mail delivery and equal advantages in currency delivery. Flint is linked closely to Detroit because of long standing personal relations between the bankers in the Vehicle City and Detroit, but nevertheless if Detroit had service on its radiating railroad lines equal to that given by Chicago much business now going to the latter would come here.

The writer had a close-up of the service between Detroit and Mount Clemens about six months ago which shows the great disadvantage Detroit is under in this matter. A Detroit bank habitually sent its cash letters to Mount Clemens, posting them about 6 p. m., but the Mount Clemens bank seldom received this mail until too late for the following day's clearings—often it was afternoon when the letter arrived in Mount Clemens—and as a result the checks on the other Mount Clemens banks had to be held over and presented the third day. Returns were thus mailed back to Detroit the third but often were not delivered in Detroit until late the fourth day—so late, in fact, that occasionally "N. G." checks returned by Mount Clemens were not delivered to the indorsers until the fifth day. And Mount Clemens is only twenty miles from Detroit. Detroit bankers will testify to many similar cases on other points in Michigan. Similar cash letters are commonly sent from Chicago to points in Michigan, and vice versa, in less time than from Detroit. Port Huron, 336 miles from Chicago, has an overnight service which enables the Port Huron banks to get credit the second day for items sent to Chicago, and reversely Chicago banks get returns the third day from items sent to Port Huron. This puts Chicago on a par with Detroit, which is only 58 miles away. This is true of Flint, which is 270 miles from Chicago, and Lansing and Grand Rapids.

The table given below shows several points in Michigan which geographically and otherwise are naturally within Detroit territory, but many of which, by reason of quicker and better postal service, give the bulk of their bank business to Chicago and Toledo, which are further from them than Detroit.

City	Dist. from Detroit (Shortest R. R. route)	Dist. from Chicago (Shortest R. R. route)	Dist. from Toledo (Shortest R. R. route)
Port Huron	58 miles	336 miles	... miles
Flint	74 "	270 "	... "
Lansing	87 "	231 "	... "
Saginaw	104 "	310 "	... "
Bay City	121 "	328 "	... "
Grand Rapids	153 "	177 "	... "
Kalamazoo	143 "	141 "	... "
Hillsdale	103 "	178 "	88 "
Adrian	68 "	211 "	28 "
Hudson	50 "	194 "	50 "
Mt. Pleasant	126 "	... "	154 "
Ashley	100 "	... "	128 "
Alma	117 "	... "	145 "
Sturgis	149 "	133 "	113 "
Battle Creek	120 "	164 "	... "
Jackson	74 "	109 "	... "

The amount of up-state bank reserves which ought to be deposited in Detroit banks by reason of location, but which is going to Chicago and Toledo, is difficult to figure closely, but one may draw this comparison with Cleveland, which is not as large as Detroit in population, but which has about $100,000,000 more in bank deposits.

We have therefore it seems two fairly acceptable reasons why Detroit is going to need to look outside for money. Just at present the foreigners going to Europe, and the strodus of some of the shop workers, is drawing down savings deposits, but this is a perfectly normal proceeding, which eventually will be offset by the deposits of the newcomers and the increased savings of those now employed.

Some Other Factors

There are other factors which play a more or less important part in the determination of country bank depositaries. For instance, Cleveland pays 4 per cent on time certificates and 3 per cent on reserve accounts and Toledo banks do the same, while the rates in Detroit for similar classes of deposits are 3 per cent and 2 per cent respectively. The county banker figures the difference in his yearly earnings very closely under the two different arrangements and many are influenced therefore to send surplus funds to one or the other competing cities. Moreover, since the Federal Reserve Act has been in force it has been the more necessary to discriminate in selecting reserve depositaries (correspondents) owing to the fact that member banks are required to keep 7 per cent of commercial deposits and 3 per cent of time deposits (savings) with the Federal Reserve Banks, on which sums they receive no interest. Many country banks, on becoming members of the Federal Reserve System, found it necessary to reduce the number of their correspondents, and it was perfectly natural for them to eliminate the account which paid the smallest returns, which operation, it is believed, has tended to send

Digitized by Google

acme money to Toledo and Cleveland that should come to Detroit.

Another factor which used to work against Detroit was the policy of the Ford Motor Company in maintaining bank accounts in other centers. The extent to which this obtains at present is not pointed out, but it is clear that if the aggregate bank balances of the Ford company belonged, for example, to twenty individual companies, a much smaller percentage of the aggregate cash would be kept outside of Detroit. Financial writers for Eastern papers have often made capital of the stories that the Ford bank account was so large that Detroit banks had to refuse deposits, which may or may not have been based on fact, but I have yet to meet a banker who would refuse a large bank account if the same were offered on any reasonable basis. It is true that a widely fluctuating large deposit account is unprofitable if a greater rate of interest is paid on it than the interest received from a bank's own correspondent less handling costs, for a bank cannot invest a million dollars today even in the highest grade short-term paper and then be required to convert most of it into reserve the next day to take care of withdrawals, and make any money. But as a rule depositors of the size of the Fords have access to the same paper that banks purchase for short-term investment and commonly buy such paper rather than place money on checking account if they know the funds are not going to be needed immediately.

So the big point, then, in the discussion of this feature of the matter is whether twenty individual corporations in Detroit having an aggregate of $20,000,000 to deposit would keep a greater percentage of that fund in Detroit banks than one corporation like the Ford company might do with an equal amount for deposit. I am strongly inclined to the opinion that Detroit banks collectively would receive a greater portion of the assumed $20,000,000 deposit if it belonged to twenty individual companies, for the time-honored principle of "keeping one's eggs in one basket" does not come so quickly into consideration in each of twenty owners of $1,000,000 as it might with one company owning $20,000,000, aside from all the other reasons of expediency which any company doing a nationwide business might take into consideration.

The Borrowing Limitation

And there is also the borrowing limitation which operates against a large depositor as well as the small. The rejection of a large salary bank is commonly made with a view of the ability of the bank to extend credit, and although any discussion of the Ford's company's borrowing instead of its funds in view of the reams of hypothesis lately published we may just as well go on with the discussion, assuming that the Ford company is ruled by the same economic laws as the rest of the business world. So, taking again the twenty individual depositors with $1,000,000 each, we find that regardless of any rejection of each separate bank or all go to the same bank, the laws do not prohibit the banks selected from granting each one a full line of credit. For example we will say that the bank selected by all of the twenty companies has $5,000,000 capital and $5,000,000 surplus. Now under the national law each company could obtain a normal line of credit of $1,000,000, making an aggregate lending capacity to the twenty concerns, $20,000,000, which no doubt would be acceptable to each individual company. But suppose instead of twenty companies we have only one corporation to consider. In this case the legal limit that the bank could grant would be precisely the same, $1,000,000, and to whatever extent the corporation in question desired a larger line of credit than this it would be necessary for it to turn to other banks. And, legally, if every bank in the city extended the corporation a 10 per cent line of credit, an aggregate of $5,250,000 could be borrowed without going away from home.

It might be explained here that state banks may lend up to 20 per cent of capital and surplus to one corporation under certain circumstances, which would bring the aggregate line of credit up to $9,150,000, but the national bank limit of 10 per cent of capital and surplus is the one more commonly followed.

But a concern like the Ford probably would not apply to every bank in town for a line of credit, neither would it be apt to deposit all its funds in fifteen banks in the home town.

HOUSE OF DAVID WOULD LIKE TO KNOW

THE Detroit Automobile Show was not without its comedy.

A learnedly talking brother of the House of David, Benton Harbor, with a chin unscathed by Gillettes or Ever Readys, lingered long around the chassis of the Stearns. He gave the differential a careful scrutiny, looked over the universal joint carefully and put his ear down close to the engine. After crouching in seeming communion with the slowly pulsating pistons he took out paper and pencil and wrote down the following query which he handed to the salesman: "What is the ratio of the total volume to the piston?"

The best answer gets a brown derby.

Seamen's Act Conference In Progress in Detroit

Representatives from all the states bodering on, or within short hauling distance, of the Great Lakes are in Detroit for the conference on the LaFollette seamen's act, the provisions of which have operated to drive freight and passenger boats from the Great Lakes routes. The conference opened Friday at the Board of Commerce. A tentative bill modifying some of the requirements of the act, drafted by the Board of Commerce committee, was considered at the conference. If this or some other amendment is sent to Washington from Detroit, delegates will be asked to attend the Congressional hearings in Washington.

MICHIGAN RAILROAD EARNINGS

Earnings of the Michigan Central Railroad Company during the first two months of this year totaled $1,084,045, as compared with $1,192,992 for the corresponding period a year ago. The net income after taxes was $476,952, as compared with $1,347,971. Net operating deficit after taxes of the New York Central for the same months of this year was $687,159, as compared with a net operating income of $1,121,671 in 1920 for the corresponding period. The Detroit & Mackinac reports that gross earnings during February were $120,943, while a year ago they totaled $134,788. The net operating deficit after taxes was $28,696, as compared with $39,657 a year ago.

CALUMET & HECLA LOSS

The Calumet & Hecla Mining Company reports a loss of $3,823,743 for 1920. The operating loss was $526,051, to which was added a reduction of copper on hand to 18 cents a pound, the current market price.

For reasons of business expediency we might expect to find such a company with two or three Detroit accounts, one or two in Chicago and New York and some in other large centers withina which it may be doing considerable business, whereas twenty individual concerns having a combined bank account of the same size as the Ford company might naturally keep all the money in Detroit.

We have, therefore, in the instances advanced in the foregoing a reason why the Detroit money supply as furnished by the banks is not all that it might be were postal service out of Detroit as good as that out of other centers which control the country bank business, if rates were as favorable to outside deposits and if our largest depositor's money were split up into smaller units of ownership. But whether or not these reasons account for the $100,000,000 difference in deposits between Detroit and Cleveland, there is going to be sharp competition for capital notwithstanding, and if it does not flow to Detroit of its own natural bent, steps should be taken to attract it from other centers.

How to Attract It

In this connection note that the Federal Land banks soon will issue from $50,000,000 to $75,000,000 of farm loan bonds, that the War Finance Corporation has been revived and is going to extend a few millions of credit, both of which operations mean in the end that the United States Treasury will furnish the money. And the Treasury will get the money from the Federal Reserve Banks on U. S. Certificates of Indebtedness which will amount to a restoration of the unhealthy competition between government and business for available bank credit. And before long, too, the Foreign Trade Financing Corporation will be going to the people, as it should, with millions perhaps of debentures. No, we see no prospect of very cheap money right away with both government and business bidding for the credit-tough pelf mell and no unsolicited flow of private funds to Detroit.

But Detroit can and will get considerable money from other parts of the nook and corner of the United States if the proper campaign for it were put on. The business depression has demonstrated to people all over the United States that the automobile industry has greater and quicker recuperative powers than many so-called "staple" lines of manufacturing, and the sooner that the public is protected, according to the proverb, has now become the cornerstone of the temple. For the same reason that bankers used to refuse credit they now grant it in preference, namely, that the willingness of the people to pledge their last dollar for an automobile gives that industry a considerable advantage. Similarly, in December, when there was a blanket of indigo over everything businesswise, a prominent wholesale clothing manufacturer in Chicago bewailed the fact that he was unable to get people making automobiles instead of being in Chicago making clothes, and upon being questioned as to his reasons, said: "The people of the world want automobiles first, and food and clothing come second, and the manufacturer who makes any article that the people will put ahead of food and clothing is bound to be the least affected by depressions and the first to recover."

It would seem to the writer that a desirable activity for the Board of Commerce of Detroit to undertake immediately would be a campaign of publicity, conducted in conjunction with the banks and bond houses and other financial institutions, to obtain a new flow of private outside capital into Detroit. In so doing the world might be apprised of some facts that have often been distorted by interest which are jealous of the city's progress. We are witnessing a revival just as this is written that will open the eyes of thousands of investors, and the facts properly presented should establish a new confidence in Detroit and Michigan throughout the length and breadth of the land.

Digitized by Google

Research, the Bond Between the University and Industry

A Discussion of the Relationship That Should Exist Between the Manufacturer and the U. of M.

By A. E. WHITE
Director, Department of Engineering Research, University of Michigan

RESEARCH has been accepted and accredited as a function of our schools and colleges since their very establishment. Even in the days when Latin and Greek and philosophy and theology were the main subjects in the curriculum it was duly recognised that further study in these fields into nooks and cranies still unknown—namely, research—was a fundamental and necessary function for the instructor. We had research with us then, we have it with us today and if history permits of prophesy, we will have it with us until Gabriel sounds his trumpet and summons us all to that great beyond.

Thus research is no new thing. It is no untried thing. That which is new is the modern concept of it, a concept which believes that greater attention should be directed in our universities and colleges to those phases of research which will mean greater employment and greater prosperity to the people. There are those in our midst who feel that such a concept is not in keeping with the best traditions of our schools. They feel that our research, whether in the philosophical or natural sciences, should be abstract, intangible. They fear the possible screditing effect of money, since they believe that attempts will be made to use research for the selfish benefit of a few. They hold themselves aloof from matters of an industrial character. They realize that their training, their very life work has necessarily kept them out of contact with industry and its needs. In ignorance they are willing to view research from the same light it was viewed by our grandfathers. They are willing to profit by our material advances but are unwilling that our universities should do their share in these advances. To whom do we owe the developments in our steam and electric transportations To whom do we owe the electric light, modern sanitary equipment, the automobile and the many other numerous things which make life easier and pleasanter? Would we replace our modern Pullman or automobile with the leather strung coach? Would we return to our oaken bucket in preference to our modern bath room fixtures? Do we prefer candles to the electric lights? It is true that college men have had their share in these developments but—and here is the distinction—not as grandnates or as alumni doing their work in close contact with the university, but when, in large measure, if not completely, divorced from the university. It is true that Michigan has done her share in this very indirect manner. To Charles F. Bush, an alumnus of the University of Michigan, we owe much in our electric lighting; but who associates Michigan with the development of lighting? To Howard E. Coffin, a Michigan graduate, and others, many of whom are Michigan graduates, we owe the modern automobile; but who associates the university with the development of the automobile?

Personally I have no quarrel with those who believe the university should stick closely to abstract research. Personally I believe we should encourage in every possible way work of that type, for through it we widen our knowledge, we add to our culture and in the field of natural science we work toward laws which are at the foundation of science. I trust that as the Department of Engineering Research develops it will have funds available for work of this type. May the day come when all of the members of the various faculties have at their disposal funds to carry on such research work as they desire and in such magnitude as the work warrants.

The mistake which has been made in past, however, is that undue reticence has been displayed by those in authority at our institutions to encourage industrial and engineering research. This reticence is possibly a relic of the opposition which engineering education has encountered since the days of its first inception. It was only after overcoming much opposition that Rensaalaer Polytechnic Institute was established in 1837. It was felt for a long time by many of the leading educators of that period that the training at the school was too practical and not in keeping with tradition of higher education. Yet today we have no educators of moment who would make such a charge against our modern engineering schools and colleges.

Have not many of us as educators gone only half way? In taking a leading part in engineering education but not in engineering research have we not fulfilled only half of our mission? Should we neglect engineering research merely because it comes close to the material concerns of mankind which have great possibilities for adding to our efficiency and comfort? In an attempt to meet the old time classical viewpoint on research have we not neglected the modern engineering viewpoint?

The neglect is readily explained. It came about because of the very rapid increase in attendance in our engineering schools and colleges so that the various members of our faculties had little time or strength to devote to problems other than those of teaching. At Michigan the attendance in the Engineering College has doubled in the last ten years.

It arose because the money available was consumed in the procurement of buildings and apparatus for instructional purposes because of the rapid increase in attendance rather than in the procurement of apparatus for research purposes. Do you realize, for instance, that Dean Cooley has available for the college year 1920-1921 for new equipment the vast sum of $20,000? Do you realize that this sum must be distributed among the departments of civil, mechanical, electrical, chemical, marine and aeronautical engineering, and architectre? Do you realize that in chemical engineering we attempt to be conversant in inorganic technology including work in salts and work involving evaporation in all of its various ramifications, in organic technology including iron and steel, copper, brass and bronze, and in fuels including gas manufacture and coking practice? Do you realize that in these various fields we have available for new equipment for the year 1920-1921 a total of $1,925, a sum not sufficient even for the purchase of a moderate priced automobile? Do you who have been given opportunities to spend or authorize the expenditure of sums ranging from a few thousand to hundreds of thousands of dollars for the purpose of solving a given problem, do you imagine much work of real value under such limitations can be produced? This statement involves no charge against our University authorities relative to the improper assignment of funds. The Engineering College is given its pro rata. It does imply one of two things. Either we have looked at matters at the University from an utterly inadequate angle or else those of you who are in the industries have spent money on research work like drunken sailors

This very limitation of funds has very seriously hampered the mission of many of our teachers. They uncomplainingly attack problems with equipment that seriously handicaps rapidity of solution. Those who are in the industries would no more think of undertaking tests with the limited equipment and facilities we possess than you would think of turning Lake Erie salt by pumping into the lake the brine from our salt wells. Yet



THE 1921 MODE IN BOILER ROOM CONSTRUCTION

This photograph shows the steel work of a boiler room which the Reo Motor Car Company, Lansing, is building. You will notice one of the boilers pitched high up in the framework. This is a new 800 horsepower boiler and the plan is a starter on an arrangement which will be carried throughout the boiler room eventually. A new type of stoker is a part of the equipment. War quality fuel brought this form of boiler erection to the fore. The coal is carried to the boiler by mechanical stokers. There is plenty of room beneath to handle clinkers and ashes. The framework shown will be enclosed with brick.

Digitized by Google

our teachers carry on as best they can their work under most extraordinary handicaps. Is it any wonder that results are only slowly obtained? Yet our universities are our most consistent and continuous producers of research. Is it not a shame, though, that our men work under such handicaps?

The Handwriting on the Wall

Beyond question the magnitude of research at plants has far outstripped that at our schools. Where we spend a thousand dollars you spend a hundred thousand. Where we have a factory facility of equipment, chemist, draughtsman, engineer, clerk and stenographer we are compelled to do all things ourselves. Where we have to take down and replace apparatus because of lack of space, you build, if necessary, a special laboratory. Yet there is this handwriting on the wall: "Either there must be provided proper facilities for research at our universities or else the grade of men necessary for the proper conduct of your laboratories will not be forthcoming." It is believed that this handwriting has been seen, especially is this true in our own state, and that there will shortly break a day when with respect to research the University and the Industries will be closely allied.

Yet the University is not totally to blame for the present lack of co-operation. There has been and still is in some lines of manufacturing a belief that secret research will develop products of great value.

Co-operative research, co-operative with respect to industries of an allied type and co-operative with respect to close contact with institutions of learning, is the development of the day. Co-operation in this manner means a free interchange of information. It means freeing industries from the fetters of belief in Elysian powers of patents and in the value of secret processes. There are boards who have most powerful agents to prevent rational co-operation. Business achievement is more a matter of business administration and economics than patents. Can one of our automobile companies lay its success to patents? Are any of our furniture factories, our stove plants, our iron and steel and brass and copper plants dependent for their success upon patents? To one company that attributes its prosperity to patents there are hundreds that cannot make such a claim. Why, therefore, refuse to co-operate with one another and with the University merely because it may entail a surrender of patent possibilities and control on matters of publicity? Would not the saving resulting from joint co-operation offset in practically every case the benefits obtained through secrecy?

Even though matters of industrial success depended upon secrecy, carrying as it would patent privileges and deferred duplication, is it expedient, proper or wise that a state institution should be a party to such a course? Can the University lay itself open to possible charges of serving public interests? It would be quite proper to issue patents in the name of the public so that the unscrupulous would be prevented from collecting blackmail or deriving improper benefit from something that might have been worked out for the benefit of the public.

Before proceeding to a statement of the proposed work of the Department of Engineering of the University of Michigan, let us pause and see if we can picture to ourselves the industrial situation in the state.

In 1899 Michigan was the ninth state in the Union with reference to the value of its manufactured products. In 1904 it had crept to eighth place and in 1914 it occupied the seventh place. The census figures for 1919 are not yet out, but it is safe to say that it has not stepped backward and in all probability it is now in the fifth or sixth place; surpassed only by New York, Pennsylvania, Illinois and Ohio. Detroit has had a still more remarkable growth, rising from sixteenth place among the cities of the land in 1899 to fourth place in 1919.

Unfortunately there are no detailed figures available for conditions since 1914. An industrial census takes place every five years, the last one being in 1919, but the figures for this have not as yet been made public. Conditions for 1914 are given merely to enable one to draw a mental picture of the kind of industries in Michigan, not with any idea of giving a picture of the numerical scope of these industries. In 1914 there were six industries in which Michigan took first rank—automobiles, drugs and preparations, refrigerators, wooden goods not elsewhere specified, showcases and airplanes. There were seven industries in which she took second rank—furniture, stoves, salt, wood distillation and mail plaster. There were nine in which she stood third, seven in which she stood fourth and ten in which she stood fifth.

Based on the value of the product, the automobile industry for 1914 has been credited with $298,289,022. This had grown by 1919 to an estimated yearly value of $1,393,000,000. Detroit's quota of this amount is believed to be about 63 per cent. Foundry and machine shop products, lumber and timber products and furniture with a value in 1914 of something over $30,000,000 individually will doubtless show a collective value for 1919 of more than $350,000,000. Then there were four other industries, namely flour mill and grist mill, leather, tanned, carried and finished, paper and wood pulp, and slaughtering and meat packing, that produced goods individually to a value of more than $20,000,000 in 1914. In the same way there were eleven industries with a value to their products in 1914 in excess of $10,000,000 individually. These were lumber and planing mill products not included in planing mills connected with sawmills, brass, bronze and copper products, food preparations not elsewhere specified, malt liquors, chemicals, butter, steam, gas and water engines, printing and publishing newspapers and periodicals, tobacco, cigars and cigarettes, druggists' preparations and illuminating and heating gas. Then there were eleven industries in 1914 with a value to their product of more than $5,000,000 each; twenty-seven with a value of more than $2,000,000; twenty-one with a value of over $1,000,000; eighteen with a value of over $500,000, and twenty-four with a value in excess of $250,000.

The total value of Michigan's manufactured products in 1914 is given as $1,086,000,000. The estimated value for 1920 is probably close to $3,000,000,000.

Co-operative University Research

During the World War some of us who were in a supervisory capacity in the Inspection Division of the Ordnance Department estimated two and one-half per cent of the value of the finished product as the cost of inspection. Should we accept this percentage figure for this work and add to it one of similar amount for research we would have a sum total, based on a $3,000,000,000 valuation of the manufactured product for 1920 of $150,000,000, of which $75,000,000 would be for inspection and $75,000,000 for research. Are these figures too high? If you think so go back to your plant and learn the real facts regarding your inspection costs—include not only the labor of inspectors, but the expense on work which before final assembly proved to be defective, lost materials, lost supplies such as fuel and lost use of equipment.

Seventy-five million dollars looks like a big sum for research, but let us realize we are taking a statewide view of the situation. There are companies that have not hesitated to spend $500,000 a year on research. It would take only 150 such companies to make $75,000,000 and when we realize that the number of good sized industrial concerns in this state runs up into the thousands this sum when distributed shrinks into insignificance.

With this picture before us it is not hard to realize what should be the position of the Department of Engineering Research in its relation to the industries. It should become the research center for the industries.

Each main group of industries should bend together all problems that are common to all should be worked out in a common center. The University places its facilities at your disposal. To be sure they will be far from adequate when industries fully awaken to what has been placed at their disposal; but there is ground and beyond that increased facilities imply nothing but buildings and equipment. If these must be procured, it is much cheaper to procure them jointly than separately.

But do you say we have no problems? That statement I expect from sections which are dying of dry rot, but not from a state which

(*Continued on Page 36*)

Drafting a Standard Form of Contract

By ELWOOD SAMPSON

Chairman Public Relations Committee, National Association of Purchasing Agents

THE subject of contracts is one of the biggest issues in business today. Numerous articles published in almost every trade paper complain about the "contractual breakdown." Although no two writers or business men exactly agree on just what is wrong, it is still evident that something must be seriously wrong to cause so widespread a complaint.

When any situation is very serious, emergency measures will not effect a permanent cure. To bring about a real reform requires time and care. Even more so, it requires a calm getting together in a proper spirit of both sides affected by the situation.

Also, existing conditions can scarcely be corrected by any measure which can now be carried out. The damage has already been done, however, we can profit from the lessons of the last six years and endeavor to prevent as much as possible such conditions from occurring in the future.

Almost without exception the numerous remedies suggested put all the burden of the corrective work on the other fellow. Further, they are so generally altruistic and impractical that they are instantly rejected by everyone.

The one thing needed is a definite, concrete workable plan. Acting upon this premise, the National Association of Purchasing Agents is proceeding to carry out the following program:

The general plan or purpose is to draw up a standard form of buying and selling contract for use throughout both the United States and Canada. If such a contract form be drawn up protecting the equitable interests of both buyer and seller, then this is something concrete to start with.

The next step will be for the various trade, manufacturing and professional associations to make a concerted effort to get this contract form everywhere accepted and established. This would finally result in the crystallization of business opinion toward living up to contractual obligations.

(*Continued on Page 38*)

Digitized by Google

The Real Battle Is Yet to Come

Eastern Interests to Carry Fight on St. Lawrence Waterway to Congress or the Courts if Need Be



INTERNATIONAL JOINT COMMISSION IN SESSION IN DETROIT

Left to right—Marcus Smith, new member of the Commission; Charles A. McGrath, chairman, Canadian section; Obadiah Gardner, former United States Senator from Maine, chairman, American section; Henry A. Powell, K. C. and Clarence D. Clark, former United States Senator from Wyoming. Sir William H. Hearst, former premier of Ontario and member of the Commission from Canada, was not present when this picture was taken.

By F. W. HERSEY

ALTHOUGH the case for the Great Lakes-St. Lawrence deep waterway to the sea, as presented by the ablest exponents of commercial, industrial, agricultural and transportation economics in fifteen or more states of the Middle West, and a great part of Canada, has been completed and submitted to the International Joint Commission of the United States for codification and deliberation, the battle for this great project is not won.

Because of Michigan's remoteness from the center of Eastern opposition, which is New York state, and the masterly manner in which Michigan's evidence has been compiled and presented, those in the Wolverine state most deeply interested will be inclined to consider the matter settled and the waterway as good as established. Instead, the hardest road is ahead. The first step in the proceedings has been statistical and argumentative; the second step will be judicial and the third legislative. When the fourth, or engineering and constructive stage has been entered, then slippers and the easy chair will be in order.

Into the judicial hopper has been poured a fairly amazing mass of information, which, when compiled in orderly manner, will constitute a history of past achievements, a clear picture of present struggles for future accomplishment and a prophecy of future development, which, in the light of all that has gone before, scarcely can be called the figment of imagination nor the vaporings of speculative enthusiasm.

Wherever this high commission has gone to listen, the feeling has been that it is a body most friendly to the project; a group of men who have sat in the high councils of their countries and whose years and experience assure analytical and judicial ability. The engineers' report on the feasibility, cost and engineering details of the proposed waterway development will be presented to the Commission within the next 30 days, after which the Commission will begin a systematic study of the evidence before it and prepare its recommendations. The time set for this work is 90 days; so that at the expiration of approximately four months all data and recommendations will be placed before the Congress of the United States and the Canadian Parliament. In the meantime the Great Lakes-St. Lawrence Deep Waterways Association, which has been working energetically for the project as the representative of all the states interested, will carry on a campaign of education throughout the country so that the public opinion which Congress will desire to know before committing itself will be intelligently voiced.

It is not believed that Eastern opposition will make itself really felt until the report of the engineers and the recommendations of the Commission have reached Congress. That there will be active opposition from New York state is evident from the statements already circulated. The Eastern section of the United States is intensely jealous of Middle Western advancement where such progress indicates competition the precise measure of which cannot easily be visualized, and therefore must be feared. It is evident that the opposition intends to reserve its real campaign against the project until it has reached Congress, where the political Big Berthas will be trained upon the legislators. There is the possibility also of recourse to the courts, a hint of which was voiced at the Detroit hearing.

This final hearing, by the way, was a fitting climax to the months of research, survey and symposiums in the major cities of the United States and Canada where the proposed route is favored or opposed. Detroit was accorded the honor of having the final hearing, a distinct tribute to the work of Michigan, Detroit and the Detroit Board of Commerce.

In the three sessions Wednesday and Thursday of last week much of the evidence previously submitted from this territory was rounded out and supplemented and a great number of additional facts added. It was open to all those from the United States or Canada who wished to be heard, and both countries produced able witnesses. It offered New York opposition a splendid chance to put in its case after having been in a position to review all the facts submitted in the long series of hearings. The fact that New York did not show to advantage may have surprised some of those attending the hearing, but it did not surprise the Association officials.

Former State Senator Henry W. Hill, of Buffalo, N. Y., was present on Wednesday, but apparently his main purpose in being there was to delay proceedings as much as possible. His first words to the Commission constituted a request that he be given an opportunity to be heard after the Commission had received the engineers' report. He asked that the Commission hold a hearing either in Washington or Ottawa after this report was in, so that New York could talk again at length. It was a neat attempt to obtain a semi-private hearing for the opposition, but it did not meet with the Commission's approval.

Mr. Hill's argument was that much of the evidence submitted in this final hearing was new to him and his clients. Although he was accorded full privilege to place before the Commission the arguments of the opposition, he pleaded inability to do so because he had little opportunity to study the evidence so far submitted. He declared that he was working without pay and therefore had other business to attend to which could not be ignored, which unfortunate situation prevented his preparation of a case for the opponents. His request for permission to file a brief with the Commission after the transcript of the proceedings of this final hearing was made, was granted, with the provision that the brief be filed within eleven days. Mr. Hill explained that he would have to ask the Commission for the courtesy of providing him with a copy of the proceed-

Digitized by Google

ings. The Commission agreed, although the question arose as to why New York had not kept a record of all the hearings if it was so vitally interested.

Obadiah Gardner, chairman of the American section of the Commission, replying to Mr. Hill's request for another hearing, said there would be no time for another hearing after the engineers' reports were in.

"It seems to me," said the chairman, "that you have been given ample time to present your facts at any of the numerous hearings."

Chairman McGrath, of the Canadian section of the Commission, recalled to Mr. Hill's attention that a hearing had been held in New York for the purpose of receiving all information possible on this subject.

"If New York were in Canada, I should feel free to express my opinion of its attitude toward that hearing," Commissioner McGrath said.

Commissioner Clarke, of the American section, asked Mr. Hill if any of the statements made in the present hearing were incorrect. Mr. Hill said there were, but that he could not challenge them effectively until he had prepared his case.

Several times H. C. Gardner, president of the Great Lakes-St. Lawrence Deep Waterways Association, who presided at the hearing, accorded Mr. Hill the privilege of speaking for an hour, or longer if necessary, but Mr. Hill declined to say a word until near the close of the hearing, at which time he spent about half an hour in more or less rambling statements and sugar-coated pleasantries.

He challenged as highly speculative all the statements bearing on the probable tonnage and traffic, the industrial and agricultural developments and power facilities expected from the opening of the St. Lawrence route, and made the charge that the whole project was fostered by the hydro-electric interests, whose only interest was in power production. He did not believe the tonnage of the route, when opened, would reach 3,000,000, but whatever it was, the New York Barge Canal and the railroads could easily handle it. Past rail conditions, he pointed out, were due entirely to the war and were not likely to occur again unless there was another war.

Referring to power development resulting from the improvement, Mr. Hill said that these, too, were largely speculative. He questioned whether power interests could get control of land for power stations and equipment. The Secretary of War might rule that the river was to be used for navigation only, but his judgment would be questioned in court, "just as your judgment on this project can be," Mr. Hill said.

"Assuming that the power rights are granted," the speaker added, "I doubt if more than 900,000 horsepower can be developed for the United States, while Canada might be entitled to 3,000,000 horsepower."

Mr. Hill bore strongly on the costs of the project, offering the argument that there were many other waterway projects only half developed which were more important and for which Government funds should be used, and declared that "the waterway and harbor facilities as are now in use will largely solve the transportation problems." He regretted a movement that would contemplate spending more than a billion dollars on a project that could not be considered more than "speculative and visionary."

Advocates of the waterway project who spoke at this final hearing were H. C. Barlow, traffic commissioner of the Chicago Association of Commerce; Hugh L. Hughes, director of the Bureau of Markets, Department of Agriculture of Minnesota; Rep. O. J. Larson, Duluth; Frank Niles, collector of internal revenue, Detroit; C. Carter, M. P., secretary-treasurer of the Canadian Water Power Association, Toronto; L. G. Macomber, traffic commissioner, Toledo Chamber of Commerce; C. E. Latshaw, secretary of the Farmers & Grain Dealers' Association of Ohio; C. L. Lewis, former president of the West Toledo Chamber of Commerce; B. R. Inman, Indiana State Chamber of Commerce; Rep. W. W. Chalmers; John A. Russell, editor of the Michigan Manufacturer & Financial Record, and president of the Detroit Board of Commerce, and William H. Adams, inland waterways committee, Detroit Board of Commerce.

All those speakers who followed Mr. Hill commented upon his remarks with considerable vehemence. Mr. Niles described the statements of the opposition as "vacuous and destructive." Mr. Russell pointed out that it was vision that built the great railroads of this country, and in these days no one questions but rather admires the vision of the great railroad builders. Subsequent developments have proved their "speculation" on the probable growth of this country to have been well founded.

Mr. Hill's statement that the railroads were quite competent to handle the future traffic received a jolt from Mr. Barlow, who called attention to the fact that although there had been seven increases in revenue and a four-fold increase in tonnage in the last 50 years, the railroads were closer to bankruptcy today than ever before in their history, and further increases in rates were out of the question. In freight rates, he said, Chicago was today 1,160 miles farther from New York than it was in 1916. Mentioning only one commodity, Mr. Barlow declared that the proposed waterway, if in operation today, would have 16½ cents on every 100 pounds of sugar transported westward. He estimated the operating expenses of the railroads as 80 cents on every dollar. "There is only one relief in sight," he said, "and that is to bring the Atlantic Ocean to the Great Lakes."

Mr. Hughes said he had made a survey of farming conditions in the Middle West recently and found that there had been no increase in crop acreage in the last fifteen years. While the population was constantly increasing, he said, farm development was at a standstill. Such increases in crops as were reported were due entirely to intensive cultivation and number of farms. Lack of cash and excessive cost of transportation were the causes, Mr.

(Continued on Page 40)

Mr. Earle Defends Building Material Producers

HORATIO S. EARLE, Michigan's "Sunny Jim" of good roads fame, seldom allows the complacent course of his busy life to be the least ruffled by the various controversies which stir the political and economic life of the state, but the oft-repeated charges that the producers of building materials are responsible for the high cost of those materials and the consequent cessation of building activities have driven him into the role of private investigator.

As president of the Genesee Gravel Company, Mr. Earle has written the following letter and sent copies to Harvey B. Wallace, vice-president of the Detroit Board of Commerce; John A. Brown, director of the Board; Frank P. Rogers, State Highway Commissioner; the Interstate Commerce Commission; Michigan Public Utilities Commission; Flint Board of Commerce and Frank H. Alfred, president of the Pere Marquette.

"The public believes that the producers are to blame for the high cost of building material.

"They are told so by the press.

"We deny the charge.

"The prices of sand and gravel aboard cars at the plants in Michigan are 12 per cent higher today than in 1913.

"The first zone freight rate in 1913 was 37 cents per ton; today it is 84 cents, a raise of 127 per cent.

"The producers as well as the railroads have to purchase coal, machinery and labor.

"Why is it that the producers have to be the goat?

"Kindly answer this letter and give us the privilege of publishing both, and greatly oblige."

The Interstate Commerce Commission gracefully ducked the responsibility of expressing an opinion. Secretary G. B. McGinty, replying for the Commission, said it was not a subject coming within the jurisdiction of this body, therefore no opinion could be expressed as to the causes of the high prices of building materials.

Commissioner Esri R. Stewart, replying for the Michigan Public Utilities Commission, wrote:

"It is a well known fact to producers and commissions that freight rates have been very largely increased since 1913, and of course it is axiomatic that an increase in freight rates will increase the cost of a product to the consumer. The Commission is of the opinion that a very large proportion of the ultimate cost of sand and gravel is labor and freight."

Mr. Earle's letter to the Detroit Board of Commerce was placed before the board of directors, none of the members of which were able to contribute any information on the subject, but it was voted to turn the correspondence over to the Detroiter, official organ of the Board, in the hope that publication of the text would bring out discussions of the building materials situation.

In his letter to the Board of Commerce, Mr. Earle said that if the railroads would restore the freight rates of 1913, he believed the sand and gravel companies would immediately restore the 1913 prices on their product.

On March 26 Mr. Earle again wrote to the Board of Commerce announcing that his company had put into force the 1913 prices and the only difference in prices now existing, so far as his company was concerned, was chargeable to the 127 per cent increase in freight rates. The prices he quotes were as follows:

Washed sand, 60 cents a ton; washed 0-40, 75 cents a ton; washed pebbles, 90 cents a ton; bank 60-40, not screened, 80 cents a yard; bank 60-40, screened, 85 cents a yard.

State Highway Commissioner Rogers replied to Mr. Earle's letter as follows:

"This department is doing what it can with the Michigan Public Utilities Commission to cause a reduction in freight rates which we think are exorbitant. I do not think it seemly for this department to enter into a controversy between the railroads and the gravel producers concerning prices."

The Flint Board of Commerce sidestepped. Mr. Earle's letter was turned over to the publicity manager, who wrote that the "Flint Chamber of Commerce was not in a position at the present time to make any statement for publication regarding the prices of sand and gravel."

President Alfred, of the Pere Marquette, came back with an interesting discussion of railroad conditions as they affected his company. He wrote as follows:

"I assume from your letter (although you

(Continued on Page 44)

Digitized by Google

How Detroit Is Putting On Men

Steady Improvement in Both Employees and Hours Since First of Year Shown in Official Figures

By MARC BRAUN

THE employment situation is steadily improving in Detroit. Proof is to be found in the accompanying two tables which have been compiled from the weekly labor records of the 79 concerns which are members of the Employers Association. These records show that the week ended March 29 was by far the best thus far this year, for the reason that a great many more men employed were put back on a full time schedule, while the number of workers employed on part time was the lowest since the week of January 18.

In referring to the general labor situation in the city one of the officials of the Employers Association said: "The mere fact that more men are being taken back weekly by the factories is naturally indicative of improved conditions of business, or at least of a necessity to increase production. However, because 8,500 men are added in this manner to the plants one week, as compared with 4,500 for the previous week, is not as a matter of fact so important and so much of an indication of improved conditions as the fact that 12,000 men were put on full time during the week although only 6,000 new men were added to the payrolls. The thing that means most is in reality the number of men putting in full time."

In general the public has not looked at the re-employment situation in the right light. The average man merely takes notice that so many workers are added from week to week. Few have analyzed carefully the weekly changes from the standpoint of the hours or time put in—in other words, have taken into consideration the fact that a large number of men were working only part time, while a comparatively small number was employed on a full time basis.

The accompanying charts will give the reader a clear idea of what has happened since the first week of January in the 79 plants. It will be seen that for the week ended January 4 there were 30,919 employes, while on perhaps best shown. The figures for eight weeks show an increase as to the number of full time workers and in the case of four weeks there is a decrease. The same is shown with the part time record, there being an increase recorded for eight weeks and a decrease in four weeks. The chart also shows quite a fluctuation in the average hours of work put in weekly by the part time workers.

The table showing the number of workers in the member plants of the Association, classified according to groups of trades or industries, gives striking evidence of the fact that the automobile manufacturing industry employs practically three-quarters of the entire industrial population of the city, for the caption "Vehicle and Transportation" on the table means the motor car makers. It will be seen that of 58,700 workers employed at the end of January, 33,555 were working in the automobile or truck establishments. At the end of February the number was 53,205 out of a total of 79,111, and at the end of March, out of 104,788 workers employed in 79 plants, 81,093 were in the motor car factories.

While the Employers Association does not disclose the conditions as they exist with each of its members, nor the names of the firms, the statement is made that the figures include the Ford Motor Company.

In referring to the employment figures for the week of March 29, General Manager, Chester M. Culver, said: "The firms who are reporting to us employ, when operating normally, two-thirds of the industrial working population of Detroit. They have working now 88,572 men, and that would seem to indicate that the present total employed in the factories of the city is 132,858, or 57 per cent less than were employed on March 20, 1920.

"As a further indication of the situation now, it may be mentioned that at the height of the employment situation in 1920, 201,542 were employed by the 79 concerns members

TABLE NO. 1

[No classification by trades or industries. Figures cover 79 concerns members of Employers Association of Detroit.]

Week of:	Total Number Employed	Increase or Decrease	Working Full Time	Increase or Decrease	Working Part Time	Increase or Decrease	Average Hours
Jan. 4	30,919	5,580	9,411	....	21,508	....	35
Jan. 11	34,102	3,183	12,157	2,746	21,945	437	34
Jan. 18	35,466	1,364	18,453	6,296	17,013	*4,932	31
Jan. 25	38,190	2,724	15,948	*2,505	22,248	5,235	35
Feb. 1	44,972	6,777	15,836	110	29,137	6,719	36
Feb. 8	51,745	6,772	14,529	*1,307	37,216	8,079	37
Feb. 15	49,528	*2,219	14,877	348	34,651	*2,567	37
Feb. 23	54,870	5,344	18,220	3,343	36,650	4,001	37
March 1	62,578	8,006	21,357	3,137	41,221	4,571	36½
March 8	67,054	4,476	25,676	4,319	41,668	447	39
March 15	75,781	8,427	24,682	*993	51,099	*9,430	39
March 22	82,187	6,406	26,105	1,422	56,082	*5,016	39
March 29	88,572	6,385	69,227	33,122	19,345	*26,737	38

*Decrease.

TABLE NO. 2

[Classification by trades or industries. Figures cover 79 concerns members of Employers Association of Detroit.]

Groups	January 31	February 28	Increase or Decrease	March 31	Increase or Decrease
1—Food Products and allied	971	947	* 24	781	* 166
2—Textiles	850	985	135	955	* 30
3—Iron and Steel	7,678	8,343	* 1,335	4,156	* 2,187
4—Lumber	....	....	....	....	....
5—Leather	....	....	....	....	....
6—Paper and Printing	400	503	103	350	* 47
7—Liquor	....	....	....	....	....
8—Chemical	5,820	5,194	* 626	5,172	* 22
9—Stone and Clay	....	....	....	....	....
10—Metal	1,996	2,235	239	2,459	224
11—Tobacco	740	1,065	275	1,029	* 36
12—Vehicle and Transportation	33,555	53,205	19,650	81,093	27,888
13—Railroad Repair Shops	....	....	....	....	....
14—Miscellaneous	6,650	8,650	2,000	8,593	* 57
Total	58,700	79,111	†20,417	104,788	†25,661

*Decrease. †Net increase for the month.

March 29 these same establishments had 88,572 persons on their payrolls or an average increase of 4,435 for the thirteen weeks. Every one of these thirteen weeks shows an increase in employment except the week of February 15, which shows a decrease. When an analysis is made as to full time and part time employment, the unsettled conditions in industry are shown in the March 29 figures, which show that of the association, this record being attained in March. This was an abnormal record or high mark, and there seems no possible doubt that this figure will not be attained again for a long time. In fact it is known that a very large number of workers have left the city since last October, the estimates varying from 40,000 to 60,000, and it is not likely that all of these men will return to Detroit."

While it is not possible to make a correct estimate of what the high employment mark will be this year, it is estimated by some of the employment and work managers that 135,000 to 150,000 may be reached. Although more are of the opinion that the lower figure would be a very good showing for the year.

One feature in the employment situation is that the workers are putting in their best efforts to do things right. You hear this at the Ford plant; they tell you so at the Continental; it was so stated at the Paige-Detroit. At the Packard plant a man connected with the employment department said that some of the employes had been "transformed."

One of the officials at the Ford Motor Company said: "There is evidence in all departments that the men are working more conscientiously. They are more eager and willing to do their part so that there will be the least waste and the best returns. In some cases a shift of three or four or five is doing almost as much now as double the number did during the war."

"With fewer men in some departments," said an official of the Studebaker Corporation, "we are achieving not only as much as we did previously with a full force, but the work turned out is better.

"I believe the reason is the fact that the majority of workers know that there are thousands and thousands of men out of jobs and eager to get work and that there is somebody ready to take their place on short notice."

Digitized by Google

Yankee Ingenuity Tackles the World Banking Problem

Foreign Trade Financing Corporation the Result Of American Inventive Proclivity; What It Means

By PHIL S. HANNA

An address delivered by Mr. Hanna, Thursday of last week, before the Jackson, Mich., Chamber of Commerce Luncheon Club and five other luncheon clubs.

ONE of the grandest things about being a Yankee is that we do not wait for someone else to do the inventing. When a machine in one of your shops becomes obsolete by reason of changed conditions, or when unusual requirements are made of it, the Yankee impulse to find a machine to fit the new conditions immediately is aroused and we either consult other Yankees who make a business of inventing or we invent the new machine in our own shops. This isn't true in some countries. More often, when the machine becomes obsolete, progress stops. And this distinctive ingenuity of Americans is the very factor that has invented and created the machinery of the Foreign Trade Financing Corporation. It is nothing more or less than a new machine to do work that present machinery is inadequate for, and to perform a function that the creators of our present banking system did not foresee in the years of fat prosperity.

We are getting ready to enlarge the Welland Canal and deepen the St. Lawrence for the same reason, namely, that the old machinery is inadequate for the demands of progress. And about six years ago we created the Federal Reserve machinery, for a similar reason.

Some Comparisons

But now let us take a look at the existing banking machinery and see how far it goes in serving the demands of business. To employ a simile, we have several models for the various classes of banking—small cars in abundance for strictly home use, a number of medium carrying capacity for use at home as well as inter-city banking, and in the reserve cities we have a few two-ton trucks useful for all purposes; but all of these kinds of banks function on the short-haul theory. They are not provided with large enough gasoline tanks, so to speak, to undertake the long trips necessary in financing foreign trade, understanding that all of them have carried their normal load and more too during the last few years. Continuing the analogy, even the savings banks, which may be likened to trucks, are not suitable to the demands of foreign trade financing either. What we need (and I speak in terms of automobiles because it is the only tongue common to the whole United States today) is a new model built on the order of a five-ton truck but equipped to make trips of many hundred miles without stopping for gasoline.

This new model of banking machinery is necessary not only because the character of foreign trade financing is so absolutely different from that of commercial, or short time domestic financing, but because the war has injected a new problem for the sales manager.

Instead of shipping goods C. O. D. or on thirty, sixty or ninety-day drafts, the impoverished cash account of our foreign customer requires that we give terms anywhere from six months to six years, a job which few manufacturers and fewer commercial banks are in shape to undertake. The foreign buyer must have time enough to sell the goods he buys from us or to manufacture such goods so they can be turned into money. And the unfortunate part of it all is that we must go into this business or convert some of our surplus factories into cow sheds; for at the present rate of production of both manufactured goods and raw materials we are creating property worth on present prices of about $8,000,000,000 annually over and above what we consume at home.

I am not going at any length into the reasons why we must sell our surplus. Men like former Secretary Redfield and Charles M. Schwab, whose pronouncements I am sure have not escaped your attention, have covered this subject in the daily press. Just last week Mr. Schwab returned from Europe and made the following statement: "I studied conditions very carefully—and I have come to this conclusion with regard to America: the productive resources are somewhat in excess of home consumption. If we cannot export this surplus, we must at once limit the production of our factories. If we can export our surplus, as we should, we can then keep practically every factory in the country running at full time twelve months to the year." And we all know the testimony of many dependable observers to the effect that the war turned trade relations between the United States and the rest of the world upside down. Instead of owing Europe $6,500,000,000, Europe owes us to the extent of more than $15,000,000,000; but even if the debt were paid tomorrow, the big problem of finding work for our factories would not be materially changed. Payment of the debt would help us handsomely in taxes, but Congress would, no doubt, at its present rate of making appropriations, find a good excuse for using some of the billions for other purposes.

The Big Problem Is a Market

So that the big problem is to find a market for the $8,000,000,000 surplus in order to maintain the equilibrium in industry so often referred to by George E. Roberts, of the National City Bank, whose writings on this subject are so widely believed in.

The war disposed of this problem nicely for a time, but it went too far. The tremendous inflow of orders during the war urged many corporations to build plants in feverish haste to catch up with demand. And many did catch up, but they forgot that the rush would have to end some time. When it did, it would didn't result in a slowing-down that many expected at that time, we were still further lulled into a neurotic ecstacy of spending and flush times. I recall vividly the remarks of a bank president during a directors' meeting in April, 1920, when he said that business the world over was normal, the only difference between then and 1914 being that we were going to continue on a higher price level.

But what really was taking place from the Armistice up to the middle of 1920 was that we were filling orders on credit furnished by our own Federal Reserve Banks, and all the time it was the emergency stretch in our currency and credit system that we were doing business on. Europe was more nearly "broke" in November, 1918, than she is now, only we didn't know it. Our United States treasury kept on lending money to Europe which was nearly all spent here, and the Treasury raised those funds through certificates of indebtedness which were carried by the Federal Reserve Banks. But eventually Governor Harding became convinced that the system was too far stretched to be healthy and he put the lid on the money mess, with the well known result. In fact, the tendency toward overproduction was so manifest in 1913 that I believe this country would have come face to face with this problem sooner or later, even had there been no war.

Seriously, however, it is a burning shame, not alone from the humanitarian standpoint, to think of 100,000,000 people on this side of the ocean vested with the treasures of the earth, the fruits of the soil, the animals and their products, all in greater abundance than we have any possible use for, and the machinery, tools, factories, power and everything needed to convert our raw goods into commodities, having to sit idly by, passing up profits with a figure up in the billions, while other millions of people on the other side of the water who need these gifts of God and man-made goods so badly are obliged to go without, simply because financial machinery capable of achieving the exchange of our property for theirs has not been set up.

Can't Cash In On Surplus

And the worst of it is we can't cash in on our surplus. All we can do while Mr. McHugh is getting his long distance banking machinery built up and greased is sit by and watch that beautiful economic process of deflation do its deadly work to our inventory accounts and our profit and loss accounts. It is plainly up to us now. We must either find a way to sell our surplus and keep the factories running or the present scheme of living has got to be changed by sending the surplus employes who are out of work back to one-acre plots. And you can imagine how many men will embrace the small farm idea willingly. Even now the railroad unions are trying to make larger run uphill—they have foisted these national agreements on to the railroads with one object in view, namely to make jobs where none exist. And Townley, out in North Dakota—while he is just about licked—was doing similar stunts for the farmers, trying to make crops sell for more than they would bring.

Now just a word as to exports and imports. The business men of the country knew last fall that exports were falling off, although the government figures did not support the view at that time. Recently, however, Secretary Hoover has indicated that perhaps the earlier reports were in error and he assures us that the March figures will be correct. I mention this because the fact of shipments falling off and government figures going up led many people last fall to lay the blame for the business depression on something else. But, fortunately, the fact and the figures are now in agreement. Last Thursday the Government reported February exports $489,000,000, as compared with $635,000,000 for January. For the eight months ended with February, 1921, total exports were $5,127,000,000, as compared with $5,230,000,000 for eight months ended February, 1920. By countries the comparison is even more striking. Exports to Europe for February, 1921, were $241,000,000, as against $384,000,000 in February, 1920; to South America, $38,000,000, as against $40,000,000 a year ago

(Continued on Page 42)

Digitized by Google

Motor Industry Starts Lower Taxation Drive

A definite campaign by the automobile industry to obtain reduction of federal taxes and a decrease in national expenditures is forecast by the activities of the National Automobile Dealers' Association and the National Automobile Chamber of Commerce, according to Harry G. Moock, general manager of the dealer association.

C. A. Vane, general counsel of the dealer association, went last week to Washington and New York to take up with the tax committee of the automobile chamber the definite proposals for revenue legislation principles which it is expected the industry will insist upon.

The two associations are very close on their ideas. Both have stuck to principles of taxation rather than methods and both are insisting that governmental extravagance, waste and so-called "war-time" expansion be eliminated. It is the theory of both organizations from their declarations that while a necessary measure of preparedness will cost money, there is no apparent reason for continuing expenditures for Army and Navy in peace times that were considered needed at the height of the German drive.

An interesting feature of the tax situation which was developed by the N. A. C. C. is that although the Government has cut from the estimates for 1922 (fiscal year) the item of $1,025,000,000 for federal control of the railroads, the total estimates for the year aggregate $4,653,856,759 for 1922, as against total appropriations of $4,673,396,276 for 1921. In other words, while the Government won't have to spend a billion dollars for the railroads, the other departments, mainly Army and Navy and civilian expense in Army and Navy Departments has crept up to absorb the extra billion dollars.

"The dealers throughout the country are not fully awake to the menace of the taxation program," says Moock, "but we expect to awaken them to its seriousness before the bill is enacted. We shall need the help of every association and individual before that is done."

A. I. B. PREPARES FOR CONVENTION

Preparations for the nineteenth annual convention of the American Institute of Banking are beginning to absorb the interest of bankers and bank employe members throughout the country. The convention is to be held in Minneapolis, July 19 to 22. President Stewart D. Beckley is spending several days in the four city going over arrangements. A feature of the convention that no doubt will attract many delegates is the special boat trip which leaves Duluth shortly after the convention ends. This will enable eastern delegates to return home by way of the Great Lakes.

FURNITURE SHOW DATES

Several important furniture expositions are announced. The first is being held, April 4 to 9, in Evansville, Ind. High Point, N. C., will have a show, June 20 to July 2. The Grand Rapids show will be held June 27 to July 22. About the same time there will be an exhibit in Chicago. The Jamestown exposition is scheduled for May.

MAKING BLOCKS AT ORION

Verne Green and Clarence Taylor have started a cement block manufacturing business in Orion.

BRIMMER CASHIER AT PETOSKEY

At the March meeting of the board of directors of the First State Bank of Petoskey H. L. Brimmer was elected cashier to succeed Chester D. Masters, who went to the First National Bank of Munising early in the year. Mr. Brimmer joined the First State about a year ago as teller, coming from Ludington, and was commercial teller until Masters left the bank, when he was made assistant cashier.

STRAIGHT LINE METHODS

Man and Method

Man is the human element in business—its soul and its brain.

Method is the orderly regulation of human effort. Without soul and brain all effort is mechanical. Until man found his soul and began to use his brain with definite purpose, business did not exist. Nor until the growth of business made an orderly regulation of effort necessary did method exist. Success, the attainment of a definite purpose, came with the introduction of method.

The development of method made business a science. And the science of business, like any other science, is simply the knowledge and understanding of facts and figures, coordinated, arranged, systemized for practical timely use.

To this end, and for this purpose, were conceived and developed the

Straight Line Methods

OF

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT

304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON
CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY
CLEVELAND, BUFFALO, PITTSBURGH
CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND
NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

New Centerless Grinder Ready

Detroit Machine Tool Company Brings Out Equipment With Several Important Features

THE Detroit Machine Tool Company, Detroit, a pioneer in the centerless grinding industry, and which has had a grinder on the market for the last four years, has been working on a new machine for the last year which it claims will place centerless grinding in a position heretofore unoccupied.

The new machine, which is to be called the No. 4 Heavy Duty Detroit Centerless Grinder, has several new and important features. Briefly, in this machine the work is actually and positively rotated by having it rest on top of the driving or rotating emery wheel. The work is also automatically fed and the machine is so designed that any feed or rate of traverse of work from the finest to 100-inch per minute can be had. The company calls particular attention to the fact that in this machine it is possible to rotate the work and have it travel at exactly the same speed and feed as any other cylindrical grinder of the



center type on the market today, so that former data is used to advantage.

In other words, a problem which is submitted to this machine, which has been handled on an ordinary type of cylindrical grinder, can be run exactly the same way, with the advantage that rows of work can be fed continuously through the machine and the grinding wheel will be working on its entire surface all of the time. Where only one piece is ground at a time on the center type of machine the wheel is often not working on its entire surface more than 40 per cent of the time.

In the full view of the machine as shown herewith, it will be seen that there are two emery wheels used. The upper one is the grinding wheel and is 18 inches in diameter, with a width of face of 4 inches, giving 225 square inches constant cutting or working area. The lower wheel is 9 inches in diameter and eight inches long. This wheel can be revolved at several rates of speed so as to give the peripherial velocities required for rotating the work. The wheel runs normally at 28, 38 or 52 revolutions per minute. In addition to revolving work, it also feeds it endwise. This is accomplished by swinging the two wheel column around so that the lines of force on top of the wheel feeds the work through the machine. The work is supported by the driving wheel and is guided between two blades which are accessible for adjustability through hand wheel and screw. In this case the work is a piston pin 1¼ inches in diameter, 4 inches long. The guide blades are of hardened and ground steel and are similar in appearance to those used on the old machine.

In one instance a feed angle of four degrees was used, which resulted in feeding six feet of work per minute, and since four cuts were taken, a net result of 1½ feet of pins per minute or 90 feet per hour of finished work, or 180 completely finished pins, were made. Recently on test, small ¾-inch diameter by ⅞-inch long cold rolled steel pins were ground with a view of sizing them or "clearing them up," and since ony one cut was necessary an hour's run disclosed the fact that 5,140 pieces were ground. A few pieces were unusually small and were quickly located because they were not ground or polished in appearance.

This strengthens the claim made that it is impossible for the work to receive scratches or "flats" which are received from the grinding wheel when it is possible for the work to lean against the grinding wheel. "Flats" are also received from the grinding wheel during moments of non-rotation and here again the claim is made that the work always rotates. Weight of work in the old machine often caused trouble, but here the pressure on the work from the grinding wheel as well as the weight of the work on the driving wheel all aid to keep the work "geared" to the driving wheel. In taking heavy roughing cuts with a free cutting wheel the wheel pressure has often been found to be around seven pounds and this pressure between the work and the driving wheel is more than sufficient to keep the work from slipping.

The capacity of the machine is from ¼-inch diameter to 3-inch diameter and from ½-inch length to 16 inches. Rods of brass and tubing have been ground up to three feet long. Outboard bearing supports were used to hold the work in alignment. Short work up to 4 inches long is fed to the machine by aligning the pieces in the angle iron trough supported by a stand.

The lower wheel is located centrally under the upper wheel. Since the lower wheel is 8 inches wide, it has 2 inches extra width on each side of the grinding wheel. This extra width is to insure the work rotating before it reaches the grinding wheel, and the same thing is done after the work has been ground. This is done not alone to make sure that the work is not rotating while it is near the grinding wheel, but it also brings the work to the grinding wheel and carries it away as well.

The work leaves the grinding wheel and falls into a pan. This pan leads it through an opening in the frame of machine and after it gets into the opening, the inclined floor inside returns, the work to the operator's side of the machine. When ft is remembered that 500 feet of work per hour can be fed through the machine, the factor on handling the work becomes a problem and this feature will be one of convenience to the operator as well as a time saver to the owner of the machine.

Trueing the wheel is done by putting in place the wheel trueing unit. The tube with slot permits the diamond to be pre-alined so as to be able to dress either wheel. A quick forward and backward motion will true the entire face of the wheel in a few minutes.

A safety feature is installed in the cyl-

(*Continued on Page* 39)

Digitized by Google



A SIMPLE SET-UP

This Buick-6 cylinder block is handled with standard equipment. The cross sliding head makes it possible to grind the six holes without resetting the block.

Mr. Garage Owner:
Here Is Your Opportunity!

Repair shops everywhere are being approached by automobile, truck and tractor owners to look after their engines in such a way as to make them last longer.

Prepare to meet this demand by installing a

Madison Cylinder Grinder

for regrinding the cylinders.

It will add to your reputation, satisfy your customers and add new ones to your list, *all at a profit to you.*

The time required for regrinding cylinders averages less than one hour per hole. The usual charge is $24.00 per 6-cylinder block with 3½" to 4" bore, which can be done in 6 hours or less. Figure it out for yourself.

THE CHAS. A. STRELINGER CO.
Machinery—Tools—Shop Supplies

149-165 E. Larned St. DETROIT Cadillac 7080

Eight-Hour Bill Beaten; Other Legislative News

By H. BOND BLISS

[*Staff Correspondent, Michigan Manufacturer and Financial Record*]

LANSING, April 4—Bills of importance to the manufacturing, financial and other business interests of the state were passed upon by the Legislature last week. Some of these measures were approved; others were defeated or amended.

The reciprocal insurance bill of Rep. Pat O'Brien was overwhelmed in the House by an adverse vote of 71 to 8. The purpose of the measure was to regulate reciprocal insurance companies, place them within the purview of the state insurance department and require a permanent deposit of $25,000 with the state treasurer.

The Holland eight-hour bill was also defeated in the House by a big margin, receiving only eight favorable votes. This bill provides for an eight-hour day for working men in all quarries, factories and manufacturing establishments, with time and a half for overtime and penalties for employers violating its provisions. Rep. Strauch of Shiawassee, who led the fight against the bill, offered an amendment to include farm labor. Several other amendments were proposed, which met with defeat, and then the entire bill was killed.

The loan shark bill of Rep. Liddy, Detroit, was passed by the House, but not until it had been amended by Rep. Frick, Detroit, reducing the legal interest rate allowed from 3½ per cent a month to 1½ per cent on small loans. The bill, approved by the Russell Sage Foundation, provides regulations of the small loan business. The present rate of interest on such loans is 3 per cent, with occasional additional charges. The bill eliminates any other charge except that of interest. Rep. Liddy declared that the reduction in rates would drive the loan sharks out of business as they could not afford to transact their affairs with this small return.

A concentrated attack upon the bill of Senator James Henry, Battle Creek, proposing a tax of $3 on driveway cars, was made by the automotive interests of the state. It was declared that such a tax would impose a hardship on the manufacturers at a time when they could ill afford it. W. S. Galbraith, manager of the Detroit Automobile club, said an average of 51,000 cars were driven out of the state on their own power annually and each driver usually left at least $20 in the state. It was pointed out that the Michigan automobile manufacturer already pays his full share of taxes for road maintenance and other purposes, and should not be taxed further. It was also emphasized that this tax would injure the interior towns which cannot ship by water. L. B. Roberts, counsel for General Motors, asked Senator Henry if he would be willing to levy a tax of a few cents on each carton of breakfast food shipped out of Battle Creek. George C. Conn, traffic director of the Buick Motor Company, Flint, and other representatives of the motor interests spoke against the bill.

Several important amendments may be made to the utilities bill of Senator Don C. Osborn, Kalamazoo, by the railroad committee, which has the measure in charge, to meet the objections of representatives of municipalities. One of the amendments provides that nothing in the bill shall be construed to prohibit a municipality from entering into an agreement with a public utility, fixing rates and terms and conditions or extensions of service on the basis of service at cost or any other basis, provided that if the utility is operating in more than one municipality the rates agreed upon shall not be discriminatory against the consumers in any other place, and if so shall be subject to regulation by the public utilities commission. Another amendment would give the Commission the power to appoint or remove, and in any city or group of cities to investigate complaints and be a local inspector, the expense to be borne by the utilities. Another change would include jitney buses under the jurisdiction of the Commission. Another amendment would exclude Highland Park from jurisdiction of the Commission along with Detroit, because it is a city within the boundaries of Detroit.

The Michigan Public Utilities Commission would be reduced from five to three members and the salaries from $7,000 to $5,000 by a bill introduced in the House by Rep. Miles. The measure would also prohibit any interference of the Commission with home rule franchises and any kind of jurisdiction over publicly owned utilities.

The McNaughton fence bill providing certain requirements for fence manufactured in Michigan probably will die in the committee of agriculture of the House as a result of the opinion of Attorney General Merlin Wiley in which he stated he believed the bill to be unconstitutional, as it interferred with federal statutes on interstate commerce. Michigan manufacturers opposed the bill, claiming

(*Continued on Page 37*)

Digitized by Google

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.



America's Headquarters for
Second Hand Electrical Machinery
Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

The Bellefontaine Bridge & Steel Co.
Engineers, Fabricators and Erectors
STEEL BUILDINGS AND BRIDGES
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6558.

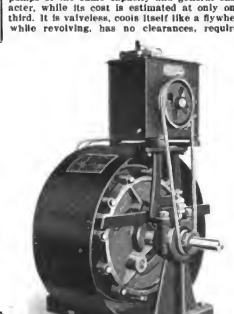
Hughes
FACTORY EQUIPMENT
STRONG, DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE - ALLEGAN, MICH.

A Rotary Vacuum Pump, Chuck

Crescent Company, Detroit, Develops Equipment Which Shows Well in Tests

ALTHOUGH vacuum has for years been put to many useful purposes, its application to various industrial operations is steadily increasing and engineers are constantly experimenting with it in an effort to find new uses for it. The Crescent Pump Company, Detroit, has developed a new type of rotary vacuum pump, which, it is claimed, has many improvements over other types now in use. The company also has perfected a vacuum chuck for holding magnetic and non-magnetic materials for work on grinders, shapers, planers, millers, lathes and bench work of all kinds. Both the pump and the chuck are the results of experiments conducted by William A. Hatcher, an automotive engineer now connected with the Crescent Pump Company.

The pump weighs only 1-19 as much as other pumps of the same capacity and general character, while its cost is estimated at only one-third. It is valveless, cools itself like a flywheel while revolving, has no clearances, requires



The New Crescent Rotary Vacuum Pump

no sealing or cooling liquids, has a positive displacement and is guaranteed to pull within one-half inch or less of the barometer. It is constructed on a new principle which eliminates wear by revolving all working parts in the same direction at the same angular velocity.

This type of motion requires that all parts be in perfect dynamic or running balance. All moving parts are supported on bearings, and are circular, one within the other. The wear does not take place upon the bearings, for there is an automatic compensation between the parts which takes up the wear. This compensation prevents slippage and leakage. This pump seals itself by the nature of its construction and likewise cools itself. The stuffing box is of original design and does not require taking up. Ball and roller bearings are used. Both compressing elements revolve in the same direction and at the same velocity, the resultant motion being rolling. The vane is not a flying or sweeping vane, but revolves with the casing. There are no valves in this pump. Each revolution opens and closes ports.

The inlet port is a slot on the periphery of the roto-piston. The exhaust port is a slot on the periphery on the revolving case. Port opening occurs as the roto-piston rolls around to the proper position on the inner periphery of the case. Self-cooling is obtained by the fact that the working chamber itself is revolving at high speed with the case and is constructed to radiate heat of compression through its walls to the outer atmosphere. The roto-piston as positively displaces the space within the working chamber as does the piston of a reciprocating machine—more so, in fact, for there are no clearances or valve losses. Thus the pump gives high volumetric delivery efficiencies. The volume delivered can be as accurately known when speed is known as if measured by a gauge. Low friction loss and high efficiency at compression and delivery produce low power consumption.

The pumps are equipped with automatic lubricators. Oil cups could not be used because the vacuum created inside the pump would immediately empty them and flood the pump with oil. A 170-pound pump direct or belt-driven will deliver 15 pounds steady pressure or pull a vacuum to one-half inch of the barometer, 3,000 cubic feet of air an hour for a maximum of 5 horse power. Special types will exhaust to 1-10 of an inch of vacuum or better.

At the Llacois motor plant several of these pumps with the necessary chucks were put to work grinding bronze washers after other grinding methods had resulted in losses of from 50 to 75 per cent of the work produced. It seemed impossible properly to hold the work in place until suction pull was adopted. It is reported on reliable authority that the loss has been cut to less than one per cent. Vacuum lifters are used at the Dodge Brothers factory for the operations on brake drums and also for pulling steel sheets under machines. The Production Tool Company has used this vacuum chuck for grinding stellite and high speed tool steel.

Introduced in one Detroit cleaning establishment for drying, the vacuum pump has increased the production capacity per girl 280 per cent for twelve girls on ironing work. Another use is the drying of pepsin and ptyalin in chemical laboratories. There are being conducted in Detroit at present intensive experiments in the manufacture of paper bottles, and vacuum is used to pick up and hold the paper while being rolled. The B. F. Goodrich Company uses thousands of glass bottles of a peculiar type in certain operations. Vacuum has been used in filling these bottles with a great saving in breakage. For grinding glass the vacuum chuck has proved of great value in eliminating the necessity of making plaster of paris beds. An 8-inch vacuum cup, for instance, has a 703-pound pull, while a 24-inch cup has 6,333 pounds lifting power. The roto-piston pump for 3,200 cubic feet per hour weighs 185 pounds complete.

The vacuum chuck developed by the company is similar in shape and use to the magnetic chuck, but has the additional advantages of being able to hold brass, bronze, fiber, glass, stellite, die cast metals, wood, rubber, etc., as well as holding iron, and machine and tool steel. Materials can be held without bending or warping. Angle plates and special shapes can be held to the chuck surface, and materials held to the angle plates as well as the chuck surface. The work can be held so that the strains in the material are removed while machining. The chucks, it is claimed, do not mar,

Digitized by Google

strain, warp or magnetize the work. Truly parallel faces can be obtained with one setting instead of two or three. Work can be machined to close limits. There is nothing to get out of order in a vacuum chuck and the faces do not need constant grinding to keep them true, thecompany asserts. The vacuum tends to draw off the heat from the work while being machined. The holding power of high vacuum, by which is meant vacuum to within one-half inch of atmospheric pressure, is equal to the holding power of magnetism and more evenly distributed.

Cadillac Moves Offices to Its New Detroit Plant

The general offices of the Cadillac Motor Car Company have been moved from 6331 Cass avenue, Detroit, to the new eight-building manufacturing plant at 2860 Clark avenue. This new factory replaces the present plant, which consists of 77 old type structures scattered about Detroit, and is declared by engineers to be one of the most modern automobile manufacturing plants in the world. It provides 48 acres of working space, and the various buildings which are now four stories high, can be raised to six stories. Materials used are concrete, steel and brick.

Largest of all the units is the manufacturing building, 800 feet long and 600 feet wide. It is so arranged that raw materials can be brought into one end of the building and completed chassis run out under their own power from the other end. This building has a floor space of 970,000 square feet.

The heat treating building is 500 feet long and 80 feet wide, and the assembly building, 800 feet long and 360 feet wide, the floor space being 626,000 square feet. A warehouse with a capacity of 1,000 cars has been provided for storage.

The executive offices will be located in the administration building, a structure 225 feet long and 50 feet wide. The exterior is of Bedford limestone.

The plant service department will be located in the assembly building.

LYONS' ANNUAL FAIR

The annual spring sample fair of Lyons, France, March 1 to 15, was, according to a press report, as usual a very successful and important event. Foreign representation was strong, but the number of exhibitors from the United States was not what had been expected. An advance list received a few days ago shows only six American firms listed, compared with 115 from England; thirty each from Italy and Switzerland; twenty-two from Czecho-Slovakia; seventeen from Belgium; ten each from Holland, Sweden, Norway and Denmark; five from Argentina, and two each from Spain and Finland. There were, all told, about 2,300 exhibitors, most of them being, naturally, French firms. A further idea of the size and importance of this fair may be had from the following list showing the number of different concerns, firms or agents according to groups of trade: Food products, 125; shoes, 121; metal industry, 59; watches and jewelry, 104; automobiles, 88; ceramics or earthenwares, 131; furniture, 76; wool fabrics, 66; knit goods, 79; men's clothing, 80; leather wares, 96; cotton fabrics, 120; silks, 86; hides, 77. Many American products were shown by French firms or by the agents in France.

SECOND PACKARD DRIVERS' CLASS

The Packard Motor Car Company, Detroit branch, opened its second 1921 class for truck drivers Wednesday evening of this week. The course, which is open to all drivers, will extend over eleven weeks. Fifty drivers graduated in the first class this year. R. D. Andrew is in charge.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins
Valve Roller Pins
Roller Clutch Pins
Dowell Pins (Hardened Straight)
Oil Pump Plungers
Roller Bearing Rolls (Straight)
Differential Gear Pins
Headless Shackle Bolts
Universal Joint Pins
Small Gear Shafts

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 575

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

500 CARS SOLD AT DETROIT SHOW

There were 88,130 paid admissions to the 1921 Detroit automobile show—12,022 more than in 1920. This is a new record and is considered by the show management as a splendid one, the daily average attendance being better than 10,000.

Sales aggregated more than 500 cars, it is announced. As for the number of prospects recorded by dealers, the total runs into the thousands.

NEW UNITED MOTORS FACTORY

The United Motors Company, Grand Rapids, one of the oldest exclusive truck manufacturers, has completed arrangements to open its new factory for the assembly and distribution of United trucks on the west coast and in Mexico. The factory in Grand Rapids will continue as before and manufacture and handle the sales for the entire territory east of the Rocky Mountains. The manufacture of parts will be continued at the Grand Rapids factory and shipped in carload lots to the western branch to be assembled. Enlargements to the present factory will be made here as fast as necessary. Mr. Kanary will continue as president of the United Motors and will also act as general manager of the new western factory. H. R. Green, present treasurer and sales manager of the company, has been appointed general manager of the Grand Rapids factory.

LEE TIRE SALES

For the first two months of 1921 the Lee Tire & Rubber Company reports sales of approximately $1,500,000, which is about equal to the total for the corresponding period a year ago. These were made at reductions in prices of from 15 to 20 per cent.

ADVANCE-RUMELY'S TRUCK PLANS

Pending final decision as to which engine is to be selected as standard equipment, the activities at the new motor truck department of the Advance-Rumely Company, Battle Creek, will consist in building truck bodies and otherwise making the chassis ready to take on the engine, says a report from Battle Creek. The truck branch of the company was formerly in Clearing, Ill., and has been brought to Michigan to replace the threshing department. Besides the truck, the Battle Creek Advance-Rumely division will build the company's tractor, known as the Oil-Pull.

E. J. SAMUELS MOVES UP

Several years ago E. J. Samuels was a reporter on one of the Akron, O., newspapers. Then he joined the Goodyear Tire & Rubber Company and soon graduated from one job to another until he became manager of the organization division. Now the company has promoted him again to be manager of inside sales, with headquarters in New York. At one time he was connected with the Chicago branch.

WILLYS MERGER FORECAST

Banking interests identified with the Willys-Overland Company and the Willys Corporation are considering the feasibility of a consolidation of the two organizations to facilitate adjustment of the financial difficulties of both of them, says the New York Herald.

The Willys-Overland Company and the Willys Corporation are separate organizations, although the principal executive personnel of both of them is the same and their affairs are otherwise closely interwoven. The Willys-Overland, with the main plant in Toledo and branch factories in Elmira and Indianapolis, produces Overland and Willys-Knight automobiles. The Willys Corporation represents a consolidation of Electric Auto-Lite Corporation, the New Process Gear Corporation and the Duesenberg Motors Corporation.

For the last six months Willys-Overland operations have been so reduced that profits have been practically nil. Its chief concern, however, lies in bank loans of approximately $20,000,000. Banks holding the notes have almost unanimously granted extensions, and if they continue to do so it is expected that the company will be able to improve its position this spring, when increased operations should reduce inventory and bring in cash. The situation in the Willys Corporation is less favorable. It has current assets of about $26,000,000 and banks are creditors to the extent of about $11,000,000. The Elizabeth plant is between 80 and 90 per cent completed, and additional funds are required to finish it.

The committees formed several weeks ago to protect the stockholders have the problem under consideration.

BADGER JOINS STEEL PRODUCTS

The motor spring department of the Detroit Steel Products Company announces the appointment of F. E. Badger as special representative in both sales and engineering. Mr. Badger has had eleven years' experience in spring building with both the Western Spring & Axle Company and the Standard Parts Company.

PACKARD SALES MEN CONFER

Sixty distributors, dealers and factory branch managers of the Packard Motor Car Company held a three-day convention last week at the plant. H. M. Datwick, technical manager at the factory, presided and there was a detailed discussion of field problems. The sales representatives reported business increasing.

AMERICAN BOSCH MAGNETO

The American Bosch Magneto Corporation is reported to have approximately $10,000,000 of unfilled orders on its books and to be improving its financial condition steadily. In addition to the reduction in wages the dividend has been reduced by half and other economies effected.

FRANKLIN ABOUT SOLD OUT

The H. H. Franklin Manufacturing Company, Syracuse, N. Y., maker of the Franklin car, has announced that its output for March and April is practically all sold and that the outlook for spring and summer business is unusually encouraging.

STUDEBAKER'S POSITION

One of the principal reasons why Studebaker Corporation stock has been steadily going up is said in financial quarters to be not only the fact that it is known that the corporation is doing a fine business, but that at the beginning of the year less than 3,000 unsold Studebaker cars were held by the corporation. That was very much less than was generally believed.

BEGGS MANAGES PLANET SALES

The Planet Manufacturing Corporation, Detroit, maker of a carburetor attachment, announces the appointment of Edwin S. Beggs, who comes from Long Beach, Calif., as sales manager.

Digitized by Google

C. A. EARL HEADS BRISCOE

Clarence A. Earl has been elected president of the Briscoe Motor Corporation, Jackson, succeeding Henry F. Wardell, who has been named vice-president and a director. Mr. Earl is especially well known in the automotive industry for his connection with the Willys-Overland Company, Toledo, which he joined in 1915 as a vice-president. Later he was made first vice-president and general manager of all the Overland plants. Before entering the automobile field Mr. Earl was connected with a number of other important concerns in other lines, such as the Corbin Screw Company, American Hardware Corporation and Hendee Manufacturing Company, the latter making the Indian motorcycles.

W. J. Jacoby, also a former Willys-Overland official, has become sales manager of Briscoe.

WILCOX NOW MANAGES COMMERCE

The Commerce Motor Car Company, Detroit, announces the promotion of George D. Wilcox, director of sales and advertising, to the position of general manager of the company. Mr. Wilcox has held the position of sales manager for Commerce for seven years. Under his direction the policies of sales, advertising and service have been formulated, resulting in a nationwide organization distributing Commerce trucks as well as invading in a large way the export field. Orville D. Coppock, who has been Mr. Wilcox's assistant, becomes sales manager. There will be no change in policy.

MEARS-RICHARDSON-BRIGGS

The Mears-Richardson-Briggs Company is a new advertising firm which has been organized in Cleveland by three men well known in their profession, Charles W. Mears is one of the oldest advertising men in the automobile field in point of service, with the Winton Company, Cleveland, almost from the time Winton automobiles were first made. William E. Richardson comes from the Chicago offices of Lord & Thomas. He was vice-president of Lord & Thomas, with whom he has been connected for the last 15 years. Ralph E. Briggs has been engaged in advertising work for the last 20 years in New York and Chicago. The new company has taken quarters in the Cleveland Film Exchange building, Payne avenue and Twenty-first street.

OFFICIAL FORD FIGURES

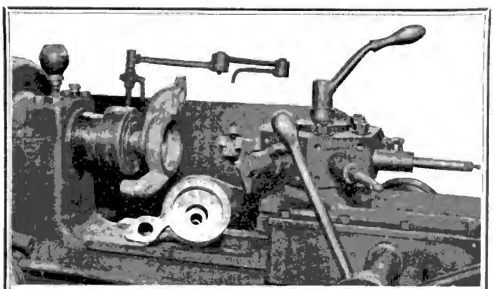
The Ford Motor Company shipped 62,362 cars during March. Retail sales for that month totaled 87,221 cars, it is officially stated. The production for April calls for 90,000 machines and there are now more than 100,000 orders to be filled. There are now very nearly 40,000 men on the payroll, these being distributed among the different plants in and about Detroit—that is to say, Highland Park automobile plant and the tractor and body plants in the River Rouge district. Of this number of employes only about 2,000 are not working full time; all the others are back on a normal schedule. General outlook for automobile and tractor sales, so far as Ford products are concerned, is said to be good and the company feels confident that from now on production as well as sales will increase steadily.

HAYES' METAL TRUCK CAB

The Hayes Manufacturing Company, Detroit, has brought out an all-metal truck cab. It is equipped with sliding windows and doors and a ventilating windshield to make it an all-weather cab. Due to its all-steel construction, it affords the driver a wider range of vision than does a wooden cab. The parts are interchangeable.

B. F. JONES QUITS REPUBLIC

The Republic Rubber Company, Youngstown, Ohio, announces the resignation of B. F. Jones as president.



The hub of this Cast Iron Water-Circulating Pump-Body has been turned and drilled on another No. 4 Turret Lathe. The tools on this No. 4 rough bore and true up for shaft, ream to size, counter-bore for clearance and finish bore and face large diameter—all in 5½ minutes. Most of these tools are standard.

Proper Tools for Turret Lathes

To do work well
a turret lathe must be equipped
with the proper tools.

Tools make or mar
a good turret lathe.
Re-tooling a turret lathe
often doubles its production.

In our catalog
we illustrate turret lathe tools
for all kinds of work,
bar or chucking,
and if you desire,
we help you select
the right tools for your work.

Send for our Small Tool Catalog.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company

CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:36 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Purchasing Agents' Association of Detroit, is the directing force in the gradual elimination of unfair practices in buying and selling

Publicity Office 18 Garfield Building Glendale 2819

TO INCREASE SALES and REDUCE SELLING COST

Good direct mail work will be an important factor in getting future business. Nearly every firm can use it profitably. A Direct Mail Specialist offers a few firms a personal service, promoting sales by mail. Write "Direct Mail Specialist," care of Michigan Manufacturer and Financial Record.

AJAX PATTERN WORKS, Inc.

Manufacturers of High Grade

Wood and Metal Patterns

Service Our Motto

Cherry 6451 Main 6602

680 Fort St., E. DETROIT

KISSEL ON 60% BASIS

The Kissel Motor Car Company, Hartford, Wis., is operating at 60 per cent of capacity, according to a statement attributed to J. F. Lynch, general sales manager. The demand has increased notably the last four to six weeks, Mr. Lynch added.

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Muskegon—Announcement has been made by the Grand Trunk Railway that Muskegon will have a car ferry service crossing Lake Michigan, the city thus becoming a terminal point for freight from many western cities destined for eastern points. It is said that the Grand Trunk plans a dock which will house four boats loaded with cars. There is some speculation also as to whether the Muskegon Railway & Navigation Company will complete its work in putting in ferry docks to carry freight from the city to other towns along the western shore of Lake Michigan.

Hamilton, Ohio—Henry Ford, accompanied by several Ford officials, visited the company's tractor plant in Hamilton, a few days ago, and expressed confidence that the tractor business was on the mend. While the party was in Kingman, O., on an inspection tour of the Detroit, Toledo & Ironton Railroad, it is said Mr. Ford told a D. T. & I. executive that he had in mind extending the road to Hamilton to reach the tractor factory.

Grand Haven—The Goodrich Transit Company's boats have started the season on a tri-weekly schedule. Boats leave Grand Haven on Monday, Wednesday and Friday nights and leave Chicago on Tuesday, Thursday and Saturday, while the boat train will leave Grand Rapids at 7:40 in the evening.

Washington—In the complaint of the Buick Motor Company vs. the Grand Trunk Western Railway Company et al., the Interstate Commerce Commission has decided that the rates charged on automobile tire carriers, in carloads, from Detroit to Flint, during federal control of the railroads, were applicable and not unreasonable. The complaint has been dismissed. The case, which was No. 11366 on the commission's docket, was submitted December 13, 1920, and decided March 1, 1921. The decision has just been published.

Detroit—The passenger traffic season on the Detroit-Cleveland run opened this week when the steamer Eastern States left its dock at Detroit, bound for the Ohio metropolis.

Lansing—John T. Ross, traffic commissioner of the Lansing Chamber of Commerce, will join in no effort to induce the railroads to reduce rates until they are able to cut the wage scale and other present costs, he declares.

Detroit—The Grand Trunk Railway shops at Port Huron and the Pere Marquette shops at Saginaw resumed operations Monday morning, the former with 375 men and the latter with 200. Grand Trunk officials said that future activity would depend on the amount of railroad travel.

1920 American Truck Sales In South America Analyzed

From 1913 to the end of December, 1920, there were exported to 26 Spanish and Portuguese speaking countries a total of 17,417 American-made trucks, according to statistics just compiled by El Automovil Americano, New York. The total does not include Ford trucks sold in Spain and Portugal, the publication adds, since the establishment of an assembling plant by the Ford Motor Company at Cadiz, Spain, in 1914, and assembling plants at Buenos Aires, Argentina, and Sao Paulo, Brazil.

How the American vehicles were distributed is itemized as follows: Cuba, 3,981; Mexico, 2,908; Philippines, 2,053; Brazil, 1,341; Peru, 1,215; Spain, 833; Argentina, 806; Chile, 759; Porto Rico, 575; Portugal, 528; Columbia, 326; Dominican Republic, 312; Venezuela, 301; Panama, 274; Uruguay, 211; Ecuador, 59; Bolivia, 59; Salvador, 52.

"Our export of trucks to Peru, South America, in 1920, increased 334 per cent over 1919," says El Automovil Americano. "Peru is in the best position of all South American countries. Here mining and industrial interests, coupled with the lack of railroads, make it an attractive field. Shipments to Peru more than double the number of trucks in 1920 that she purchased in 1919. Portugal's increase for the same year was 420 per cent. Mexico has been a large buyer of American trucks because of her oil fields and mines. During 1919 and 1920, when oil production increased 40 per cent and 120 per cent, respectively, over 1918, Mexico bought more than three times as many trucks as during the previous six years.

"Brazil has used American trucks principally in and around Rio de Janiero and San Paulo. In Argentina, light dellvery trucks have been used in Buenos Aires. On large farms, or estancieros, American trucks have been used to advantage for several years. For light trucks with pneumatic tires, this field holds potential possibilities. Cuba has absorbed the largest number of American motor trucks. This fact is due to the prosperity brought on by the expansion of its sugar industry and the necessity of increased transportation to handle the increased production of sugar. Cuba is the largest producer of sugar in the world, production increasing 50 per cent during the war period and reaching 4,000,000 tons in 1919 and 1920. American trucks have been used for the most part in the cities of the Spanish and Portuguese speaking countries. The lighter capacity trucks—up to 2½ tons—have been the best sellers, due to lack of improved highways and the lower investment cost."

SCOVELL TO ADDRESS B. OF C.

Tuesday noon, April 12, Clinton H. Scovell, Boston, will address the Detroit Board of Commerce on "Essentials of Efficient Management." Under this heading Mr. Scoveli will discuss production planning, cost accounting, labor turnover, employment methods, profit sharing and some related subjects, not to undertake a detailed exposition of any one of these matters but rather to indicate their relative importance in a well proportioned plan of management. The section will be devoted in part to Mr. Scovell's address and in part to an open forum, during which there will be an opportunity to ask Mr. Scovell questions based on his address and on related subjects.

Mr. Scovell's experience has been acquired as senior partner of the firm of Scovell, Wellington & Company, accountants and engineers, with offices in New York city; Springfield, Mass.; Cleveland, Chicago and Boston.

In the evening Mr. Scovell will address the April meeting of the Detroit Chapter of the Society of Industrial Engineers at a dinner at the Board of Commerce, on the subject, "Cost Analysis as a Device for Executive Control."

DETROIT SERVICE STATION OPENED

The American Engineering Company, Philadelphia, maker of the Taylor stoker, has established a mid-western service station at 1772 West Lafayette boulevard, Detroit. A complete stock of parts for all sizes and types of Taylor stokers is carried and immediate shipments will be made.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton
SALES REPRESENTATIVES: Atlanta Denver Portland
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

WHEN IT'S ABOUT BUSINESS

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

PUBLISHES IT FIRST

Five Dollars a Year Issued Weekly

Milling Operations



like the one shown—60 keyways per hour in Chrome Nickel Steel pinion shafts — show what can be accomplished by combining the swift, easy operation of CINCINNATI MILLING MACHINES with the experience of our SERVICE DEPARTMENT in devising fixtures.

Let Them Help You

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT
CLEVELAND CINCINNATI PITTSBURGH

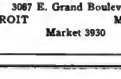
Digitized by Google

An Engineering Service

This organization is composed of men whose experience embraces years of practical association with all branches of manufacturing in the metal and wood-working industries.

Our laboratories, associated factories and personnel are at the disposal of manufacturers who are confronted with a production, patent development or sales problem.

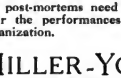
Wright-Fisher Engineering Company
3087 E. Grand Boulevard
DETROIT MICHIGAN
Market 3930



SIX feet of earth conceals the errors of many a physician. Several feet of masonry may hide the defective work of an electrical contractor.

No post-mortems need be held over the performances of this organization.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT





STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN

Commercial and Portait

Rush Work Given Special Attention

Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—Work was started here this week on the construction of a 10-story business block at Michigan and Washington avenues, on the site of the old Prudden building, destroyed by fire during the winter. The building will be erected by the Prudden Building Company, which has obtained a 99-year lease of the site from William K. Prudden, the owner. The property is 48 by 132 feet and the building will have a total of more than 50,000 square feet of floor space. The Prudden Building Company has been incorporated for $375,000, with $225,000 common and $150,000 preferred. The Michigan Mortgage Investment Corporation will underwrite the preferred and no stock will be offered the public. The officers are: President, William Brogan; vice-president, William J. Dancer; secretary, Bert J. Baker; treasurer, William R. Town. These, with Glen R. Munshaw, comprise the board of directors. Samuel Butterworth is the architect.

Detroit—The Department of Public Works was this week considering the bids received for improvements in the Fairview sewage pumping station, the improvements to consist of an additional chimney, underfeed stokers and a modern system of coal handling. The plans and specifications were prepared by Smith, Hinchman & Grylls, architects and engineers. It is estimated that the expenditure involved will be around $90,000.

Lansing—The city council last week virtually awarded the contract for the construction of the Elm street bridge to W. Marshall & Son, Grand Rapids, who bid $53,000.

Detroit—Building permits taken out during the week ended March 30 totaled 342, as compared with 458 for the week of March 23 and 484 for the corresponding week in 1920. The outlay represented was $230,690, as compared with $1,514,545 for the previous week and $1,736,575 for the corresponding week in 1920.

Capac—Eastern capital has obtained control of the St. Clair Paper Company and will enlarge the plant, it is reported.

Lansing—Work on the construction of a store and office building to be erected by the Lansing Fifty Associates Company will be started before the middle of the month. Two stories will be built now but foundations will be placed for more stories.

Detroit—Contracts and sub-contracts let by architects during the week ended March 31 were mainly for residences, stores and schools, as the list from the Detroit Builders & Traders' Exchange shows. Among the projects in the hands of architects and reported to the exchange are a number of school propositions, among them an addition to the Estabrook school, Linwood and McGraw avenues; additions to Sampson school, Begole avenue and the completion of the Case Technical gas engine laboratory and welding plant.

Saginaw—In February 112 permits were taken out, as compared with 75 in February, 1920, and the cost involved was $106,083, while a year ago the amount was $72,985. The construction contemplated was mostly small jobs.

Kalamazoo—The week ended March 19 was the best thus far this year, 26 permits being taken out, cost of buildings being estimated at $20,100. Most of the grants were for residences or homes.

Grand Rapids—Activities during the week ended March 26 increased as far as number of permits issued was concerned, and decreased as to cost involved. The number taken out was 65, which was 13 more than the previous best record so far this year. The cost of the jobs planned was figured at $63,787, as against $114,715 for the previous week, which was the high mark this year. The list of permits is headed by one taken out by the Moon Lake Ice Company, for a manufacturing plant of brick construction, to cost $20,000.

E. Foster Moreton Heads State Cartage Association

[*By Staff Correspondent*]

GRAND RAPIDS, April 6—Sixty cartage men from all over Michigan and representing about 2,500 operators, assembled at Hotel Pantlind today and organized the Michigan Highway Transportation Association, and for the first time gave the commercial hauling industry of the state a unity for co-operation.

The morning session was devoted principally to a general discussion of basic conditions under which operators in various sections must do business. All pleaded for a state body that would stabilize conditions, reduce price cutting and make for a better understanding of the cartage industry on the part of the general public.

The convention was welcomed to Grand Rapids by Lee H. Bierce, secretary of the Grand Rapids Association of Commerce, and by J. Zevalkink, president of the Grand Rapids Cartage & Transfer Association. Mr. Bierce discussed legislation and urged the delegates to work for a constructive legislative program to be submitted to the 1923 lawmakers. He explained to the truckmen how freak legislation is born and made a plea for educational efforts.

In the afternoon, a constitution and by-laws were adopted and the convention adjourned, prepared to make a strenuous campaign for membership all over the state.

E. Foster Moreton, of Detroit, was elected state president. The other officers chosen are: First vice-president, E. M. Radcliffe, Grand Rapids; second vice-president, W. G. Stone, Hillsdale; treasurer, H. G. Bebbe, Battle Creek; secretary, H. H. Hardy, Lansing; directors, the above and Henry Stephens, Flint; F. H. Stevens, Saginaw; Edgar T. Raseman, Kalamazoo; E. A. Hopperstead, Muskegon; Charles J. Foster, Cadillac; C. L. Alden, Benton Harbor; Henry Wellman, Hastings; A. Alexander, Battle Creek; W. J. Lastrange, Mt. Pleasant, and L. J. Flanagan, Marquette.

Lansing will be state headquarters, with offices of the secretary in the building of the Fireproof Storage & Transfer Company. The delegates accepted invitations to attend the convention of the National Team & Motor Truck Owners Association in Detroit, in June.

The Michigan Manufacturer and Financial Record, by resolution, was made official organ of the state association.—FISCHER.

CANADIAN BRIDGE CO. APPROVED

A bill to incorporate the Canadian Transit Company to be capitalized at $5,000,000 and to build and operate a railway and traffic bridge over the Detroit River between Detroit and Windsor, has been passed by the house committee on railways, canals and telegraph lines of the Canadian Parliament at Ottawa. The company is empowered to borrow money, issue bonds and charge tolls subject to the approval of the Canadian Railway Commission. The construction of the bridge cannot be started until the United States Congress approves the plan.

Digitized by Google

Building Revival Reported By Three Michigan Cities

The building outlook in Grand Rapids is improving, due to the fact that contractors are buying lumber at practically the prices asked four years ago. That is the gist of a statement given the Grand Rapids Press by John McNabb, who is quoted as follows:

"The time honored oak is going out of fashion for interior finish owing to its scarcity. Gumwood, imported from the South, is taking its place, even in the highest priced homes. It can be treated to resemble any wood desired and for enameling it is wonderful. It costs about what oak did three years ago.

"We also are getting a full day's work for a full day's pay. That adds to the efficiency of the work and economy of construction. One of our greatest troubles in the last two years and a principal cause of the high cost which has discouraged the building of houses, has been that the men loafed on their jobs because there were more jobs than men. They thought that by that policy they could continue the demand for labor at any price, indefinitely. But when they know they must work to hold their jobs they do their best. We don't mind paying high wages when we get full recompense in work. With these conditions there is no better time than now to build."

A dispatch from Cadillac says that despite the high prices of building materials a large number of new houses are being put up in the city, in addition to much repairing and cleaning-up work.

In Allegan a movement has been started to remedy to the shortage of bonses. The city council has been urged to exempt newly constructed homes from taxation for a number of years.

AMERICAN BOY PROMOTES GRIERSON

Griffith Ogden Ellis, editor of the American Boy, and president-treasurer of the Sprague Publishing Company, Detroit, announces the appointment of Elmer P. Grierson as business manager of the magazine and secretary-assistant treasurer of the company. Mr. Grierson, a graduate of the University of Michigan, has been advertising manager of the American Boy for seven years.

GRAND TRUNK GETS ULTIMATUM

If the Grand Trunk Railway Company wishes to have its petition for further advances in rates and an extension of time in the arbitration proceedings to determine the value of the physical properties, it must turn its property over to the Canadian Government, according to an ultimatum issued by Arthur Meighan, prime minister, who said that the government railway system must be unified and placed upon a more economical working basis. It had previously been charged that the Grand Trunk system was too expensively conducted and administered.

FOREIGN TRADE CREDIT EXTENSION

In support of its contention that foreign trade credit extension facilities are badly needed the Foreign Trade Financing Corporation asserts that 2,000,000 tons of exportable foodstuffs and fuel are held in elevators, freight cars and warehouses waiting for arrangements for financing shipment. This amount of goods represents a single order from one foreign government.

ENGINEERING OFFICES MOVED

The offices of E. R. Little, engineers, have been moved from the Dime Savings Bank Building to 1918-1920 Ford Building, Detroit.

BROADWAY MARKET DIVIDENDS

A semi-annual dividend of 3 per cent on preferred stock, payable April 20 to stockholders of record, April 1, has been declared by the Broadway Market Company, Detroit.



When purchasing cutters, bear in mind that—

BROWN&SHARPE

Carbon & High Speed Steel

CUTTERS

Give highest returns per dollar invested.

B&S cutters are the result of fifty years' experience in the manufacture and use of milling cutters. The shops around you will insist that B&S cutters give longest service and reach the maximum of Cutter Economy. They know from experience.

BROWN & SHARPE MFG. CO.
Providence, R. I.

Digitized by Google

MICHIGAN MANUFACTURER
FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building
DETROIT, MICHIGAN
Telephone Cherry 6010

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico.
Advertising Rates on Application.

DETROIT, SATURDAY, APRIL 9, 1921

The Program at Washington

IT IS REPORTED from the national capital on what appears to be reliable authority that the legislative program mapped out by President Harding and his advisers is as follows:

First, an emergency tariff to protect the agricultural interests; second, an anti-dumping law; third, an American valuation bill; fourth, a permanent tariff, and, fifth, taxation reform.

This is all meaty enough, but it seems to this paper that it could be improved upon. In our opinion there are three things more immediately pressing than the tariff, and these are: First, relief for the railroads; second, taxation reform; third, government retrenchment. They are, we believe, of importance in the order named. After these have been taken care of, Congress could very well turn its attention, first, to an anti-dumping law, and, second, to the enactment of a permanent tariff schedule. There is no real need for agricultural relief, and as for the commodity valuation bill, it may be sandwiched in among the others.

In these columns last week we endeavored to show something of the plight of the railroads and to explain why we believed it necessary that steps be taken immediately to improve their condition. We pointed out that industry could not possibly prosper under the handicap of a completely demoralized transportation system, and that we were going to have a completely demoralized transportation system by the middle of the year unless a radical operation were performed.

The point is that even under the present indefensible taxation system, and whatever tariff duties are laid under the Underwood law, business has begun to revive, and will continue to revive as the public loosens its purse strings further, and it will not be long until the railroads will be called upon to handle a volume of business much greater than that of the moment. With bare treasuries and inadequate and crippled rolling stock, how are they going to meet the demands? How are they going to care for what business we have? It seems to us that to provide the means of stimulating business first, leaving for future consideration the means of moving the products of revived industry from manufacturer to consumer, or to the seaboard, is putting the cart before the horse. The railroads should have first call.

After the railroads, taxation reform. And hand in hand with taxation reform must come government retrenchment. People of all shades of political opinion are practically unanimous in the conviction that the usefulness of the excess profits tax died with the war, and that the law should be repealed at the earliest possible moment. In view of all that has been written on this subject, it hardly seems necessary to restate at this time the arguments as to why such taxes be done away with. It may not be out of place, however, to recall to the mind of the reader that three reasons are paramount: First, that the handicap upon business enterprise and initiative laid by the tax must be removed; second, that the condition which is driving capital out of industry and into tax-free investments must be eliminated, and third, but of no less importance, that business be given prompt assurance as to what the taxation demands of the next year or eighteen months are going to be. Nothing is contributing more to the timidity of industrial leaders than the uncertainty as to what the government is going to require of them in the way of taxes. Knowledge in this regard is more important than an understanding of the principles that are to underlie our next tariff. By admission of Rep. Fordney, chairman of the House Ways and Means Committee, it will require eight or nine months to frame and pass a permanent tariff bill. Business cannot wait that long on a taxation program.

As to just what form of tax can be enacted to take the place of the excess profits levies the members of Congress are reported to be somewhat at sea. However, the business interests of the country seem to be pretty well agreed—and in this agreement they are supported by some of our most noted economists—that a tax on sales will warrant a try-out. There are objections to this program, chief among them that such a tax would be hard to collect, but, notwithstanding, the sales tax is worth trying. Certain it is that considerable relief could be afforded by spreading the liquidation of the war debt over a longer period, so as to lift some of the burden off the backs of this generation, upon whom the present system places responsibility not only of paying interest, but of the principal as well. It does not seem unreasonable to suggest that the next generation might pay its part. Although, perhaps indirectly, it has profited as much by the result of the war as have we.

Along with taxation reform must come the strictest kind of government economy. A few hundreds of millions of dollars of expense can be lopped off the annual budget, and every million saved is that much subtracted from the total of what the country has to pay. It has been estimated that there are a good many thousands of government employes scattered about the country filling jobs that were created where no need existed, and simply to provide jobs for the "deserving." These can be done away with without loss of government efficiency; indeed, with a promotion of efficiency. There are bureaus that can be abolished or combined with others, and there are many lines of endeavor that can be curtailed. The application of the principles that govern the management of private businesses would result in the saving of a staggering total annually.

A great many earnest men will argue that the tariff should come first. Mr. Fordney, writing in the Protectionist, explains our languishing industries, increasing unemployment and shrinking revenues as "the inevitable result of the inadequate tariff law now in force," declares that "the disparity between production costs here and abroad is greater than in the pre-war period," and warns that "to save our industries and the earning power of the American people, no time should be lost in replacing the present tariff law." That may be true, but we may be pardoned for expressing the opinion that Mr. Fordney has overestimated the importance of the tariff, at least for some months to come. Production costs, as he says, may be further apart, here and overseas, than they were before the war, but over against that may be weighed the fact that Europe is in no position now to compete with us aggressively, and will not be for some time to come. It is admitted that Germany is making more rapid strides toward rehabilitation than any of her neighbors, but how serious a factor in world commerce Germany may be after the Allies get through collecting the war debts remains to be seen. Our guess is that she will not cut so much of a figure as a good many people expect. Certainly, if all the reports coming from England are true—reports of disorganized industry and trade—we have nothing serious to fear from her. And France is pleading bankruptcy in such convincing fashion that the Harding administration seems disposed to believe her. There is much to support the proposition that America can hold her own in world markets and fear little from European imports on the basis of the present tariff, at least for the present.

Digitized by Google

If it be argued that we must have the tariff ahead of taxes as a means of raising revenue, let it be recalled that the tariff last year yielded only $825,000,000, as against $4,000,000,000 of the income tax. It is the opinion of able economists that the tariff for some time to come will yield only 8 to 10 per cent of the national revenues. It would be better to look first after the hen that lays the golden eggs.

The agricultural emergency tariff propaganda may be dismissed as purely political in character and deserving of corresponding consideration.

Britain at the Crossroads

WITH practically every mine in the islands tied up by a strike, with other trade unions debating whether to walk out in sympathy and with rioting so widespread and so violent as to necessitate a virtual rule by arms, Great Britain appears to have arrived at an industrial crossroads. Will the government declare for a permanent policy of subsidy to guarantee wages or will it abide by its recent decision to withdraw entirely from industry? Mr. Lloyd George asserts there will be no surrender—that the government cannot, in the present state of its finances, levy taxation to subsidize a great industry to satisfy its employes. Such a course, he declares, is "wrong in principle and completely indefensible," and now is as good a time as any to settle the question once and for all. The unions, on the other hand, are presenting what appears to be a united front. The business interests of the whole world look on with bated breath.

The situation came about substantially as follows: During the war the government found it necessary to guarantee the income of the British mining industry in order that the latter might pay the scale of wages demanded by the unions. The crisis will be remembered. Recently came the end of government subsidy and in connection therewith the announcement by the mine operators that they would have to reduce wages, support from the federal exchequer having been withdrawn. The miners struck. Today the fuel supply of the British Isles is cut off, industry, already at a low ebb, is demoralized, and the thousands of men out of work stand to be augmented by members of other unions, notably those engaged manning the railroads and the water transport systems. The government, declaring it will not retreat, repeats that it is prepared for a showdown.

The situation as embracing the miners alone is serious enough, but it becomes the more critical in view of the stand being taken by other unions. Havelock Wilson, president of the seamen's union, is reported as "opposing" a subsidy for the miners for the reason that, if it were granted, it would be necessary to extend government support to other industries. "If the miners are going to be subsidized," he asked in a speech in Liverpool, "why should not all other workers whose wages are being reduced?" It is to be suspected that he is not so anxious to beat the miners as to establish grounds for similar demands on the part of the seamen and the railroad men in case the miners win out. Earl Curzon, secretary for foreign affairs, seems to have sensed Mr. Wilson's meaning pretty clearly, for in an address in the House of Lords on Monday he declared the question had ceased to be one of wages and had become one of state policy, affecting every industry in the country.

Anyone who understands how largely British labor is unionized and how ever since the outbreak of the war it has dominated the government's course as regards industry, and how imbued with radical ideas it has become by reason of communion with the red element in Russia, will understand the gravity of the present crisis. Government subsidy of any industry to guarantee wages is nothing less of course than state socialism. The unions want a continuance of it because under it they wax comfortable while the men who pay the taxes foot the bill. So long as their income was guaranteed, the operators condoned the policy, but now that normal conditions are being restored, they realize what a Frankenstein they have helped to create. And so does the government.

Once more it is being demonstrated that the time tried principles of sound economics still prevail and that whoever tampers with them plays with fire.

This Is Real Co-operation

HERBERT HOOVER promises to put the Department of Commerce on the map, just as everybody expected he would. He started this week a series of conferences with the leaders of American business and industry looking to the development of our world trade. From the personnel of the first delegation, much is to be expected from this effort. His callers included A. C. Bedford, chairman of the board of directors of the Standard Oil Company of New Jersey; George Ed Smith, president of the Royal Typewriter Company and one of the moving spirits in the American Manufacturers' Export Association; John H. Fahey, Boston; Homer L. Ferguson, president of the Newport News Shipbuilding & Drydock Company and former president of the Chamber of Commerce of the United States, and Philip H. Gadsen, Philadelphia, president of the American Electric Railway Association. All these men were named by the U. S. Chamber of Commerce. Later on a committee from the American dye industry will confer with Mr. Hoover regarding steps to be taken to protect this youngest American industrial infant from German competition, and after that there will be meetings with some of the leaders in the automotive and other industries.

The new Secretary's program is truly significant in itself, but it is more important in that business generally has confidence in Hoover and is disposed to give him the greatest measure of support. It understands that he has sensed the correct function of the Department of Commerce, which is to bring into play all its facilities and to extend them for the assistance of commerce and trade, and that, moreover, he has the ability to do that thing in the largest way.

This is something new in American political life—at least within the last few years—and it is as gratifying as it is new.

Short Measure Stuff

THE BANDITS' lobby at Lansing has passed the word among the boys not to kill any more policemen until the legislature kills the capital punishment bill.

* * *

Now that the Tigers will require some of our kindly supervision, we will welcome contribs in greater volume for this column.

* * *

DO TELL US PLEASE, WHAT ARE "HE GIRLS?"

Girls' Basket Ball season came to a fitting close last Saturday night at a party given by Miss Joseph at her home for he girls. Music and games were enjoyed until the delicious lunch was served. The girls presented Miss Joseph with a little remembrance of the season.

—From the School Notes in the Crawford (Grayling, Mich.) Avalanche.

* * *

The trouble with most municipal ownership propositions that we have examined has been that some small group behind it is inclined to be extremely heroic with and generous with public monies to satisfy private grudges.

* * *

Spring comes again.
But fails to please;
I've worn out last year's
B. V. D's.

* * *

Emperor Charles, after failing to regain his throne, has retired to Switzerland, where they keep goats.

* * *

Representative Scott, of Michigan, on returning from the Canal Zone, reports that there are 18,000 men employed there by the Government. That ought to be enough to carry all ships across the isthmus, in which case the building of the canal might be considered unnecessary.

* * *

Now that the International Joint Commission has concluded its hearings, everybody is awaiting its report to Congress and the Canadian parliament. We sincerely hope it will be something brief, as for instance: "Go ahead and build."

—A. F.

Digitized by Google

FINANCIAL

They Seek the Facts Now * * * Something to Think About in South America

By PHIL S. HANNA

THERE is a growing disposition on the part of everyone to get at the facts concerning the future of business. This evolution of mental attitude is one of the most encouraging signs of the times. Until recently one who dared paint the picture of the business outlook according to reason and known facts, rather than wishes and hopes, was commonly accorded a reception not unlike that given a leprosy suspect. He has been shunned, avoided and ridiculed. But time has proved the failacy of attributing all our business ills to psychological trade drawbacks.

Another popular theory is likewise about to go into discard, namely, the hypothesis that business is good or bad according to the amount of money available. In spite of the fact that the Federal Reserve Banks are now holding real reserves of $53.40 against every $100 of deposits and currency outstanding, business still lags behind the early 1920 pace. On December 33, 1920, when the reserve ratio was $45 of reserve to $100 of deposits and notes, the money theorists gave us much promise that business would revive if we only had more credit. But we now have more credit and business has not come in the same proportion that the banking situation has improved.

The most dependable theory advanced is that business has been poor because more goods have been produced than consumed. In any consideration of the business outlook it is necessary to weigh the part that foreign sales has played since 1913. We cannot overlook the fact that when a truck manufacturer in Detroit failed to ship three trucks a day to Buenos Aires during November and December, an equal amount of orders from some other source had to be substituted in order to maintain his steady stream of business. And when the Detroit truck maker cut down his production by three trucks a day he cut down his purchases and his payroll proportionately, with the result that the materials and men so released became available for other country factuers, who, finding themselves confronted with a similar loss of orders, not only had no use for the men and materials released from the truck maker, but added to the surplus materials and men by releasing some of their own. And all the way down the line there was a similar falling over of tin soldiers.

We often read government figures of exports and imports which are construed according to the theory of the writer, but granting the constructions so placed, when one sees actual photographs of thousands of crates of American automobiles, steel and other commodities piled up in the harbors of Cuba and Brazil, he cannot fail to conclude that the failure of former customers to pay for and continue to buy our goods is at once one of the most definite and conclusive reasons why business has slumped.

* * *

The Buenos Aires representative of the J. B. Ford Company has favored us with a copy of the Buenos Aires Herald of February 27, in which are photographs of huge piles of goods in vacant lots in Buenos Aires. One shows more than 3,700 American automobiles in crates which have been refused by purchasers; another shows piles of machinery and steel covering an area seemingly larger than an ordinary city block. The third shows hundreds of boxes containing general merchandise. The paper says: "The situation is due largely to refusal of consignees to accept shipments. These rejections commenced to be serious last October when news arrived of falling price values in United States. Dr. Varela, addressing the Chamber of Commerce, estimated the value of rejected American goods in the port at something between 40 and 45 million gold dollars, and local bankers say the amount is now above 50 million dollars and new merchandise continues to arrive by the shipload."

If the failure of abnormal foreign trade built up during the war is not the reason why business is poor in Detroit, the falling prices have at least by the above specific instance cheated American manufacturers out of about $50,000,000 of sales previously made, and stopped new business while the accumulation is being disposed of. When the price question is brought up you have hit the nail on the head.

Let's forget exchange rates for a moment and assume that all the countries of the world use gold dollars, and look at the position of the United States as a seller of goods in competition with France, Germany and England. It seems clear that insofar as our prices are higher than those for goods offered by other nations, we should lose trade—quality, usefulness and other considerations being approximately equal. "Very well," some will say, "let's forget foreign trade. It is a hoax anyway." Therefore suppose we go back to prewar days and sell to the world approximately what they come after and buy merely those things with which nature did not endow our land. We must then witness falling prices and idle factories for some years to come. Eggs were 16 cents in Reed City, Mich., this week, because more people are raising eggs up in that section and fewer are consuming them down in this section; and on top of that, the express charges are nearly as much as the eggs cost at Reed City.

But the outstanding fact is, whether we agree with the "over-productionists" or the "under-consumptionists," that foreign purchasers have kept our factories going longer than we realize it, and the immediate future of business is going to depend largely on whether we can achieve a resumption of foreign sales or not. For any surplus of goods over home consumption, even though the surplus be small, acts as a brake on business and holds production off until the surplus is consumed. Witness the closing of the copper mines despite the fact that $40,000,000 worth of the product was temporarily taken off the market. And while the brake is clamped on business, the purchasing power of employes falls, but if only a method may be found whereby our surplus may continue to be taken by the rest of the world without interruption, the loss of our surplus goods over there will make these peoples larger ultimate purchasers and in the meantime we shall avoid the waste due to unemployment. In many respects the machinery of American business is like that of a large automobile plant which relies on quantity production for its profits. Unless a certain production is maintained, there are no profits nor even expenses, but above that figure of output there is a progressive rate of profit. And as they say in the language of the trade, "we have got to keep production low to make money." So here is something to think about. The United States is committed to quantity production and the proposition before us now is either enough orders for that kind of industrial life or go back to custom-made methods.

* * *

A strange effect of the business depression which goes to show how similar industries have been differently affected is a comparison of reports of the S. S. Kresge Company and of Sears, Roebuck & Company. The Kresge company reports sales for March as $4,642,223.89, against $4,074,175.43 for March a year ago, a gain of $568,048, or 13.94 per cent. Sears, Roebuck & Company report sales for the first three months of 1921 as $49,706,969, a decrease of 41.64 per cent, compared with the first three months of 1920. Sales for March, 1921, were $20,105,904, a decrease of 26.83 per cent over March a year ago. The figures of course bear out the well known capacity of the farmer to get along without new things as against the habit of the city man of providing himself with clothes and other commodities from day to day. The gain of the city merchandiser no doubt reflects efforts on the part of the city dweller to save money by patronizing the so-called 5 and 10 cent stores.

* * *

The ease with which the Guaranty Company of New York sold $500,000 of Porto Rico 4½ per cent bonds, April 1, is a sign that there is considerable money for investment when the offerings appeal sufficiently. These bonds, so it is reported, were sold within a few hours. The bonds mature in 1941 and 1942 and were sold on a basis of 5¼ per cent.

Current Investment Offerings

AMERICAN LOAN & TRUST CO., DETROIT

	Rate	Maturity	Price	Yield
Clayton & Lambert Mfg. Co.	6.00	1924-30	....	7.00
Bomb-Robinson	6.00	1926-37	....	6.00
Adolph Meyers	6.00	1924	....	6.00
Wm. E. Johnson	6.00	1921-25	....	6.00
Morris Schnabel	6.00	1924	....	6.00

BOLGER, MOSSER & WILLAMAN, DETROIT

Asheville Co., S. C. Road Improvement.	6.00	1923-51	....	6.00
Casper, Wyo., Gen. Oblig.	6.00	1941-51	....	6.25
Plainwell, Mich., School Dist. No. 2	6.00	1926-36	....	5.85
Three Rivers, Mich., School Dist. No. 1	5.50	1-1-26	....	5.75
Texarkana, Tex., St. Improvement	6.00	1926-40	....	5.25
Upshur Co., Tex., Road Imp.	5.50	1941-55	....	6.00

A. B. LEACH & CO., DETROIT

Detroit, Sewer	6.00	1-1-1926	....	5.25
Ashtabula, O., Elect. Light Plant	6.00	3-1-27-40	....	5.50
Chelan Co., Wash., Rd.	6.00	12-1-27-48	....	5.75
Milwaukee Yeke & Gas Co., 1st mtg. coll.	7.50	2-1-1933	98.00	7.75
Hercules Corp., 15-yr.	8.00	1-1-1936	99.50	8.05
Union L., Heat & Power 1st mtge.	7.00	2-1-1925	97.00	7.90

HALSEY, STEWART & CO., DETROIT

Brown County, Wis.	5.00	4-1-26	....	5.40
State San Paulo, Brazil	8.00	1-1-36	97.50	8.47
S. Dakota Rural Credit	5.50	1-15-41	100.00	5.50
Kansas City Pwr. & Lt. Co. 1st & Ref.	8.00	12-1-40	100.00	8.00
Tenitor Corn & Fruit Prod. Co. 1st mtg.	8.00	10-1-22	....	8.25
Winchester Repeating Arms Co. 1st mtg.	7.50	4-1-41	97.50	7.75

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. Where unable to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Bankers Land & Inv.	9	11
Burroughs Adding Machine	136	145
Columbia Nat. Fire	15	17
Commerce Fin.	15	20
Detroit Mortgage, com.	2½	3
Detroit Mortgage, pfd.	5⅝	5⅞
Detroit Copper & Brass	12	20
Detroit National Fire	25	26
Detroit Life	55	65
Eureka Croesus	90	96
Federal Bakeries Co.	28	32
Federal Discount Co.	7	7½
Fisher Body	83	85
General Necessities Corp.	10½	12
Gladstone Oil, com.	37	39
Gladstone Oil, pfd.	52	54
Great Lakes Engineering, new	11	14
Great Lakes Engineering, old	58	65
Hoover Steel Ball	14	16
Hayes Wheel Co.	13	15
Interstate Fire	25	26
Invader Oil	135	145
Invader Oil (new)	70	70
Jackson Cushion Spring	7½	7½
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com.	7	7½
Kelsey Wheel	48	48
Little Wonder Stove	1¾	2
Monroe Binder Board	39	41
Detroit Motor Bus	8	9
McFord Manufacturing, com.	10½	11
McFord Manufacturing, pfd.	40	50
Michigan Copper & Brass	16	17
Mich. Fire & Marine	75	80
Noble Oil, com.	50	50
Petoskey Portland Cement	11	11½
Peninsular Fire Ins.	21	30
River Raisin Paper	12	13
Tripoensine Mfg. Co.	6⅜	7½
Union Mtge. 100% com.	9½	10¾
Union Mtge. 90% com.	7¾	8½

Range During 1926, Approximate

Hoover Steel Ball	24½	18
Columbia Motors	5½	6⅜
Noble Oil, com.	1.50	2.50
Mich. Copper & Brass	26	19½
Detroit Mtge., pfd.	6½	5⅜

Motor Stocks	Bid	Asked
Briscoe Motors	17	18
Columbia Motors	4⅝	5
Chalmers	1	2
Chevrolet	185	190
Cole	230	270
Crow Elkhart	55	60
Cleveland	41	48
Curtis Aeroplane	3	5
Denby Truck	1	2
Doble Steam	1¼	1⅝
Elgin Motors	5⅜	6⅛
Harroun	¾	1¼
Haynes	150	175
Hupp	14½	15
Jackson, com.		1½
Jackson, pfd.		2½
Keystone Tire	13¼	14
LaFayette Motors	30	60
Liberty Motors	7	7½
Liberty Motors, pfd.	40	60
Lee Tire	25½	26½
Locomobile	2	3
Maxwell Motor	5	6½
Mercer	4	5
Mitchell Motor	8	9
Moterbus	8	9
Nash	200	225
Pierce-Arrow Truck	32½	33¼
Republic Truck	17	18
Saxon Motors	6½	8¼
Scripps Booth	25	35
Stearns	24	26
Stevens Duryea units	65	77
Stromberg Carburetor	35	38
Studebaker	73	75
Willys-Overland	8	8¾
Wilson Truck	6½	7⅛

Grand Rapids Stocks

American Public Utilities, Common	7 - 12
American Public Utilities, pfd.	18 - 23
Commonwealth P. R. & L., com.	31 - 33
Commonwealth P. R. & L., pfd.	31 - 33
Citizens Telephone Company	4½ - 4⅝
United Light & Railways, Common	24 - 26
United Light & Railways, pfd.	59 - 61
Cities Service, Bankers' Shares	27½ - 28
Cities Service, com.	230 - 240
Cities Service, pfd.	66⅜ - 67
Cities Service, Debenture "B"	124 - 125
Cities Service, Debenture "C"	92 - 94
Cities Service, Debenture "D"	83 - 86

Quotes by Howe, Snow, Corrigan & Bertles, April 5

New Export Problems

Mere order-taking in foreign trade has had its day. Though American shipments of foods, merchandise and materials over-seas continue large, exporters in every line recognize that the turn in the tide has come.

In future, goods that go abroad must first be sold. Customers must be sought, studied, served. Markets must be developed and connections formed on a basis of information and analysis even more exact than those required in securing business in the past.

In making contacts with unfamiliar markets—in keeping touch with changing conditions—in carrying out the financial or shipping operations required in over-seas transactions—the Irving's Foreign Service and Foreign Trade Divisions may be able to supply you with just the information, counsel or banking and commercial aid you need. For exporters—as well as importers—Irving spans all seas.

IRVING NATIONAL BANK
WOOLWORTH BUILDING, NEW YORK

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. E. Dunham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

85% Wastage--

Of all life insurance money paid to widows in the U. S. ONLY 15% remains visible at the end of 7 years. Whereas, Trust Funds; well, nothing can happen to Trust Funds in the care of a Trust Company.

So placed, your property and funds will remain intact for whatever period your Will directs. You may make your life insurance payable to this Company as Trustee for the loved ones.

Let our experienced officers advise with you as to what it is possible to authorize in writing.

Oldest Trust Company in Michigan

THE MICHIGAN TRUST COMPANY

Grand Rapids, Michigan

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

A Bank with a Reputation. 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
Member Federal Reserve System
42-47 Fort St., West. Foot of Shelby.
Penobscot Building. 14 Branches

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED.
(In thousands of dollars)

RESOURCES	Apr. 1, 1921	Mar. 25, 1921	Apr. 2, 1920
Total gold reserves	$2,246,429	$2,230,765	$1,956,259
Legal tender notes, silver, etc.	214,792	211,212	120,169
Total reserves	2,461,221	2,421,977	2,030,428
Bills discounted:			
Sec. by U. S. Government obligations	960,888	1,030,373	1,400,664
All other	1,262,997	1,276,276	999,349
Bills bought in open market	122,491	122,056	424,041
Total bills on hand	2,237,086	2,409,704	2,824,054
U. S. Government bonds	26,720	25,347	26,798
U. S. Victory notes	19	19	68
U. S. certificates of indebtedness	250,358	266,865	246,550
Total earning assets	2,613,183	2,692,425	3,156,970
All other resources	598,022	628,755	863,195
Total resources	5,672,436	6,753,167	6,146,593
LIABILITIES			
Capital paid in	$ 101,137	$ 101,113	$ 91,284
Surplus	202,826	202,826	129,120
Deposits:			
Government deposits	87,099	114,685	10,416
Due to members—reserve account	1,672,402	1,674,536	1,899,063
Other deposits	34,732	61,666	131,933
Total deposits	1,789,232	2,840,887	2,041,412
F. R. notes in actual circulation	2,908,153	2,930,729	2,677,323
F. R. Bank notes in circulation—net liability	129,722	175,490	196,694
Deferred availability items	451,270	464,279	665,860
All other liabilities	50,885	48,832	47,980
Total liabilities	5,672,436	6,763,167	6,146,593
Ratio of total reserves to deposit and F. R. note liabilities combined	52.4%	50.8%	*42.9%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against deposit liabilities	62.1%	60.7%	*47.4%

*Calculated on basis of net deposits and F. R. notes in circulation.

Who's Who In Michigan Finance

A. J. Haviland, Cashier, Traverse City State Bank

Honors came to Albert J. Haviland when the directors of the Traverse City State Bank, Traverse City, a few days ago elected him



A. J. HAVILAND

only is the election an honor to Haviland because of the well-merited promotion of which cashier to succeed August J. Maynard. Not it is evidence, but because he becomes thereby the cashier and managing head of the largest and one of the oldest banks in northwestern Michigan. The bank was founded in 1856 by Hannah, Lay & Company and was incorporated in 1892 as a state bank. Capital is $200,000 and on February 21 total deposits were $3,016,462.

Mr. Haviland is a native of Traverse City, having been born there in 1878. He went to the local schools, graduated from high school and went into the bank in 1897 as a messenger, in 1905 he was elected assistant cashier. An official of the bank writes: "He has filled every clerical position and for many years has been on the official staff, so that he knows the game from 'A to Z,' as well as being well versed upon all local conditions."

In addition to becoming cashier Mr. Haviland was also added to the board of directors.

Pontiac Stocks

	Bid	Ask
Airlite Baking Company	10	11
American Forge & Socket	5½	8
Michigan Drop Forge	..	10
Pontiac Mortgage & Investment	56	100
Van Auken Top	..	10
BONDS		
Detroit & Pontiac Ry., 5s, 1922	96	99
Detroit & Pontiac Ry., 4½s, 1956	83	84
BANK STOCKS		
Pontiac Commercial & Savings	168	168
Oakland County Savings	165	180
American Savings Bank	140	148
National Bank of Pontiac	125	140

Quotes by Hughes, Burke & Company, April 5.

PREST-O-LITE STATEMENT

The annual statement of the Prest-O-Lite Company, Indianapolis, for the year ended December 31, 1920, shows total assets of $18,230,149, as compared with $12,186,446 in 1919. The profit and loss account is given as $3,716,300, as compared with $5,946,759 in 1919. Assets are made up as follows: Real estate, $1,974,337, as compared with $1,823,479; machinery and equipment, $5,226,505, as compared with $2,788,105; patent right and good will, $1, same as previous year; investments,

Digitized by Google

$369,434, same as year before. Liabilities—Capital stock, $919,720, no change; accounts and notes payable, $9,193,390, as compared with $1,749,351; reserves, $3,253,452, as compared with $2,823,329; profit and loss, $3,716,300, as compared with $5,946,759; capital surplus, $1,147,287, no change.

BANK REPORTS FEBRUARY 21

Commissioner F. W. Merrick has issued Bulletin No. 60 containing abstract of reports of 550 state banks, two industrial banks and eleven trust companies doing business under Michigan banking laws, as of February 21, 1921.

Aggregate footings, compared with the report of December 28, 1920, decreased $16,650,407.04, but showed an increase of $13,085,785.72, as compared with the report of February 20, 1920. An idea of how both loans and deposits are following one another down the scale of deflation may be gained by the following tabulations:

Report Feb. 21, '21, compared with:	Report Feb. 24, '20	Report Dec. 28, '20
Loans and discounts, com'l, deps.	*$2,378,302	*$ 5,267,744
Bonds and mtgs., com'l, dept.	$ 19,249,062	* 2,764,393
Deposits, commercial dept.	$ 52,867,572	$ 4,196,920
Bonds & discts, savings dept.	* 1,900,404	$ 4,551,603
Bonds, mtgs., Sec., savings dept.	* 19,909,957	$ 4,458,142
Deposits, savings department	* 19,959,548	$ 13,422,396
Total loans and discounts	$ 14,128,844	$ 14,256,784
Total deposits	$ 21,075,327	$ 15,954,916
Capital stock	$ 12,317,675	* 3,427,425
Borrowed money	* 14,822,938	* 166,960

*Increase. †Decrease.

A condensed statement of all the institutions as of February 21, 1921, follows:

Loans and discounts	$ 509,106,534
Bonds, mortgages and securities	161,570,191
Reserves	113,092,421
Other assets	52,56?,?80
	$?,?08,?2?,?06
Capital, surplus, undivided, etc.	$ 118,540,408
Commercial deposits	317,?96,?2?
Savings deposits	?01,?2?,?79
Rediscounts	29,901,130
Bills payable	?7,?61,?54
Other liabilities	29,?86,6?6
	$1,?2?,?5?,6?6

Applications for charter for new banks approved February 4, to March 21, are as follows:

Nunica State Bank, Nunica; Kaleva State Bank, Kaleva; Cass City State Bank; American State Bank, Cadillac; Pinney State Bank, Cass City; Jeddo State Bank, Jeddo.

Increases in capital stock have been approved as follows:

Lansing State Savings Bank, from	$150,000 to	$200,000
Merchants Savings, Battle Creek, from	125,000 to	250,000
State Bank of Perry, from	15,000 to	25,000
Athens State Bank, from	30,000 to	40,000
Citizens Com'l & Sav., Flint, from	150,000 to	400,000
Farmers State, Breckenridge, from	25,000 to	50,000
Allegan State Savings, from	50,000 to	75,000

AN UNIQUE ADVERTISER

F. A. Roethlisberger, president of the First State Bank of Hillsdale, believes in writing his own copy. Excerpts from recent advertising carried on by his bank seem to be of sufficient carrying power to warrant reproduction, as follows:

"What is 'Conservatism' in Banking? It is a standard bank word, but what does it mean? U. S. Government securities illustrate that of itself a low interest rate does not prove conservatism or safety. For who can say that a government 2 per cent bond is more safe than one at a higher rate?"

"Conservatism in banking seems to us to consist in doing the right thing at the right time. For some time banks have received 1 per cent or 2 per cent more for their loans than formerly. We feel that we are conservative when we allow our depositors a part of this increase. We believe it is the right thing for us to pay 4 per cent on savings deposits and this is the right time to do it."

REDMONDS OPEN DETROIT OFFICE

George F. Redmond & Company, Boston brokers, have opened a Detroit office in the Congress building.

LOSS RESERVES and SURPLUS

These two items comprise the real strength of an insurance company.

Of the two, SURPLUS is the most important, for if the LOSS RESERVES of the company are only barely sufficient to comply with the law, it is still technically solvent and may continue business.

But LOSS RESERVES in compensation insurance are of necessity partially based on estimate. If they prove insufficient the solvency of the company thus depends on its SURPLUS.

Realizing the vital importance of an adequate SURPLUS for the complete security of its member policyholders, the Michigan Mutual has consistently maintained such a surplus.

On Dec. 31st, 1920, this amounted to MORE THAN A MILLION DOLLARS, providing a margin of security ample for every possible contingency.

Write for "The Motive of the Mutual," a booklet giving full information about the company. A postal will do.

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — Michigan

President

Home Office—Cherry 2829 Grand Rapids, Lansing and Saginaw Hospital—Cadillac 2676

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE APRIL 5th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.			100			6%		Quarterly	Apr. 1, 1921	1½%		3%		$3,000,000
Am. Ld. & Trac. Co., com.	94	95	100	114 - 89	204 - 86	6%	4%	Quarterly	Feb. 1, 1921	1%	1¾%	1%	1¾%	$23,271,900
Do., pfd.			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$16,226,700
Auto Body Co., com.	7¾	7½	10	8¾ - 4¾	12⅛ - 6¼				Jan. 20, 1917		25%			$1,074,000
Do., pfd.			10		10¾ - 10¼	6%		Semi-Ann	Feb. 1, 1921	3%		3%		$527,600
Bower Roller Bearing Co.			10	17½ - 17	26¾ - 16				July 1, 1920	10%				$600,000
Charcoal Iron Co. of America, com.	2	2¼	10	2¾ - 2	5¾ - 1¾				Apr. 1, 1919	2%				$2,839,350
Do., pfd.		3	10	3¼ - 2¾	5¾ - 3				July 1, 1919	3½%				$3,217,250
Cities Service Co., com.	234	239	100		356 -250½	*6%		Monthly	Apr. 1, 1921	¼%	1¾%	2%	6%	$42,877,899
Do., pfd.	66¼	67	100		70 - 65	6%		Monthly	Apr. 1, 1921	½%		2%		$76,628,400
Cushalla Land & Zinc Co.			1	16 - 12⅝	28 - 6				Nov. 16, 1917		20%			$300,000
Columbia Sugar	11½	12	10	14¾ - 10½	20¼ - 11¾	12%		Quarterly	Apr. 1, 1921	3%		6%		$2,500,000
Commerce Motor Car Co.			10	7¾ - 6¾	15⅜ - 6¾				July 1, 1920	2%				$500,000
Com. Pw. Ry. & Light Co., com.			100	16 - 13¾	43¾ - 10¾				Nov. 1, 1917		2%			$18,583,900
Do., pfd.			100	23 - 21	43¾ - 20¾	16%		Quarterly	Jan. 1, 1921	4%		1½%		$17,953,000
Continental Motor Co., com.	6¾	6¾	10	7¾ - 6¾	14⅝ - 6¾				Dec. 20, 1920	1%				$7,295,300
Do., pfd., XD.	82	85	100		103 - 53	7%		Quarterly	Apr. 15, 1921	1¾%		1¾%		$2,131,700
Detroit Brass & Malleable Works	90		100	98 - 98	98 - 93	8%		Monthly	Apr. 1, 1921	⅔%		2%		
Detroit & Cleveland Navigation Co.	71	75½	100	75¾ - 71	100 - 67	8%		Quarterly	Apr. 1, 1921	2%		4½%		$6,038,000
Detroit Creamery Co.	20½	21½	10	25¼ - 20½	38⅝ - 18	8%		Quarterly	Apr. 1, 1921	2%		5½%		$1,600,000
Detroit Edison Co.	95½	97	100	97¾ - 92½	114 - 92½	8%		Quarterly	Jan. 15, 1921	2%		2%		$27,853,200
Detroit Forging			100			8%		Quarterly	Mar. 1, 1921	2%				$15,000,000
Edmunds & Jones, com.		14¾	None	14½ - 14¾	34 - 6¾	$2.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,000 shs.
Do., pfd.			100		78 - 78	7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$843,200
Federal Truck	21½	23	100	23 - 18	42 - 18¾				Jan. 1, 1921	10%				$2,000,000
Ford Motor Co. of Canada	270	272	100	296 -217	460 -210	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.	10½	11¾	10	13¾ - 10¾	28 - 11	Varies		As Decl'd	Dec. 20, 1920		5%			$1,952,780
General Motors			10	16 - 12¾	42 - 12¾	$1.00		Quarterly	Feb. 1, 1921	25c		25c		20,962,358 sha.
Godchaux Sugar, com.			None		56¾ - 30¼									$ 70,000 shs.
Do., pfd.		27	100	26 - 23		7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$3,500,000
Hanna Furnace, com.			None											$1,998,000
Do., pfd.	XD		100			8%		Quarterly	Mar. 15, 1921	2%		2%		$750,000
Hall Lamp Co.		13½	10	16 - 12¾	32½ - 16	Varies		As Decl'd	Dec. 24, 1920	2½%				$750,000
Hayes Mfg. Co., com.	3¾	4¾	10	3¾ - 2¾	8¼ - 2¼	Varies		As Decl'd	Feb. 1, 1921	2½%				$1,500,000
Holland-St. Louis Sugar Co.		9	10		19¾ - 7¾				Oct. 15, 1920	6%				$2,000,000
Iron Silver Mining Co.			20		82 - 42	8%			Jan. 1, 1921	2%				$2,500,000
S. S. Kresge, com.	134	140	100	96¾ - 96¾	161 - 100	6%		Semi-Ann	Jan. 2, 1921	3%				$10,000,000
Do., pfd.			100			6%		Quarterly	Jan. 1, 1921	1½%		3½%		$7,500,000
Linderman Steel, com.			None	24¼ - 15¼	24¼ - 15¼	6%		Quarterly	Apr. 1, 1921	1½%		1½%		$1,098,000
Lincoln Motors, Class A	18		50	21½ - 17½	60¾ - 13½				Dec. 1, 1920	$1.25				$6,000,000
Mexican Crude Rubber Co.			100	7¾ - 6¾	13¾ - 9¾				Dec. 1, 1914	3%				$750,000
Michigan Drop Forge, com.			None		90 - 90	$3.00		Monthly	Apr. 1, 1921	25c		$1.00		$ 12,500 shs.
Do., pfd.			100		90 - 90	7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$250,000
Michigan Stamping Co., com.	17	18¾	100	18¾ - 17½	30 - 16½	9%		Monthly	Mar. 25, 1921	¾%		3¾%		$1,200,000
Michigan Sugar Co., com.	7¾	8	10	9 - 6¾	13¾ - 7¾	4%		Quarterly	Mar. 1, 1921	1%		1%		$7,471,100
Do., pfd.	8	8¼	10	8¾ - 8	9¾ - 8¾	6%		Quarterly	Apr. 1, 1921	1½%		3%		$2,500,000
Miles-Detroit Theater Co.	16	17	10		21 - 15¾	*16%		Quarterly	Jan. 10, 1921	4%		4%		$350,000
Motor Products	42	45	None	43 - 37½	60 - 37¼				Jan. 15, 1921	$1.25		$1.25		$ 100,000 shs.
Motor Wheel	10½	10¾	10	11¾ - 8¾	13¾ - 8¾	*8%		Quarterly	Mar. 21, 1921	2%				$4,500,840
Murray Mfg.			100		30 - 30				Oct. 1, 1920	3%		3%		$733,450
National Lumber Co.			100	9¾ - 7½	156 -156	*8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.			100		102 - 90	8%		Semi-Ann	Jan. 2, 1921	4%		4%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd.	107	110	100	1 26-1 00	2 00-1 05	*18%		Quarterly	Jan. 2, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com.	11½	11¾	10	13 - 9¾	28¼ - 9¾				Oct. 31, 1920	2½%				$11,843,300
Do., pfd.	74½	75½	100	77¾ - 74½	97¾ - 67	7%		Quarterly	Apr. 15, 1921	1¾%		1¾%		$18,223,500
Paige-Detroit Motor Car Co.	21½	22	10	23½ - 17	43½ - 12			Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.	87¼	87¾	25	98¾ - 87½	117 - 95	*16%		Quarterly	Apr. 1, 1921	4%		8%		$11,841,385
Pyrethrum Injector, pfd.			98	100		8%		Quarterly	Apr. 1, 1921	2%		4%		$500,000
Reo Motor Co.	21½	21¾	10	23½ - 17¾	29¼ - 10¾	10%		Quarterly	Jan. 3, 1921	2½%		2½%		$6,337,000
Scotten-Dillon Co.	18	18½	10	21 - 18¼	35 - 29	8%		Quarterly	Jan. 3, 1921	2%	50%	2%	50%	$1,500,000
Timken Axle, com., XD.		34½	100	34¾ - 26¼	63¼ - 21	16%		Bi-Month	Apr. 16, 1921	2%		2%		$5,000,000
Do., pfd.	86		100		93¼ - 84	7%			Mar. 1, 1921	1¾%		1¾%		$5,000,000
Tru-Con. Steel Co., com., XD.	17		10	23½ - 16	29¼ - 16	16%		Quarterly	Mar. 1, 1921	4%		4%		$1,450,350
Do., pfd.			100		8¾ - 8¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,632,200
U. S. Radiator, com.			100		31½ - 20									$5,000,000
Do., pfd.	80	90	100		95¾ - 80	7%			Jan. 25, 1921	1¾%		7%		$2,800,000
Warring Hat Co., com.			None											
Do., pfd.			100			8%		Quarterly	Apr. 1, 1921	2%		4%		
Western Knitting Mills			100	11 - 8½	30¾ - 8½				Nov. 25, 1919	6%				$ 140,050 sha.
White Star Line		40	50		50½ - 50½				Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.	2½	3½	10	3 - 2	3½ - 2½				Dec. 15, 1917	1%				$1,000,000

*Old $90-$70; new 83¼-37 $7 % in 1911, 7 % in 1920, only dividends since organized. †Liers dividend. ‡Scrip. § Book value, $959,609, Ed. & J. ¶ Book value, $3,219,327, Godchaux. Book value, $2,277,694 60. Western Knitting Mills. ‡ Book value $5,084,450, Motor Products. ‖Old eTaken from other exchanges.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Apr. 5, 1921
Canada		$.8275	$.8500	$.8950
London	4.8665	$.8275	$.8500	$.8950
Switzerland	.1930	.1329	.1602	.1782
Paris	.1930	.0699	.0706	.0700
Belgium	.1930	.0626	.0743	.0728
Holland	.4019	.3182	.3375	.3440
Italy	.1930	.03455	.0366	.0413
Greece	.1930	.0768	.0735	.0740
Spain	.1930	.1328	.1398	.1392
Vienna	.20263	.0022	.0024	.0023
Berlin	.23821	.01345	.0158	.1630
Denmark	.26799	.1585	.1940	.1775
Norway	.2682	.1595	.1866	.1590
Sweden	.2680	.2045	.2190	.2225

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Apr. 5, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	90.38	82.56	86.00	91.68	93.20	99.76	98.58	98.84
U. S. Liberty 1st 4s	87.16	85.50	85.82	85.80	88.00	94.80	93.00	94.15
U. S. Liberty 2nd 4s	87.06	86.80	84.16	85.00	91.58	92.84	93.04	94.10
U. S. Liberty 1st 4¼s	87.58	86.35	85.50	85.18	89.46	95.14	95.80	....
U. S. Liberty 2nd 4¼s	87.06	86.30	84.34	85.00	88.20	94.08	95.70	....
U. S. Liberty 3rd 4¼s	90.22	90.04	87.20	88.22	91.88	94.10	94.44	....
U. S. Liberty 4th 4¼s	87.16	86.48	84.96	85.56	88.75	100.10	....	....
Victory Bonds, 4¾s	97.50	96.48	94.90	93.50	94.00	95.02	95.32	95.32

Digitized by Google

Detroit Stock Exchange

High and low sales on the Detroit Stock Exchange for the month from February 28 to March 29, inclusive, were as follows:

Listed Stock	No. shares	High	Low
American Light & Trac-tion, com.	4,869	114	101¼
Auto Body, com.	6,265	8½	6¼
Bower Roller Bearing	86	17½	17
Charcoal Iron of America, com.	8,460	8¼	2¼
Charcoal Iron of America, pfd.	2,480	3¼	2¾
Columbia Sugar	1,410	12¾	11¼
Commonwealth Ry., Power & Light, com.	10	84	84
Continental Motor, com.	84,174	4¾	3¾
Detroit Creamery	560	23¾	22¼
Detroit Edison	1,950	97¾	86
Edmunds & Jones, com.	115	14½	13
Federal Motor Truck	120	22¾	19¾
Ford Motor of Canada	2,555	268	262
General Aluminum & Brass	560	12½	10½
General Motors	1,505	13¾	12¾
C. M. Hall Lamp	15	13¾	12¼
Hayes Manufacturing Co.	6,530	3¾	3¾
Holland-St. Louis Sugar	4,560	8¾	8¼
Lincoln Motor, Class A	2,375	20	17¾
Michigan Stamping, com.	183	13½	13
Michigan Sugar, com.	3,320	8¼	7¾
Michigan Sugar, pfd.	10	81¼	81¼
Motor Products	70	42¾	42¼
Motor Wheel	1,547	113¾	104¼
National Grocer, com.	300	8¾	7¾
C. P. Noble Oil & Gas, pfd.	11,980	1.15	1.08
Packard Motor, com.	1,352	13	11¾
Packard Motor, pfd.	346	76	71¾
Paige-Detroit Motor, com.	2,350	20¼	18½
Parke-Davis	169	68¼	59¾
Rex Motor, com.	18,400	23	21¼
Scotten-Dillon	180	18	18
Timken-Detroit Axle, com.	1,935	32¼	29¾
True-Cut Steel, com.	275	28¼	25
Western Knitting	50	10	10
Wolverine-Portland Cement	85	3	3
	137,580		

Banks and Trust Companies

Highland Park State Bank	25	260	259
Bonds			
Detroit Edison Deb. 1940	2,000	78¾	78¾
Detroit Edison Deb. 1939	1,000	78¾	78¾
Detroit Edison Deb. 1931	19,100	102	100⅜
Detroit City Gas	2,000	90½	90½
	24,006		

Unlisted Stocks

Briscoe Motor	250	20¼	20¼
Columbia Motors	1,160	4¼	4¼
Eureka Croesus	84,200	1.12	.87
Detroit Mortgage, com.	1,352	3	2¾
Detroit Mortgage, pfd.	1,510	6¾	5¾
Gladys-Belle, com.	177,527	.52	.24
Gladys-Belle, pfd.	17,885	.67	.49
Harroun Motors	200	96	95
Hoover Steel Ball	15	15¼	14¼
Hupp Motor	490	13¼	13
Invader Oil	500	1.45	1.45
Invader Oil (New)	650	.70	.70
Jake-a-Cushion Spring	10	7¾	7¾
Liberty Motors	200	8	8
McCord Manufacturing	1,820	9¼	8¼
C. P. Noble Oil & Gas, com.	282,500	.50	.40
Wilson Truck	50	4½	4½
	542,255		

Total sales ..... 768,860 shares

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$187,652,884	$121,488,204
January 12	80,173,447	120,687,098
January 19	101,896,952	141,041,078
January 26	78,035,807	97,641,858
February 2	87,995,936	81,777,220
February 9	76,606,452	101,048,806
February 16	76,671,630	101,292,770
February 23	67,711,631	88,526,787
March 2	86,235,592	127,098,854
March 9	75,742,352	108,011,659
March 15	95,826,453	128,175,052
March 22	80,166,495	118,923,604
March 29	69,091,371	114,461,856
April 5	78,156,971	104,206,621
Month of		
January	$68,180,226	457,221,670
February	402,544,686	428,256,206
March	377,675,840	670,428,228
April		546,278,949
May		484,286,859
June		556,706,267
July		522,684,145
August		522,289,085
September		561,592,940
October		518,425,780
November		485,023,440
December		453,951,246
Yearly totals, 1920		$6,102,222,802
Yearly totals, 1919		$4,504,886,165

Price Range Detroit Bank Stocks

Detroit Stock Exchange

Name	Range 1921 High	Range 1921 Low	Range 1920 High	Mar. 29, '21 Bid	Mar. 29, '21 Ask
American State	221	215	226	200 *221	...
Detroit Savings	280	258	295	280 *280	...
Dime Savings	258	258	280	258 *258	...
First and Old Detroit Nat'l	273	271	275	268 *273	...
First State				*200	...
Highland Park State	260	260	264	265 *260	...
Hamtramck National	140	140	160	142 *140	...
Nat'l Bank of Commerce	210	210	190	210	210
Peninsular Savings	215	215	222	212 *215	...
Peoples State	360	355	335	300 *355	...
United Savings	225	208	215	200 *225	...
Wayne County Home				347 306	347
American Loan and Trust				155 155	127
Bankers Trust					
Guaranty Trust				148 142	140
Detroit Trust	295	295			*295 300
Fidelity Trust					1200
Union Trust	180	180	197	195 *180	190
Commonwealth-Federal			130		105 107
Bank of Detroit					1192 200
Continental Bank					1135
Last Sale.					
†Nominal Quotation.					

Cleveland Stocks

	Bid	Asked
American Multigraph	20	21
Bow Chemical		200
Firestone Tire & Rubber	75	85
Do, preferred	84	86
Fisher Ohio Body	17	19
Do, preferred	85	87
Goodyear Tire & Rubber	18	24
Do, preferred	18	22
Grant Motor	3	4
Interlake Steamship	104	110
Jordan Motor		125
Miller Rubber	85	87
Murray Ohio		8
National Acme	24	26
Penguin Refining	22	23
Peerless Motor	26¼	27¾
Prod. Refining Corp.	4¾	4¾
Do, preferred	7	7½
Portage Rubber	18	20
Do, preferred	35	84
Standard Parts	194	210
Do, preferred	3	4
Stearns Motor	26	27
Thompson Rubber	28	30
White Motor	40	41
Wingfoot Shoe & Tube	64	85
Do, preferred		102

Quotes by Otis & Co., April 6.

Detroit Listed Bonds

Name	Apr. 5, 1921 Bid	Ask	Last Sale
Cons. Pow. Co.—5s, 1926	80	81	81
Detroit & Elan 5s, 1952	87¾	88¼	87
Det. Pt. W. & H. L.—5s, 1927	80½	88	78
D. U. M. & St. Short Line—6s, 1933	75	81	
Det. & Northw'n—4½s, 1951	38	39	35
Detroit & Pontiac R'y—5s, 1922	88	96	95
Detroit & Pontiac—4½s, 1933	84		
Det. & Pt. Huron S. L.—5s, 1950	65	75	
Detroit Railway—5s, 1931	65	75	
Det. Ypsi. & A. A.—6s, 1924	100		
D. Y. & A. Jackson—5s, 1940	79	65	
Det. United Ry.—4½s, 1932	50	62	
Detroit Edison Co.—5s, 1932	87	89½	
D. Ed. Co.—1st & ref. 5s, 1940	78¾	81	78¾
East Mich. Edison—6s, 1931	81		
Detroit Edison Deb. 7s, 1926	98¾		
Detroit Edison deb. 7s, 1929	95	96¼	95¾
Detroit Edison deb. 7s, 1932	96½	96	
Detroit Edison deb. 5s, 1937	101¾		102
D. C. Gas Co., G. M.—5s, 1913-28	80	81	80½
D. C. Gas Co., P. L.—6s, 1928	93	95	
Detroit & Sub. Gas Co.—6s, 1926	81	84	
Mich. State Tel. Co.—5s, 1924	87		
Tel., Prem't & Nork'n—6s, 1920		88	
Wyan. & Det. River—1934			
By-Prod. Coke Corp.—6s, 1930			
Detroit Rock—6s, 1932		88	

Sales During Week

Det. Edison Debs., 1820, $500 at 86.
Det. Edison Debs., 1931, $500 at 101¾.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	6	8
Economy Baler Co., com	5	10½
King Trailer Co., pfd	14	15
Hoover Steel Ball, com	14	15
Mich. Milling Co., com	71½	71½
Motor Products Co., com	42	44
Prod. Foundries, com	2½	3
C. A. Sauer Co	5	8

Quotes by Langley, Feldner & Co., April 5.

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com	19	31
American Box Board, pfd	9½	10
Bardeen	17	18½
Grant	13½	
Eddy, com	4¾	5¼
Eddy, pfd	9¾	10
Hawthorne	11	14
Kalamazoo, new	22	25
Parchment, stock	12¾	13¾
Parchment, rights		2¼
King	18¾	19¼
Lee, units	125	150
Mac Sim Bar	12½	15½
Monarch	17½	18½
Monarch	12¾	14
Rex	12	13¾
Northern Michigan Pulp	100	125
Standard		85
Sutherland	9¾	10¼
Watervliet	19½	20¼
Western Board		20¼
Banks		
First National	225	
Home Savings	175	180
Kalamazoo City Savings	190	200
Kalamazoo National	150	152
Miscellaneous		
Barley Motor, com	25	50
Farley Motor, pfd	75	85
Hayes Wheel	14	18
Kazoo Loose Leaf	14	16
Kazoo Corset		10¼
Utah-Idaho Sugar	6	6½
Kalamazoo Sanitary Mfg		10
Limousine Body	10	12

Quotes by Olmsted & Mulhall, April 8.

Lansing Stocks

	Bid	Asked
Auto Body Co	5½	7½
Auto Body, pfd		97
Dupiex Truck Co	5½	6¼
Bates & Edmonds Motor Co		16
Motor Wheel Corp	10	12¾
First Bond & Mortgage Co		85
Michigan Mortgage Co	9	10
Michigan Screw Co. (ex. stock div.)	18	24
Lansing Co	28	45
Atlas Drop Forge Co	24½	26
Federal Forge Co	3½	15½
Novo Engine	22	25

Quotes by G. M. Murchey & Co., April 8.

Motor Stocks

Wm.A.Neer & Co.
Members Detroit Stock Exchange

THE BABY TYPEWRITER STAND

SAVES SPACE and TIME

$6.50 F.O.B. DETROIT

A strong, well-built Stand, five-ply oak, veneered top. Will last a lifetime. Easy to move about. Suitable for small office and home use.

Write for free trial offer.

Auto Parts Mfg. Co.
1821 Trombly Ave.
Detroit, Mich.

Digitized by Google

Michigan Bond Items

Walton township, Olivet, has approved the proposition of bonding the village for $30,000 for building and equipping a public school building.

The voters of Shelby have decided, 138 to 18, in favor of bonding the town for $10,000 for highway purposes.

The city of Manistique has sold to Howe, Snow, Corrigan & Bertles, Grand Rapids, $97,000 of pumping station and water extension bonds, the offer being par with a premium of $2,968. Other offers were: Whittlesey, McLean & Company, Detroit, par and $1,940 premium; Keane, Higbie & Company, Detroit, agreed to find purchaser for bonds, par value, accrued interest and $950 commission; Watling, Lerchen & Company, and Bolzer, Mosser & Willaman, Detroit, agreed to find purchaser and offered par value, accrued interest and asked $1,675 commission.

Frank F. Rogers, state highway commissioner, will receive sealed bids at his office at Lansing up to 1:30 p. m., April 20, for the sale of road assessment district bonds following: Road Assessment District No. 364, in Isabella, Mecosta and Montcalm counties. Approximately $66,000 worth, maturing serially in from two to five years. Bonds are the obligation of Rolland township, Isabella county; Millbrook township, Mecosta county; Belvidere and Home townships, Montcalm county and the counties of Isabella, Mecosta and Montcalm and an assessment district. The bonds are being issued under the Covert Act. Interest will be payable semi-annually on May and November 1 in each year. Each bidder will be required to name the rate of interest (not exceeding 6%) and premium for each thousand dollars he will pay, in his bid. A certified check in the sum of 2 per cent of the amount of the bonds bid on, payable to the order of the State Highway Commissioner, will be required with each bid. The right is reserved to reject any or all bids.

To provide funds for reducing the company's bank loans and increasing its working capital, the Vacuum Oil Company, through a banking syndicate, headed by the National City Company, is marketing $20,000,000 of 15-year 7 per cent gold bonds, dated April 1, 1921, and redeemable on and after April 1, 1926.

The state highway commissioner will receive sealed bids at his office at Lansing, up to 1:30 p. m., April 20, on the sale of $120,000 of bonds of road assessment district No. 205 in St. Clair and Macomb counties. The bonds mature serially in from two to five years. They are the obligation of Wales, Columbus, Lenox and Berlin townships, St. Clair county; Armada and Richmond townships, Macomb county; the counties of St. Clair and Macomb and an assessment district. They are issued under the Covert Act, with interest payable semi-annually on May and November 1 each year. Each bidder will be required to name the rate of interest (not exceeding 6%) and premium for each thousand dollars, he will pay, in his bid. A certified check in the sum of 2 per cent of the amount of the bonds bid on, payable to the order of the state highway commissioner, will be required with each bid. The right is reserved to reject any or all bids.

Elston & Company are offering an issue of $600,000 of 8 per cent notes, dated March 1, 1921, due serially up to March 1, 1931, at par and accrued interest, of Barnhart Brothers & Spindler. This company manufactures and sells commodities necessary to the printing industry and according to the announcement has earned consistently since its establishment 53 years ago, the average for the last nine years being $227,136.

The Belgian government will retire, June 1, 1921, by operation of the sinking fund, $2,000,000 of the issue of 7½ per cent bonds, due in 1945 at 115 and accrued interest. Paine, Webber & Company are asking holders of these bonds to report the numbers on their bonds and they will advise whether such numbers are included in the list of bonds drawn for payment.

Halsey, Stuart & Company are offering a limited amount of bonds of the state of San Paulo, Brazil, to yield annually 8.47 per cent. The bonds are secured, according to announcement, by first charge on a surtax of 5 francs per bag levied on the export of all coffee produced in the state, bear 8 per cent interest and are due January 1, 1936.

H. M. Bylesby & Company are calling attention in an unique way to possible returns of $2,320 from an original investment of $760 in the Standard Gas & Electric Company's 6 per cent notes, due October 1, 1935. The notes are offered at 76, which gives the investor an annual income of 7.80 per cent for 14 years, with a 31.50 per cent profit on principal if both interest and principal are paid according to terms of the notes.

The Province of Nova Scotia has issued $1,500,000 of five-year, 6 per cent bonds, which are being offered by Wood, Gundy & Company at 93⅜ and interest, yielding 7⅝ per cent. Payment is required in American funds. Principal and interest are payable in either Canada or New York at the option of holders.

JOSEPH N. SMITH & COMPANY

Assets	Dec. 31, '20	Dec. 31, '19
Cash	$ 15,384.14	$ 28,152.14
Notes and accts. rec.	174,045.23	226,942.57
Investments	4,117.31	3,178.45
Inventories	174,172.56	360,216.69
Real estate and bldgs.	271,705.76	268,646.69
Mach., tools, equip.	216,359.23	215,246.41
Sinking Fund	49.87	.....
Organization expense	28,879.66	.....
	$1,185,073.75	$1,101,452.98
Liabilities		
Accts. pa. and accrued labor, etc.	$ 72,155.15	$ 85,668.59
Bills payable	61,486.07	37,576.87
Reserve federal taxes	.....	.....
Bonds on building	.....	.....
Preferred stock	288,100.00	200,000.00
Common stock	300,000.00	200,000.00
Surplus	*463,332.53	378,207.52
	$1,185,073.75	$1,101,452.98

*Subject to reduction of $9,467.18—1920 income and excess profits taxes.

Jos ph N. Smith & Co., Detroit, manufacture automobile body hardware and windshields. They were organized in Michigan, February 16, 1898. Net earnings last three fiscal years as follows: 1917, $127,681.50; 1918, $66,836.36; 1919, $148,756.21. For 1920 no net is reported, but surplus increased $85,126. E. L. Ackerman is president James Shand, vice-president, and C. E. Hausser, secretary and treasurer, all of Detroit.

APPLICATION FOR MEMBERSHIP

Phipps, Williams & Beeson, Saginaw, have made application for membership in the Detroit Stock Exchange.

AUTO CLUBS SPRING SHOW

The following cars were exhibited this week at the spring show of the Automobile Club of America, in New York: Ambassador, Cadillac, Cole, Dodge, Essex, Haynes, Hudson, Kissel, Lexington, LaFayette, Locomobile, Lincoln, Marmon, Minerva, Mercer, National, Paige-Detroit, Packard, Pierce Arrow, Renault, Rolls-Royce, Rauch & Lang, Stevens-Duryea, Velie and Winn.

Miscellaneous Finance

GENERAL MOTORS EARNINGS

The annual report of the General Motors Corporation for 1920 was given to the stockholders, Tuesday, April 5. Net earnings were $82,762,063, as compared with $103,667,700 for 1919. Earnings applicable to common stock were $32,129,949, as compared with $55,792,972 for 1919. Surplus account increased from $78,641,897 at the end of 1919 to $121,273,217 at the end of 1920, with a corresponding increase in assets covering the same period from $468,737,345 to $604,806,868. President Pierre S. du Pont said:

"In the early months of 1920 there was promise of increasing annual sales and net profits. Volume of sales reached this expectation notwithstanding the sudden diminution of business during the latter quarter of the year, but the net profits fell somewhat short of 1919, although far in excess of any other year of the corporation's history. The decline of the latter months of 1920 has continued during the early months of 1921, but as this report goes to press there is evidence that the year will show a substantial recovery and a reasonably satisfactory business, with foundation well laid for future prosperity."

Comparative figures of surplus, net income and assets for three years are as follows:

	Surplus	Net Income	Total Assets
1918	$ 38,408,927	$25,804,576	$299,488,335
1919	78,641,897	103,667,700	468,737,329
1920	121,273,217	82,762,063	604,806,868

*In addition just received net income for 1919 is given as $103,667,700.

The directors have declared the regular quarterly dividend of 25 cents a share on the common stock and the regular dividends on the other issues.

INVESTMENT DEALERS ORGANIZE

At a meeting of Grand Rapids investment bankers and representatives of the bond departments of the banks, the Investment Bond Dealers of Grand Rapids was organized for the purpose of protecting its members and for furtherance of good fellowship and co-operation among the class. C. R. Kusterer is president; Warren H. Snow, vice-president; L. S. Hillman, secretary; James C. Everett, treasurer. Executive committeemen are A. E. Kusterer, H. W. Nelson, J. A. Whitworth, J. F. Barnett, Noyes L. Avery, J. D. MacNaughton and Russel J. Boyle.

NOBLE OIL ISSUES BONDS

As previously announced, the Charles F. Noble Oil & Gas Company is offering $3,000,000 of first mortgages 8 per cent convertible serial gold bonds, dated April 1, 1921, and due serially up to April 1, 1931, on a basis to net 8¾ per cent. According to announcement of Emmet L. Spracue & Company, the bonds are secured by a first mortgage on the entire properties of the company, now owned or hereafter acquired; the value of the physical properties as certified by Bauer & Clark is $17,244,435; developed oil producing properties, $1,556,487, and undeveloped properties, $470,267, a total of $19,271,290. Net profits for the year ended December 31, 1920, before taxes and depreciation, are given as $2,704,058. The bonds are convertible at par into common stock on the basis of $1.25 per share on or before March 31, 1922; $1.50 per share on or before Sept. 30, 1922, and $1.75 per share on or before March 31, 1923.

ADVERTISING NATIONAL SYSTEM

The First National Exchange Bank, Port Huron, of which Gust Hill is president, is carrying on a local advertising campaign pointing out the advantages of incorporation of banks under the federal law, and has offered $150 in prizes to the girl or boy of Port Huron who turns in the best essay on this subject.

Digitized by Google

REPUBLIC TRUCK STATEMENT

Assets	Dec. 31, 1920	Dec. 31, 1919
Cash	$ 493,281.02	$ 1,229,073.00
Cash reserve for redemption fund	112,566.00	.....
Notes and accounts receivable	772,878.21	520,104.00
U. S. securities	4,714.66	247,450.00
Inventories	5,612,292.29	6,486,369.00
Total current	7,000,765.78	
Invest. and adv. affiliated companies	2,004,244.84	1,842,992.00
Land, buildings, machinery, equipment	2,269,635.98	1,882,165.00
Prepaid insurance, interest, etc.	49,744.21	
Unamortized bond exp.	146,841.96	329,307.00
Good will	4,805,926.00	4,805,926.00
	$16,311,188.97	$17,356,227.00
Liabilities		
Accounts payable	$ 294,160.01	
Trade notes payable	139,872.81	2,483,057.00
Bank notes payable	1,900,000.00	
Accrued accounts	177,537.45	266,204.00
Total current	2,601,570.27	
First mortgage notes	2,500,000.00	
Mortgage on Cleveland property	91,161.96	2,106,981.00
Reserves—		
Losses on investments	75,000.00	75,584.00
Contingencies	250,000.00	661,000.00
Preferred stock	836,200.00	904,000.00
Common stock	8,418,450.30	8,418,450.00
Surplus	1,508,806.24	1,441,111.00
	$16,311,188.97	$17,356,227.00

Changes in Surplus Account	
Surplus at beginning	*$ 1,734,193.89
Net profit for year 1920	559,182.33
Gain from reappraisal of property	171,416.77
Discount on preferred stock retired	8,191.50
	2,473,186.49
Less—	
Obsolete stock retired and inventory reduction	902,745.64
Preferred dividends	60,634.51
	964,380.15
Surplus, Dec. 31, 1920	$ 1,508,806.34

*Discrepancy in surplus as shown by balance sheet Dec. 31, 1919, not explained.

Income Account, Year 1920	
Sales, net	$15,875,231.39
Less manufacturing cost	12,793,000.90
	2,882,230.49
Plus other income	269,405.97
	3,151,636.46
Less general expenses	1,632,664.75
Net operating profit	1,518,961.71
Less: (a) Loss on Liberty bonds $8,742.69 and $414,099.29 expense during shut-down	496,842.98
(b) Interest on bonds, loans, etc.	462,936.40
	$ 959,779.38
Net profit before providing for obsolete stock and reducing inventory	$ 559,182.33

MASS COPPER DEFICIT $48,403

The report of the Mass Consolidated Copper Company for 1920 shows total income of $27,338, as against total expenses of $75,742, leaving a deficit of $48,403. For 1919, income was $429,845 and expenses $575,951, a deficit of $146,106. The mine forces have been reduced to watchmen and caretakers. The directors have voted an assessment of $1 a share on the stock, payable April 15 by stockholders of record April 14. No stock will be transferred on the books after this date on which the assessment has not been paid. This assessment brings the total paid in on capital stock up to $25 a share.

A. T. & T. GOES UP

On July 15 the American Telephone & Telegraph Company will increase its annual dividend rate to 9 per cent. For fifteen years the rate has been 8 per cent, payable quarterly.

MOHAWK MINING NETS $632,762

The Mohawk Mining Company reports net profits before depreciation, depletion and federal taxes, of $632,762 for 1920. This compares with $570,635 in 1919.

THE OLDEST HOUSE IN MICHIGAN

BONDS—THE SAFEST FORM OF INVESTMENT FOR YOUR SAVINGS—
We have a bond secured by a first mortgage on properties worth *six and one-half times* the entire outstanding issue. The yield is 8¾%. Such an investment combines safety with high interest on your money. Descriptive circular on request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
16th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Collection Facilities

We have for many years handled collection items in the Michigan field for financial institutions everywhere.

Our terms, connections and distinctly Michigan banking service would satisfy your requirements.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit. Mich.

Digitized by Google

THE LAW AND BUSINESS

EVERY CORPORATION LAW-YER knows the predicament of the foreign corporation which endeavors to do business in another state with authority only from the state in which it is domesticated. In many states corporations coming under the head of "foreign corporations" are required to obtain a license to do business. In Michigan, for instance, this requirement is known as "qualifying in Michigan."

While most large corporations are very careful to inquire about such laws before offering goods for sale or making contracts in other states, there is so little prohibitory restriction on such trading that "doing business in a foreign state" and "interstate commerce" are often confused. Often the distinction is very minute in the eyes of the law. In order to throw some light on this distinction we quote a few decisions of state courts in which the layman as well as the lawyer will be interested.

Example 1. A foreign corporation appointed an agent in Michigan to devote all his time to selling its goods. Goods were shipped to the agent, but title remained in the corporation until the goods were sold. The agent remitted each week the special price to him of all goods sold during the week, retaining the difference between that amount and the retail price as his commission. The Michigan Supreme Court held this arrangement to be "doing business," and denied the foreign corporation the right to sue on this contract since it had not obtained authority to transact business in Michigan before the contract was executed. E. A. Lange Medical Company vs. Brace, et al, 186 Mich. 453; 152 NW., 1026 Corp. Journal, No. 50.

Example 2. A foreign corporation engaged in manufacture and sale of patterns appointed a resident of Michigan as agent for its product. The contract provided that the corporation should sell and deliver F. O. B. at points outside of the state, its product at a specified discount from retail prices and allow the resident agent to return semi-annually such of the patterns remaining unsold in part payment for new patterns. The contract also provided for the purchase by the dealer of fashion sheets which, on specified terms, would bear his name and advertising. The Supreme Court of Michigan held that, although the contract was called a contract of agency, the resident was not the agent of the corporation in the state and the transaction so far as the corporation was concerned was interstate commerce and not "doing business" in the state. The corporation, therefore, could sue upon the contract in the local courts. Standard Fashion Company vs. Cummings, 187 Mich. 196; 153 NW., 814 Corp. Journal, No. 5.

Example 3. A New York corporation, without securing authority to do business in Michigan, sold, delivered and installed six superheaters in a power plant in Lansing. In an action to recover the price of $1.25 per heater, a new trial was ordered to permit the plaintiff to show that the installation of the superheaters was "such an essential requisite to the sale that it can be said that, but for the installation by the plaintiff, it could make no sale." It would appear that if this could not be proved the plaintiff could not recover. The decision in Browning vs. Waycross, 233 U. S., 16, wherein it was held that the sale and erection of lightning rods was intrastate commerce, is cited.

In its recital of facts in the case, the court says: "The superheaters were fully manufactured and made ready for shipment at the plaintiff's manufacturing plant at Dansville, N. Y., and were shipped in a knocked-down condition to the defendant's plant at Lansing, ready to be put together and installed. Plaintiff set up the superheaters in the two new boilers as they were being erected. In other words, the superheaters in these boilers were assembled by plaintiff and connected up before the boilers were bricked up. No brick work was to be done by the plaintiff on these boilers, it being necessary for him merely to install the superheaters as soon as the steel work on the boilers was completed. In order, however, to install the superheaters in the six old boilers it was necessary for the plaintiff to tear out the brick work in front, assemble and connect up in their proper places the pipes that made up the superheaters, insert the doors at the proper place, tie the pipes so as to hold them in place securely, and then brick the boilers up again." There was no evidence before the court as to whether this work could be done by the manufacturers through local workmen, and for that reason the case was sent back for a new trial. Power Specialty Company vs. Michigan Power Company, 190 Mich. 699, 157 NW. 408 Corp. Journal, No. 59.

Example 4. The B. F. Sturtevant Company entered into a contract with the A. Leitelt Iron Works for the sale and installation of a ventilating system in a high school at Grand Rapids. The contract was breached by the defendant, but plaintiff was unable to recover because at the time the contract was made he had not complied with requirements imposed upon foreign corporations doing business in the state. The Supreme Court of Michigan holds that "while the apparatus, the subject of the contract in this case" was somewhat complicated, it had no such "intrinsic or peculiar quality or inherent complexity" as made it necessary for the manufacturer to agree to install in order to effect sales generally; indeed, the contrary appears from the testimony of the plaintiff's witnesses. Many persons named by the witnesses purchased plaintiff's apparatus and made a business of installing it. The fact that the defendant

Is Your Money Efficient?

Mechanical efficiency is defined as the "ratio of energy-obtained to energy-exerted." Apply this definition to your investments. If the dollar you invest requires energy disproportionate to the money returned, your investment is inefficient. If you are receiving less than 6%, your investment mechanism needs lubrication. If you are striving for more, you are racing your motor.

Our First Mortgage Bonds offer a perfectly balanced ratio.

6%

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

COAL C. C. COREY COKE

1308-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

did not show there was a firm or individual in the State of Michigan capable of making the installation (apparently relied upon by the plaintiff) is, we think, of no consequence. The record does show that the apparatus of the American Blower Company was installed in place of that which the plaintiff contracted to install. The record shows that it was the claim of plaintiff that its apparatus was "equal to" the apparatus of the American Blower Company. B. F. Sturtevant Company, vs. Adolph Leitell Iron Works, 196 Mich., 552; 163 NW., 13 Corp. Journal, No. 71.

Banks and Bankers

DREHER GOES TO NEW ORLEANS

Harold J. Dreher, whose banking connections have included the National City Bank, First National Bank, Milwaukee; Marshall & Ilsley Bank, Milwaukee, and J. P. Morgan & Company, New York, has been elected vice-president and director of the Federal International Banking Company, New Orleans, the new foreign trade bank recently established under the Edge Act by 1200 southern banks.

NEW BANK AT TROUT CREEK

Trout Creek has a new bank known as the Tront Creek State Bank. J. S. Weldman, Jr., is president, and Percy W. Saxton, cashier. Mr. Saxton formerly was connected with the Isabella County State Bank, Mt. Pleasant.

JACKSON OFFICES EXTENDED

The Jackson State Saving Bank, Jackson, is remodeling the interior of its building and has extended the building by a 70-foot addition to the rear of its old quarters. The new safe deposit vaults in the basement will accommodate 2,500 box renters. The equipment is modern in every particular. The improvements in the main banking room involve putting in completely new furniture. Pictures of attractive marble and brass design give the remodeled structure the appearance of being a brand new building. The bank had total deposits of $1,840,543.41 February 21, with capital and surplus of $425,000.

BLOOMFIELD BUYS AN INTEREST

The Montgomery State Bank, Montgomery, has been strengthened hy the addition to its stockholders of A. C. Bloomfield, vice-president of the National Union Bank, Jackson. New officers of the Montgomery bank are George L. Tanner, president; O. K. Coolman, vice-president, and E. W. Barber, cashier.

PURCHASE AT BRECKENRIDGE

The Farmers State Bank of Breckenridge has purchased the First State Savings Bank of the same place, including the building, where the business of the combined institutions will be carried on. Directors and officers remain the same and capital of the Farmers State is increased to $37,500 from $20,000. Total deposits will be about $700,000.

KALEVA BANK REORGANIZED

A reorganization of the Bank of Kaleva has been effected and the institution is now known as the Kaleva State Bank. The officers are: President, Gust Haksiuoto; first vice-president, August Lens; second vice-president, Charles Billman; cashier, Ellsworth Billman; assistant cashier, Frank H. Wilson; auditor, Elmer Billman. The bank was originally organized nine years ago. The capital stock will be increased.

(*No. 5 of a series of examples*)

Must a Corporation Ascertain Whether Proposed Transfers of its Stock Are Authorized by the Owner?

Yes. For example, stock was surrendered (by a supposed agent of the owner) to a corporation and transferred on its books. Years after, the original owner alleged that the transfer was without his authority and void. Both the Secretary (Transfer Agent) and the supposed agent of the stockholder were dead. Records had been destroyed by fire. The Court held that the stockholder could not be deprived of his stock without his consent or negligence, and that the corporation was liable to the original stockholder.

As your Transfer Agent, the SECURITY TRUST COMPANY will relieve you of the difficulties involved in determining what are authorized transfers.

Security Trust Company

Fort and Griswold St. Detroit

Capital and Surplus, $1,000,000.00



Digitized by Google

The Bond Between University and Industry

(Continued from Page 8)

has shown itself to be as vigorous and progressive as Michigan. The minute you cease to have problems you cease to be alive, and may such a day never come to Michigan.

Do you say, though, we have no problems of a joint character? There again I say that those industries of a similar type that cannot ally themselves with one another to the extent of finding problems of a joint character are not truly representative. They are not the type we desire in this state. Either they lack that spirit of co-operation so essential to present-day progress or else they have become decadent and will not long withstand the continual battering of modern business.

But do you say we are not sure whether we will get results since we have little choice in the selection of the men who will do the work or the methods of attack that will be pursued in an attempt to solve the problem? To these I would answer that the University will be only too glad to co-operate with you to find the right man or men for the given problem or problems. Men who will be assigned to problems will be chosen on the basis of their fitness irrespective of whether or not they are now connected with the University. As a matter of fact there is not now a man on the faculty who is not carrying a full schedule. This means, therefore, that the men who handle these problems must either come from the outside or else, if chosen from within, we must find men to take their present teaching positions.

Forming Research Committees

Some concern has been expressed that the Department of Engineering Research would develop into a testing bureau. No fear need be entertained on that score unless the industries themselves demand such a laboratory and will procure facilities so that such a laboratory may function. At the present time there are no funds available for the maintenance of a staff necessary for such a department and there is no building on the Campus for housing such a laboratory. As a rule most concerns have a laboratory of their own for such work and those that have not can send their routine work to laboratories established for just such purposes, who are in a position to render the service at a much lower cost than could be rendered at the University under present conditions.

It is believed that the Department of Engineering Research at the University of Michigan can be of distinct service and value to the industries of the state through the channels of centralized research. It is recommended that the industries of the state with interests closely allied join together. It is recommended that there be formed in each group a research committee to confer with the director of the Department of Engineering Research on matters relating to problems and policies. Included in this discussion there should be all matters relating to costs and details regarding how the problem or problems are to be approached, who is to take charge and other things of a pertinent and relevant character. The committee unless otherwise empowered should then report back its finding to the interests represented and procure from them authorization to proceed with the work. In the case of an individual industry the same general procedure should be followed.

The University has already pointed out to the industries that although desirous of doing everything in its power to be of service, yet it cannot assume, beyond a very nominal figure, the cost of the investigations and researches.

To be sure the facilities of the University Library are at the disposal of the industries. This library is among the largest in the country and is especially strong in technical books and periodicals. No research should be undertaken without a thorough study of the literature on the subject. Often such a search saves thousands of dollars. On February 1 the industries of the state were advised of this service but to date the resources of the library in this respect have not been scratched. I question if the industries of the state can afford to make as little use of libraries in the future as I believe they have in the past. Requests for service may be made either to the librarian or to the director of the Department of Engineering Research. This service includes the loan of books and periodicals and at a nominal charge abstracts, bibliographies and translations.

The service further includes the use of buildings and parts of buildings when not in use for instructional purposes. At the present time there is no space that can be set permanently aside for this work because of the large enrollment. One of our departemnt heads, for instance, has but one-half an office where he should have, if given the same facilities as members of the faculty have at Columbia and the Massachusetts Institute of Technology, two private laboratories and a private office.

Further, the use of equipment and apparatus, when not in use for instructional purpose, is placed at the disposal of the industries at a fee sufficient only to cover the cost of repairs, renewals and replacements.

The Present Budget

But little thought is necessary to appreciate how necessary it is for the passage of the budget now before the state legislature if the University is to serve the industries to advantage. The passage of this budget in its entirety is necessary, for there is not a single item that can be cut without seriously hampering the work of the University. In this budget $1,500,000 for an engineering laboratory is requested. It is vitally necessary that this sum be granted, since it will provide, at least temporarily, increased space for the College of Engineering and for the Department of Engineering Research.

When we realize that today we have no greatly augmented facilities for engineering training and research over what we had in 1910; when we realize that our student body in this college is today double what it was in 1910, with good prospect of being trebled by 1930; when we realize that the state has leaped into a commanding position from an industrial standpoint, with the value of its products increasing nearly five-fold in eleven years, or, to be exact, from $685,109,169 in 1909 to approximately $3,000,000,000 in 1926, is it not time to request increased and improved facilities to train men for the industries and also for research?

To sum up, therefore, the Department of Engineering Research is to be established for the purpose of assisting the industries in such proper ways as lie within its powers. It places at the disposal of the industries its library, its available laboratory space and equipment. The industry or industries requesting service pay labor charges, provide special equipment and pay a nominal fee for administrative expense and the use of equipment. As a state institution it cannot grant special privileges. Therefore work on which patents are desired or privileges with regard to matters of publicity cannot be accepted. It is recommended that the various main groups of industry join together on a basis, each of a joint character be placed before the Department of Engineering Research for solution. It is believed that by this joint co-operative alliance large sums can be saved each company. The present day is unquestionably one of co-operation, economy and a strong belief in the value of properly conducted research. The department of Engineering Research is founded on these principles, trusting that it may be of service to the industries of the state, through them to the people at large, and that in rendering service to these groups it may be credited with duly laboring for the cause of true science, of which research is the chief if not the only servant.

A paper presented before the Detroit section of the Society of Automotive Engineers, at the Board of Commerce, March 25.

Mississippi Valley Ass'n To Meet in New Orleans

The Mississippi Valley Association will hold its third annual convention in New Orleans May 2, 3 and 4, bringing together representatives of 27 states and 28 foreign countries. The convention will have been looked to more than 10,000 interests in the Mississippi Valley, representing nearly every industrial, commercial and professional activity in this section of the country.

Probably the oddest thing about this convention call is the announcement that there will be no set speeches. Instead, there will be a series of open conferences on such vital subjects as transportation, waterways, reclamation agriculture, merchant marine, economics and foreign trade. It is the conference on foreign trade that brings the delegates from 28 countries to tell the convention their views and ambitions in world commerce.

While the convention is in session the $20,000,000 Industrial Canal connecting the river harbor of New Orleans with Lake Pontchartrain, an arm of the Gulf of Mexico, and with Bayou Bienvenue, a navigable river connecting the canal with the gulf, will be opened. This canal is 200 feet wide, 30 feet deep at all times and provides 11 miles of frontage to be leased to industries and transportation companies.

Harry H Merrick, president of the Great Lakes Trust Company, Chicago, president of the Association, will preside at the convention. Among the delegates from Detroit will be John C. Carr, Detroit, director of the Association for Michigan.

NEW CORNELIA REPORT

The 1920 report of the New Cornelia Copper Company shows net earnings of $391,137, which is equal to 55 cents a share on the capital stock, as against $17,216, or about one cent a share, in 1919.

KALAMAZOO POST OFFICE BUSINESS

Another indication that Kalamazoo is not "standing still" is furnished in the report of the post office's business during 1920, which shows a total of $311,348 taken in, compared with $294,764 in 1916; $270,275 in 1900; $48,382 in 1880; $18,105 in 1860; $15,654 in 1870; $5,200 in 1860; $2,516 in 1850 and $1,384 in 1840. Business at the post office now is averaging more than $1,000 a day, which is a substantial increase over the business done in past years and fully equals the average business done in 1919, when 3-cent postage was in effect.

Digitized by Google

Eight Hour Bill Beaten

(*Continued from Page* 15)

it would discriminate against this state in favor of outside and mail order concerns.

Senator Barney E. Brower's substitute for his measure to require steel vestibule cabs for all engines was reported out by the railroad committee with recommendation for its passage. The substitute would give the utilities commission the power to order a steel vestibule on an engine.

The corporation bill, an administration measure, passed the Senate with three amendments, lowering the tax upon building and loan associations, protecting non-paying ore mines and exempting foreign insurance companies. The Senate also passed Rep. Andrew B. Glaspie's joint resolution asking Congress to restore state control over intra-state railroads.

The MacDonald bill making a number of amendments to the compensation act for the benefit of the workman, was reported out by the labor committee. The committee placed the maximum death compensation at $7,000, the present law fixing the limit at $6,000. The present provision allowing 60 per cent of the wage up to a certain amount was not changed to the 66 2-3 per cent as proposed in the original bill. The new provision giving the industrial accident board jurisdiction over cases in which men are injured out of the state but while working under contracts signed in this state, stands, as does the compensation benefit to include employes of the public, except elective officials. It also makes sub-contractors liable. Police and firemen are given the right to elect between a municipal and state benefit, but cannot have both.

Among the bills passed by the House was the Copley measure, which would require all public utilities under the jurisdiction of the commission to pay all expenses of appraisals, book audits, etc., made of their property, the money to go into the general fund for the expenses of the Commission.

The Evans bill increasing the maximum amount of highway road bonds which may be issued annually from $5,000,000 to $10,000,000, and the interest rate which may be paid from 5 to 5½ per cent, also was passed.

Senator W. A. Lemire, Escanaba, introduced a bill in the Senate to further the restrictions upon food manufacturers and dealers by protecting the consumer from mislabeled articles. Under the bill every article of food must have an accurate label showing its contents and the quality contained. Violations would be punishable under the pure food statutes, of which it would be a part if passed.

New Refrigerating Unit Will Be Made in Adrian

After a number of years of experimental work in its plant at Harper avenue and Rivard street, Detroit, the Utility Compressor Company has perfected an iceless refrigerator unit, which, it is confidently expected, will revolutionize the present systems of iceless cooling. The company will begin production in a new plant in Adrian in August. The Detroit factory has been suitable for experimental work but is not considered adequate for quantity production.

The company has taken the view of many manufacturing concerns that plant development and manufacturing can be better accomplished in the communities of moderate size than in the larger cities, and for that reason has ordered plans from Baxter, O'Dell & Halpin, Detroit architects, for a plant in Adrian. The manufacturing space provided will be about 20,000 squnre feet. The old factory has been sold to the City Patern Works.

This new type of iceless cooling unit dispenses with pipes, running water, stuffing boxes and much of the other machinery necessary in artificial cooling systems. The entire unit is enclosed so that no running parts are exposed. It can be attached to any refrigerator by the simple process of cutting a hole in the top of the box, adjusting the machine and connecting it to an electric lighting socket. The temperature is maintained automatically. The whole refrigerator space is reserved for food.

The officers of the company are E. R. Hasse, president; J. W. Foster, vice-president; G. J. Lehmann, secretary, and T. P. Stephens, treasurer.

MICHIGAN'S 1920 COAL OUTPUT

Statistics concerning coal output per state in 1920 have been announced by the Department of the Interior, the figures being the approximate estimates, and not final. The total production of bituminous coal for the country, according to the tabulation, was 556,563,000 tons, as compared with 458,063,000 in 1919; 579,385,820 in 1918 and 551,790,563 in 1917. The output of anthracite is estimated to have been 89,100,000 tons, as compared with 88,092,000 in 1919, 98,826,084 in 1918 and 99,611,811 in 1917. The grand total of coal produced was thus 645,663,000 tons last year or 99,599,000 more than in 1919 but 32,548,904 less than in 1918 and 5,739,374 less than in 1917.

The production credited to Michigan was 1,440,000 tons, or 210,000 more than in 1919, but 64,000 less than in 1918 and about 70,000 in excess of the 1917 output. Pennsylvania tops the list, with 163,000,000 tons; Illinois is second, with 90,050,000; West Virginia, third, 87,500,000; Ohio, fourth, 45,000,000; Kentucky, fifth, 31,000,000, and Indiana, sixth, 30,000,000. The anthracite output is all credited to Pennsylvania.

REINCORPORATING AT OTSEGO

Owing to the expansion of the business, and the fact that the original issue of the preferred stock is now retirable, directors of the Otsego Furniture Company have decided to dissolve the company and wind up its affairs as provided by law. A petition asking for a dissolution has been filed in the Allegan circuit court. H. Lyle Johnson, Kalamazoo, and H. D. Lanz, Otsego, have been appointed temporary receivers, and have assumed the management. The directors say that the concern is amply solvent. A reorganization to take over the plant and business at the conclusion of the receivership is under way.

NEWAYGO CEMENT ELECTION

The Newaygo Portland Cement Company, Newaygo, has re-elected Clay H. Hollister president and treasurer; Wilder D. Stevens, vice-president; J. B. John, vice-president and general manager, and W. A. Ansorge, secretary and assistant treasurer. The directors are the officers and P. H. Travis and Fred Vogel, jr., Milwaukee; H. D. Higginbotham, Joliet, Ill., and Mrs. Daniel McCool.

$150,000 ADDED TO CAPITAL

The St. Joseph Iron Works, St. Joseph, has increased its capital stock from $60,000 to $250,000—$150,000 being preferred and $100,000 common. The company is said to be planning increased activities. Its officers are: President, John Lindt; secretary, W. E. Hatch; treasurer, G. F. Filbrandt. These officers and Herman Hintz and John Eklund comprise the board of directors.

FORD CLOSES CORK PLANT

The Ford Motor Company has closed its tractor plant in Cork, Ireland, indefinitely. Fifteen hundred men have been laid off.

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg.

Phones Cherry 8640

We solicit your inquiries

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Digitized by Google

Drafting a Standard Form of Contract

(*Continued from Page 8*)

This will be true, because, whereas a firm may not hesitate to break a special agreement which exists between it and some other one firm it certainly would hesitate to break a generally approved contract which has back of it all the prestige and influence of the constructive business interests of the whole country.

Further, court costs and liquidation would be immensely reduced by the establishment of such a standard contract form. This would be true because in a short time there would be supreme court rulings upon each clause and paragraph in the contract. Then each party to such a contract would know in advance what decision the courts would render without the matter having to be taken to court.

In line with the program outlined above, the National Association of Purchasing Agents is now proceeding with the first step. This is to be carried out as follows:

Each of the national commodity committees will work out a contract form covering the special needs of their particular commodity or industry. This will then be submitted to each of the various trade, manufacturing and professional associations representing all of the constructive business interests of the country. The various criticisms, suggestions for changes, etc., will be worked out as presented. Whenever necessary, conferences will be called between the representatives of the various associations to work out the important points upon which the various parties differ.

Then finally when the various commodity contracts are worked out they will be turned over to the standardization committee. This committee will then draw up a basic standard form of contract, which meets the needs of every industry, and, in conjunction with the commodity committees make provisions for the special modifications which are necessary to meet each special commodity requirement.

In the undertaking of this definite program the National Association of Purchasing Agents desires every business firm and association to understand that it is not going to set up a contract whose chief purpose is to satisfy buyers. Such a contract form would never be generally accepted. Instead the entire aim is to carry out that program which best serves the needs of the business welfare of the entire country.

In any such movement it is necessary that some organization take the initiative and see that the work is kept moving. It is also necessary that such an organization have the confidence of the business public in general.

The National Association of Purchasing Agents has gained the confidence of business men and business organizations everywhere because from the very beginning its entire work has been of practical, constructive benefit and never directed towards obtaining any unfair, selfish advantage. Also, through the manner in which it proceeded with and carried out the establishment of a standard catalog size and a standard invoice form, it has gained the confidence of the business world to its ability and in its absolute fairness to carry out such work.

The readers of this publication will be kept informed as this work progresses. Constructive criticism and suggestions from everyone will be welcomed. Also, any business association or organization desiring to keep directly in touch with this work is invited to write to the national headquarters of the National Association of Purchasing Agents, 19 Park Place, New York city.

THAT FORD BALANCE SHEET

ASSETS	Dec. 31 1920
Real estate	$ 59,861,000.92
Goods, chattels, merchandise, notes, etc.	124,350,296.39
Cash	12,857,244.51
Good will	21,262,833.46
Receivables	54,425,632.50
All other assets	20,084,032.85
	$284,554,041.55
LIABILITIES	
Capital stock	$ 17,264,500.00
Liabilities	143,025,300.00
Surplus	124,264,241.55
	$284,554,041.55

The above statement has been arrived at by taking the actual items of assets reported by the secretary of state of Michigan and deducting admitted liabilities to total admitted assets to find surplus. It is interesting notwithstanding its lack of definiteness because it may be compared with a similar statement filed July 31, 1920, with the Delaware authorities. In the Delaware statement the items are grouped differently than in the above, but some of the comparisons are as follows:

	Lansing Statement Dec. 31, 1920	Delaware Statement July 31, 1920
Total assets	*$284,554,041	$206,695,109
Surplus	124,264,241	165,679,122
Cash	13,557,244	142,499,929
Real estate	59,861,000	85,549,726
Cash and receivables	67,798,877	85,499,029

*Less authorized capital of $100,000,000. Includes accounts receivable.

in the Lansing report $100,000,000 of capital stock authorized is included among the assets which has been deducted in making up the December 31 balance sheet.

FINANCING LANSING EXPORTS

James R. Otto, manager of the foreign department of the Capital National Bank, Lansing, reports that Lansing manufacturers are rapidly increasing their foreign trade so that in some cases shipments even exceed those before the war. Banking connections for local concerns are being opened in South America, Europe, the British Isles and the Orient. Trade with Germany has also increased. Automobiles and parts comprise the chief exports, and most of the products are going to Latin America, Britain, Germany and Poland. Local trade with Australia has grown since the overruling of the government regulation requiring Australians to buy at the current rate of exchange, and allowing them a permanent rate. The Capital National Bank's foreign department is financing many shipments through a credit system of its own, which heretofore had to be done through the New York office. A foreign banking and credit business may be done through the mail.

UNITED LIGHT AND RAILWAYS

Surplus earnings of the United Light & Railways Company for the twelve months ended December 31, 1920, are $916,084.16 after paying all expenses, taxes, maintenance, interest, and preferred dividends. The surplus earnings for the year 1919 were $482,943.07. Thus for 1920 there was an increase of $333,141.06, or more than 70 per cent.

NEW BOND AND MORTGAGE CO.

Organization of the Grand Traverse Bond & Mortgage Company, Traverse City, has been announced. The officers are: President, J. D. Munson; vice-president, M. D. Bryant, J. O. Duncan and C. B. Hammond; secretary, L. P. Titus; treasurer, E. P. Allen. Offices have been opened in the Beadle building.

TRUSCON STEEL STATEMENT

Assets	Dec. 31, 1920	Dec. 31, 1919
Cash accounts	$ 300,715.82	$ 246,238.68
Merchandise	1,322,945.57	2,178,814.94
Accounts receivable	2,439,769.47	2,158,985.85
Stocks and bonds	127,321.50	294,051.09
Real estate and buildings	1,537,442.70	1,478,968.01
Machinery and fixtures	1,438,376.74	1,497,242.43
Stock other companies	309,999.00	267,299.00
Treasury stock	1,450,000.00	1,417,600.00
Patents	1.00	1.00
Deferred charges	41,861.33	17,760.11
	$11,231,452.83	$9,557,779.62
Liabilities		
Bank loans	$ 1,178,000.00	$ 655,000.00
Accounts payable	926,270.61	715,642.31
Charges warehouse site	15,000.00	
	$ 2,153,270.61	$1,370,642.31
Reserves—		
Property depreciation	948,426.32	685,653.81
Agents' bonus and commission	203,240.66	69,994.56
Taxes, interest, accounts receivable, etc.	231,177.80	125,338.43
	$ 1,387,844.78	$ 879,986.80
Common stock	2,000,000.00	2,000,000.00
Pr-ferred stock	2,500,000.00	2,500,000.00
Surplus	3,190,338.44	2,816,129.25
	$11,231,452.83	$9,557,779.52

CENTENNIAL COPPER CO.

Coincident with the drop in the market value of copper is the report of the Centennial Copper Company, Lake Linden, for 1920, just received. Loss from copper delivered was $39,-816, as compared with $48,029 in 1919. Production cost of 561,284 pounds of copper in 1920 was 36.17 cents a pound, as compared with 24.64 cents for 1,365,148 pounds in 1919. The income statement and balance sheet follow:

Received for copper delivery	$172,829
Cost of copper	212,646
Loss on copper delivery	39,816
Loss by red. of copper	87,509
Deficit	127,325
Miscellaneous receipts	4,347
Net loss	123,177
Add Federal tax, 1918	7,811
Inc. in capital invest	24,748
Total loss	155,891
Inc. in res. for deprec. & depl	12,024
Final loss	159,746

Principal assets and liabilities as of December 31, 1920:

Cash	$110,414
Accounts receivable	24,486
Liberty bonds, 3rd	1,400
Liberty bonds, 4th	25,650
Copper on hand	48,095
Supplies at mine	36,843
Total	$246,870
Current Liabilities	
Accounts payable	$ 22,467
Excess of assets	223,403
Total	$245,870

A BLUE SKY DECISION

Under a decision of the Michigan Supreme Court given last week in the Detroit case of the state against Frederick E. Clum, it was ruled that so-called common law trust associations, even though not incorporated under Michigan or any other state laws, but which sell stock in this state, are within the purview of the blue sky law and violate it when they sell stock without the approval of the Michigan Securities Commission. In May, 1920, Clum solicited and sold stock issued by the National Business Men's Protective Association, and certificates were issued to investors purchasing it. The capital stock was given as $25,000 preferred and 7,500 shares non-par common. Clum was convicted in the Detroit recorder's court and appealed to the Supreme Court on the ground that the association was a common law trust and did not come under the law.

Digitized by Google

New Centerless Grinder Brought Out

(Continued from Page 14)

indrical extension of bearing of lower wheel which consists of a clutch operated by pulling the hand wheel endwise. An outward motion will rotate the wheel at proper work rotating speed, while an extreme inward push will disengage a back gear which will throw the wheel in high speed for wheel trueing purposes. If work of unusually large diameter is presented by mistake to the machine, the moment the operator notices the heavy cut he can grasp the hand wheel and push it toward the wheel and the wheel will stop instantly.

A month's test on actual production has shown that the machine has an hourly earning capacity of $4 to $10. Thie is based on present market prices for grinding piston pins.

A machine will be exhibited at the annual Car Builders' convention to be held in Atlantic City, as well as one in the near future in Chicago in the Machinery building, with the E. L. Eesley Machinery Company, the Chicago agent.

McGRAW BUILDING ON MARKET

The Detroit Journal says the McGraw building, at Griswold street and Lafayette boulevard, Detroit, is on the market and that several propositions looking to its future use either have been or are under consideration. One plan is said to involve the erection of a 33-story office building on the site, which is assessed at $1,000,000. Another has to do with an extension of the Free Press building. The Detroit Trust Company handles the property for the McGraw Land Company, owner of the corner. George H. Kirchner, president of the First State Bank of Detroit, which occupies the lower floor of the building, said the bank had not made a decision as to a new location when its present lease expires in 1924.

MICHIGAN MORTGAGE INVESTMENT

The Michigan Mortgage Investment Company, Lansing, distributed its regular quarterly dividend of 1¾ per cent on the preferred stock April 1 to stockholders of record March 20. The distribution totaled $18,715.59, making a grand total of $113,742.84 which the company has distributed since its organization, besides two stock dividends.

CONTRACTORS TO SELL STOCK

Gohr Brothers, Lansing, contractors, will sell about $20,000 of their reserve stock to assist in financing a number of road contracts. The concern was incorporated for $75,000, but only $54,000 has been sold.

CITIES SERVICE DISTRIBUTION

The twenty-sixth monthly distribution on Cities Service Company bankers' shares, payable May 2 to bankers shares of record April 15, will be 35 cents, the same distribution as made April 1.

WILL BUILD AT GRAND LEDGE

Plans are being made for the erection of a building for the Loan & Deposit Bank, Grand Ledge. E. P. Mills, formerly cashier of the South Lansing branch of the Lansing State Savings Bank, has been appointed cashier of the Grand Ledge bank.

DURANT-STUDEBAKER REPORTS

Some of the New York newspapers have published reports to the effect that William C. Durant has acquired a good sized block of stock of the Studebaker Corporation. His holdings, along with those of E. R. Erskine, president of the corporation, and Frederick S. Fish, chairman of the board of directors, are said to amount to more than one-half the stock.

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164



The Luxeberry Painter Says:

"Our sixty-three years of experience is your guaranty that every ounce of Berry Brothers Varnish products is made to the highest possible standard of service."

BERRY BROTHERS
World's Largest Makers Varnishes and Paint Specialties
Detroit, Michigan — Walkerville, Ontario

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

The Real Battle Is Yet to Come

(*Continued from Page 10*)

Hughes declared. The grain-growing sections of Australia, Austria, Russia and India are closer to seaboard by many miles than the Middle West of the United States and the Canadian farm lands, he said.

Mr. Macomber also challenged Mr. Hill's statement that the railroads could handle the traffic when there were no war conditions to interfere. He asserted that of the 2,500,000 freight cars in use, five-sixths were in movement and the rest idle. He questioned the ability of the remaining one-sixth of all available freight cars to care for traffic resulting from a renewal of business activities. The average car miles a day was given as 33 3-10 and the average time from Toledo to New York city as thirty days, whereas the shipment by water to Liverpool from Toledo would not exceed fourteen days. He called attention to the continuous embargoes from January to June, 1920, as sufficient evidence of the "ability" of railroads to handle traffic and the conditions obtaining at the New York terminals.

Summed up, the entire flow of testimony in the final hearing bore out the statement of Mr. Russell that the railroads needed supplemental waterway transportation and the country needed it; that whereas the great railroads of the United States and Canada were built in the belief that the growth of the country would justify their existence, which belief was sound, the necessity of the Great Lakes-St. Lawrence route is apparent from present transportation conditions and present tonnage, and not dependent for its justification upon what the future may bring.

New Publications

AUTO ELECTRICIAN'S GUIDE

The Michigan State Auto School, Detroit, has issued a new volume of its Auto Electrician's Guide, a compilation of automotive wiring diagrams. The Guide is complete in two volumes, the two together containing more than 1,700 different wiring diagrams, ranging from 1906 to 1921. This is said to be a much larger number than any similar book issued to date has approached.

The price of the Auto Electrician's Guide is $15 complete. It can be had from the Auto School, 3729 Woodward avenue, Detroit.

CUTLER-HAMMER PUBLICATION

The C-H Enclosed Switch, used for starting polyphase squirrel cage motors, is described and illustrated in Publication 2046, which is a two-color, four-page imprint folder of envelope size. The first page bears the caption, "Start 'Her up, Bill," and shows a view in an industrial plant, with "Bill" moving the lever of the Bulletin 9116 Switch in the process of starting the motor. The folder states that this switch protects the motor by inserting the fuses in circuit only after the motor has reached speed, thereby avoiding over-fusing of the motor to carry the heavy inrush current. The totally enclosed structure of the switch protects the workman from injury by accidental contact with live parts. When the switch is "off" and the fuses are dead, a sliding panel on the enclosure case can be lowered to allow inspection and renewal of fuses.

Copies of this publication may be had on application to the Cutler-Hammer Manufacturing Company, Milwaukee.

DETROIT AUTO CLUB ISSUES GUIDE

The Detroit Automobile Club has just issued to its members at 50-page booklet entitled "Marked Roads," which is going to be a valuable asset to members driving in the environs of Detroit. The map shows the state roads as well as the county roads and gives several optional routes for the same trip in many cases. The book alone is worth the price of membership in the club.

ARIZONA ROADS

Better Good Roads for Maricopa County, Arizona," the name of a new booklet published by the Lakewood Engineering Company, Cleveland, describing Twohy Bros.' 280-mile road job. The booklet is mostly pictures, reproduced in brown duo-tone ink on very fine paper. A cactus plant on the front cover gives some idea of the nature of the country in which this road building program is being carried out.

Copies of the booklet will be sent free on request.

REORGANIZING KILLEN KEMICAL

The Killen Kemical Kompany, Lansing, has been placed in the hands of a receiver by Judge Carr, of the Ingham circuit court, as a result of petitions made by executives of the company that the present trusteeship be terminated and receiver appointed. Joseph Gerson took charge of the plant's finances and promises creditors he will make every effort to pay them in full. An unusual legal tangle is involved in this receivership. The concern was brought to Lansing last September from Marinette, Wis., by D. J. Killen, president. In order to avoid Michigan corporation laws, the company organized under a common law trusteeship, a procedure not recognized in Michigan courts. It is an old English law which empowers a man to place his properties in the hands of plenipotentiary trustees, a statute that is still in force in Massachusetts.

President Killen resigned February 5, withdrawing his stock and leaving the other executives to bear all responsibilities as trustees. These executives are R. W. Johnson, secretary; J. F. Murphy, vice-president; E. A. Golden, treasurer; H. C. Nielson, chemist, and Dewitt Hungerford, trustee. When it was realized the company could get no further under these conditions, action was taken to end the trusteeship and name a receiver to continue until the company can be incorporated under Michigan laws. The company manufactures oils, greases, soaps, paints, varnishes and a patented antifreeze solution known as "Hot Frost."

BRIER HILL STEEL'S DIVIDEND

J. B. Kennedy, chairman of the board of the Brier Hill Steel Company, is quoted in an eastern newspaper as saying that unless there is a decided improvement in steel buying during the second quarter of the year it is probable there will be no July 1 Brier Hill dividend. A dividend payment of 4 cents a share was announced for the first quarter, as against a payment of 60 cents on the junior stock for the preceding three months.

PONTIAC EMPLOYES' BENEFIT ASS'N

The Pontiac Employes Mutual Benefit Association paid out $47,621 during 1920, or $17,600 more than in 1919, according to announcement made at the annual meeting, recently. The total number of claims was 1,092, of which 638 were for sickness, 431 for accidents and 28 for death benefit. Benefits paid were as follows: Sickness, $24,456; accident, $18,563; death, $4,602.

Since the Association was formed, some years ago, there has been paid out $77,643 as follows: Sickness, $40,960; accident, $33,756; death, $5,827. The average benefit paid to members is $35.01; the average absence on account of sickness, 17.2 days; accidents, 16.4 days. Total assets of the Association are listed at $53,329.

The election of officers for the year resulted as follows: W. A. Booth, Wilson Foundry & Machine Company, president; O. I. Van Schoick, Hubbard Spring Works, vice-president; George Westbrook, General Motors Truck Company, treasurer; C. S. Skelton, manager and secretary of the board of trustees. Trustees: Clayton Springer, Oakland Motor Car Company; Chris Bachner, Eames & Brown; Harry Elkins, Iless-Pontiac Company; Frank Stout, Michigan Drop Forge Company; George Eaton, O. J. Beaudette Company; Edward Goulet, Slater Construction Company; Vern Rohn, Consumers Power Company; D. L. Brown, Pontiac Daily Press, and the officers.

TWO NEW INDUSTRIAL FILMS

Two new educational motion picture films are announced as being ready for distribution by the United States Bureau of Mines.

"A dollar saved is a dollar earned" is the title of a film produced in co-operation with the National Association of Pipe Covering Industries. This film shows the advantages and economy that result when pipes and boilers are properly insulated and radiation losses thus overcome.

"The story of ingot iron," a three-reel picture showing the various steps in the process of making ingot iron for plates and sheets, was produced in co-operation with the American Rolling Mills Company, Middletown, Ohio.

Requests for the loan of these films should be addressed to the Bureau of Mines, 4800 Forbes street, Pittsburgh.

AMERICAN SHIPBUILDING CO.

The American Shipbuilding Company in announcing its regular quarterly dividends on the common and preferred stocks, also the usual extra dividends, has disposed of rumors that these payments were to be passed. The Cleveland Plain Dealer says: "Prior to 1917 the company paid dividends on a hit-and-miss plan, as the preferred stock is a non-cumulative issue. However, it paid the regular 7 per cent dividend on the preferred since date of organization to January 15, 1914. No more was then paid until 1916, when 8¾ per cent was distributed. The regular dividend has been paid since. On the common stock 60½ per cent has been paid in cash and 15 per cent in Liberty Bonds since 1917, as follows: 8½ per cent in 1917; 12 per cent cash and 15 per cent in Liberty bonds in 1918; 16 per cent cash in 1919 and 1920, and 8 per cent in cash thus far this year."

ENGINEERS' PROGRAM APRIL 12

The subject, "Cost Analysis as a Device for Executive Control," will be discussed at the meeting of the Detroit Chapter, Society of Industrial Engineers, at the Board of Commerce, April 12. The question will be taken up first by Clinton H. Scovell, of Scovell, Wellington & Company, accountants and engineers. After the address there will be an open discussion. A. G. Sherman, general manager of the Detroit Vapor Stove Company, and R. J. Houser, comptroller of the Penberthy Injector Company, will be among those speakers. The chapter also has arranged for a talk to be given at a noon meeting of the Board of Commerce, to be announced shortly.

NEW HARBOR SPRINGS ENTERPRISE

Official announcement is expected to be made at any time of the establishment of a new industrial enterprise in Harbor Springs. Those principally interested, Chicago business men, asked, it is said, that $10,000 of the concern's capital stock be subscribed by local people, which was done. It is reported that the company will occupy the property formerly used by the Cadillac Handle Company.

Digitized by Google

U. S. Copper Production Practically at Standstill

Practically the entire porphyry copper mining industry in the United States came to a standstill March 30. Temporary suspension of mining operations was announced by the Anaconda, Utah, Ray Consolidated, Chino and Nevada companies, while the Inspiration and North Butte companies closed down the week previous. These seven concerns have a total productive capacity of about 1,000,000,000 pounds of copper a year, although last year their output was about half that amount. It is expected other companies will act similarly.

Lack of domestic and export demand, coupled with large surplus stocks, was given as the reason for stoppage of production, which at present costs and the price of the metal around 12 cents a pound was a losing venture. Officials of the companies expressed the opinion that the shutdowns would be only temporary and that normal production would be resumed at general industrial conditions become easier.

"Suspension of activities was ordered with regret, and only after deliberate consideration compelled the conclusion that under existing conditions no other course was advisable," said John D. Ryan, chairman of the Anaconda Copper Mining Company. "The mines and plants are in good condition and can and will be so kept that a normal production at reasonable cost can be made quickly whenever there is sufficient improvement in the business situation to warrant an output on an economic basis."

"Continuation of production which cannot be sold at the cost of production would lead only to later demoralization, a detriment to stockholders and ultimately a much greater pecuniary loss to employes," said Charles Hayden, a director in several of the companies. "Copper is a basic industry and it is the belief of the managements that rehuilding of commercial industry in this country and abroad will not require a long period of shutdown."

REALTY DEVELOPMENT CORP.

The Realty Assurance Corporation, 1402 Real Estate Exchange building, Detroit, announces that its name has been changed to Realty Development Corporation, for the reason that the former name did not clearly indicate the nature of the business, which is confined to the development of real estate. The change of name in no way affects the personnel, organization or business transactions of the corporation.

NEW PUNCH AND RIVETER

A new machine is being manufactured by the Baird Pneumatic Tool Company, Kansas City, Mo. It may be used either as a punch or riveter simply by changing the dies. Among the many advantages claimed for the machine is the fact that although it is a stationary unit, it can be readily moved from place to place in the plant where the work is located, as it weighs only 600 pounds complete. It has a capacity for punching ⅝-inch plate and for riveting ⅝-inch cold rivets, and because of this dual use is practicularly adaptable for light structural steel fabrication. The pressure exerted on the punch and rivet dies is approximately 70,000 ponnds. It operates on the standard airline pressure of 100 pounds.

ST. JOHN'S COMMERCIAL CLUB

The St. Johns Commercial Club, St. Johns, at its annual meeting elected George H. Chapman, president; A. E. Wilson, vice-president; A. L. Rand, secretary, and R. C. Dexter treasurer.

TO BUILD CANNING PLANT SHORTLY

Work on the canning plant to be erected in Greenville is expected to be started shortly. Officials of the company have acquired the site of the old Greenville barrel factory.



Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

Digitized by Google

Yankee Ingenuity and World Banking

(*Continued from Page 12*)

February; Great Britain, $93,000,000, as against $169,000,000; France, $20,000,000 as against $65,000,000. Nearly every country shows similar decreases in purchases of our goods except Germany, and it is noteworthy that this "bankrupt" country bought $39,000,000 from us in February this year, as against $18,000,000 last year. Germany also increased her sales to us from $3,881,559 in February, 1920, to $4,952,278 in February this year.

Alright, some have said, how about the improvement in business the last thirty days in spite of falling exports? That improvement is simply the natural rebound from overmuch contraction. Yankees never take the middle of the road. When the price of Ford cars was cut, September 21, we all dropped into low speed, put up our side curtains, put on our chains and generally prepared for and acted as if, we were going into a hurricane. But we have found since that it was merely a healthy rain storm and business is now getting back to the speed which sanity and normal demand require.

But the need for a machine to revive foreign trade is none the less on this account. The new foreign trade financing corporation when it gets on its feet will furnish you the means of selling goods to Constantinople, where they are crying for machines to make bread. It will enable you to supply merchants in Egypt, who are calling for soap, perfumery, kitchen utensils, glassware, linoleums, alcohol and motorcycles, and to supply a large Greek importer house with motor cars and typewriters. These are positive efforts to buy goods about which any of you may obtain specific information by addressing the American Manufacturers Export Association, at New York. And if this new bank were doing business today, as it will before long, you would be getting some of this business. The amount of stock that any manufacturer may be asked to take is insignificant compared with the possible profits that are ours when the possibilities are considered. And the best of it is, under the system of issuing debentures which the new bank will use, the very profits we make will be the source of new capital for making additional profits. Every $100 of stock paid in gives the bank the means of issuing $1,000 of debentures. And every workman who buys a debenture is in a sense creating a job for himself because the proceeds of the debenture immediately begin to finance part of a sale of goods, and the sale of course makes additional demand for labor here at home.

As to the safety of this foreign trade bank, we have as a guide the time-tried foreign financing concerns of Great Britain, which have been doing this business since 1578, when the Eastland Company was organized. And similar concerns have been in successful operation ever since, until in 1914 European countries had outside investments of more than $39,000,000,000. But the outstanding feature of these European companies is that the best managed ones have earned an average of more than 12 per cent above all expenses and losses for many, many years.

The best information obtainable is that Governor Harding, who successfully piloted our banks through the war, will become managing head of this new bank, which in itself is a guarantee of safety. And thus the situation resolves itself simply into this: Given, a 16 per cent surplus of goods and crops, ships, men and factories, plus reliable and tested management, are we going to let European foreign traders beat us to it, so to speak, while we bem and haw about raising capital? I think not. The potentiality of this new banking is steadily making converts, and before long, when the bandwagon starts, we will all be scrambling for front seats and the rest of the world will again be marvelling at Yankee "pep" and ingenuity.

Public Utilities

Gaylord—After August 1 the electric lighting and pumping plant of Gaylord will be owned by the Cheboygan Electric Light & Power Company, Cheboygan, which will then furnish power to the following municipalities: Gaylord, Mullet Lake, Long Point, Topinabee, Indian River, Wolverine, Mackinac City, Carp Lake, Levering, Pellston, Brutus, Alanson, Oden and Conway. The deal made between Gaylord and the company provides that the town retain charge of water mains.

Lansing—The Michigan Public Utilities Commission has approved the agreement of the holders of the 15-year, 5 per cent consolidated mortgage gold bonds of the Lansing Fuel & Gas Company to extend payment on these bonds. They were due April 1, 1921, but the payment has been extended for 10 years and the interest raised to 7 per cent. The agreement has been executed by the gas company the Central Trust Company of Illinois as trustee, and by the Pennsylvania company as bondholder.

Evart—The Winterfield Light & Power Company has been reorganized with the following officers: John M. Perry, Tustin, president; A. H. Rose, Evart, secretary; William Rogers, Evart, treasurer. Directors: Henry Multner, Lake City; William Gustafson, Leroy; W. L. Kenney, Marion; and Messrs. Perry and Rogers. Under the new plans of the company it is proposed to erect a dam across the Clam river in Winterfield township. The company will furnish electricity to Evart, Leroy, Sears, Lake City, Marion, McBain and Winterfield.

NEW ENGINEERING CONCERN

The Engineering Equipment Company, capitalized at $12,000, has been incorporated in Lansing for the purpose of conducting a general sales and engineering business. The concern is headed by Harry L. Conrad, chief engineer of the local branch of the H. G. Christman Company, assisted by J. C. Gunnell and O. E. Eckert, Lansing.

Ernest T. Ross Joins The Corrigan Company

Ernest T. Ross, Chicago, has been engaged by the Corrigan Company, investment banker and broker, Grand Rapids, to be associated with John D. MacNaughton, manager of the bond department. Mr. Ross has had a wide



ERNEST T. ROSS

experience in the bond business and has been connected with Devitt, Tremble & Company, Chicago, one of the oldest bonds houses, for a good many years. For the past three years he has been associated with Halsey, Stuart & Company as their Michigan representative.

Basil Barker, the oldest employe in point of service of the First National Bank, Allegan, has been advanced to the position of cashier, owing to the resignation of Walter Miller. Marinus Van de Baute has become assistant cashier.

Recent Dividends

Company	Rate	Payable	Stock of Record
American Shipbuilding, com.	1¾% Q	May 2	April 15
American Shipbuilding	2½% extra	May 2	April 15
American Shipbuilding, pfd.	1¾% Q	May 2	April 15
American Shipbuilding	2½% extra	May 2	April 15
Aetna Rubber, pfd.	1¾% Q	April 11	March 25
American Telephone & Telegraph	12.00 Q	April 15	March 18
Allied Chemical & Dye, com.	11.00 Q	May 2	April 15
Continental Motors, pfd.	1¾% Q	April 15	.....
International Paper, pfd.	1¾% Q	April 15	April 8
Loose-Wiles Biscuit, 2nd pfd.	1¾	May 1	April 19
Midwest Refining	11.00 Q	May 1	April 15
Midwest Refining	3.00 extra	May 1	April 15
Pacific Gas & Electric com.	81.25 Q	April 15	March 31
Sonora Phonograph, pfd.	2% Q	April 1	March 22
Stearns Motor, com.	11.00 Q	April 1	March 31
Tramiail Steel, com.	40 cents Q	.....	.....
Tramiail Steel, pfd.	1¾% Q	.....	.....
United Verde Mining	25 cents Q	May 2	April 5
U. S. Industrial Alcohol, pfd.	1¾% Q	April 15	March 31
United States Smelting, Refining & Mining, pfd	1¾% Q	April 15	March 22
Westinghouse Electric, com.	2% Q	April 30	March 22
Westinghouse Electric, pfd.	2% Q	April 15	.....

The Vanadium Corporation of America, which paid a dividend of 11.50 on its common last year, reduced this to 11 three months ago, has passed the dividend now due.

The regular quarterly dividend of 1¾ per cent on the common stock of Fairbanks, Morse & Company has been passed.

The Edmunds & Jones Corporation, Detroit, has passed the dividend on the common stock due at this time. The preferred dividend was declared as usual.

The National Grocer Company has passed the quarterly dividend of 2 per cent on the common stock.

The Merrell Manufacturing Company has passed its quarterly dividend of 1¾ per cent on the preferred stock.

The Loose-Wiles Biscuit Company has declared a dividend of 1¾ on the second preferred stock for the period from May 1, 1916, to August 1, 1916.

GRAND RAPIDS EVENING OPENING

The Grand Rapids banks which belong to the clearing house association will hereafter keep open Thursday evenings from 6 to 8 o'clock, effective April 1, for a six months' trial to determine whether there is a public demand for such accommodations. There are 21 branches of state banks in Grand Rapids and they have been keeping open Wednesday and Saturday evenings. The newer ruling, however, applies only to the downtown offices.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

L-XX
HIGH SPEED STEEL

Carbon Tool Steels
Alloy Steels

Atlas Crucible Steel Co.
Offices and Warehouse
1437-1459 Franklin Street
Detroit, Mich.

BRASS and COPPER
Seamless Tubing

A very careful study has been given to this equipment by the

U.S. Copper Products Corporation
of Cleveland, Ohio

with a view toward modernizing production and care in the selection of men who operate this plant

Our Extreme Effort is Quality and Service

Detroit Office
H. B. KENDAL COMPANY
Real Estate Exchange Bldg.
Telephone Main 1657-8-9

Digitized by Google

Mr. Earle Defends Building Material Producers

(Continued from Page 10)

do not make the assertion) that you consider the railroads are responsible. In the first place, the railroads use more fuel than any producers I know of. The Pere Marquette uses 1,000,000 tons of coal annually, on which the freight rate has been increased, on account of the haul made by other carriers, in a sum approximating $500,000, and the cost of the coal at the mine has been increased from $1.05 a ton to $3.25 a ton—more than 200 per cent, equal to over $2,000,000 a year increase in the cost of coal. Another large expense on account of materials used by the railroad is in the cost of cross ties. In 1913 our ties cost us approximately 90 cents apiece in the track. Today they cost us about $2.25 in the track. We use 800,000 ties a year, so that the excess cost of our ties at this time is more than $1,000,000 over the cost of cross ties in 1913. This increase is just 150 per cent.

"The payroll for the Pere Marquette in 1920 was 220 per cent in excess of the payroll for 1917, with practically the same number of men at work. I do not take the time to go back to the rolls for 1917, so that while the freight rate was increased 127 per cent I am sure the labor rate on our railroad was increased quite as much.

"I have no doubt that the small per cent of increase in the cost of loading gravel is due to the advanced methods used in loading, as there have been a large number of high class plants built in Michigan for the handling of gravel since 1913.

"I would inquire of you as to what price you received for your gravel in 1913 and the price you received in 1920, and whether the freight is paid by your company or by the consignee. If you are loading gravel for 12 per cent more than the cost of loading in 1913 you should certainly be entitled to 12 per cent more a yard for your gravel now than you were getting in 1913, at the pit, providing the consumer pays the freight.

"The railroads were on the rocks in 1913, in Michigan, as you will know, and unless we are able to get away from the present conditions exacted through our agreements with labor, some of the roads will again doubtless find themselves in difficulty. I do not believe railroad officers want to penalize the public or the industries along their lines; and the Pere Marquette is interested in the success of the industries along its lines and would not want to exact a freight rate that would yield more than a reasonable profit upon the operation, based upon efficient and economical management.

"I wish it were possible for the public and the railroad to work closer. There is no reason why we should not work together always. Our interests are identical. When the shipper is prosperous, the railroad should be prosperous, and the railroads should not prosper beyond the shipper. It is a fact that the long haul through business can be handled at much lower rates than the short haul local business. In the former, the average movement of freight cars per day is as high as 50 miles, while in local business the average movement will not exceed 10 miles a day, on account of the time consumed in loading and unloading cars.

"The price of freight cars in 1913 was less than $1,000. It is now $3,000, or an increase of 200 per cent, and the charge as between railroads for the use of freight cars, as a rental, is $1 a day. The handling of local business on the Pere Marquette requires an average use of a car of 12 days per load handled. This means that for the rental of the use of the car alone the railroad company is obliged to pay $12. It makes no difference whether the railroad owns a car or rents it from another railroad. The charge of $1 a day no more than covers the interest on the investment, depreciation and upkeep of the car.

"You may think 12 days is a large average, but it is not when you consider that the shipper is entitled to two days free time at each end of the haul, and he usually consumes it, leaving but eight days for the railroad company to handle the business. The average car lings on gravel at the present rates are between $40 and $50 a car, of which 25 per cent is at once absorbed for the use of the car. On gravel from your plant located on our Fostoria branch, into Flint, the average earnings per car are about $40 and the time consumed in making the

Situation in Jackson Is Improving Steadily

It does not appear after talking with bankers and business men of Jackson that there is any pessimism in the hub of Jackson county. Business is coming back in a cautious and deliberate manner which is characteristic of that city's past performances. Bank deposits are still greater than at this time last year although totals are following the same gradual shrinkage shown throughout the country.

In labor circles there is rumor of a new outbreak between the Michigan Railway and its employes over the alleged discharge of the business agent of the carmen's union for his remarks about the one-man car policy of the company. The Michigan Railway has endeavored to continue service on the light traffic lines by using cars which do not eat up so much income, but the overzealous union men apparently believe that there is no appreciable relation between savings and expenses on such lines. Jackson has no association record of employment but parties consulted say many foreigners and former farm hands are making good.

A financial man in very close touch with Jackson's industries makes the following resume of some of the leading manufacturing companies' business prospects:

Briscoe: Gradually moving ahead but cramped because of production carried on during the depression.

Jackson Motor: Moving slowly.

Walcott Lathe: Prospects good but stationary at present.

Hayes Wheel: Has fair volume of orders and just starting operations.

Mott Wheel: Getting slowly on its feet following reorganization.

Reynolds Spring: Doing better. Prospects good.

Sparks Withington: Hurt by patent suit but other products going in good volume more than enough to offset any loss.

Jackson Fence: Doing fairly well.

Frost Gear & Machine: Marking time.

Knight Commutator Lighting Co.: Has done nice winter business. Plenty of orders.

Aspinwall Manufacturing Company (now Aspinwall-Dyer Company): Has raised new capital. Should improve soon.

Bayard Henry, George H. McFadden and Howard Hines have been re-elected directors of the Pennsylvania Railroad Company for four years. The stockholders have approved a proposed $100,000,000 increase in the company's indebtedness. The company's total gross revenues in January were $44,640,210, comparing with $52,596,067 in December and with $60,603,431 in October last year.

movement should be considerably less than 12 days.

"Conditions have changed for the railroads the same as for the individual. The Pere Marquette has 600 local stations in Michigan, most of which are small country towns where the trains leave early in the morning and return in the evening. The agent at each of these places, even if he has nothing to do in the daytime, must be paid from the time he goes on duty early in the morning until he serves the last train in the evening, regardless of how little work he has to do between trains, and for all the time he puts in beyond eight hours the company is obliged to pay him time and one half. At the end of these runs where it is necessary to have the engine watched during the night, in order to have the fire ready for starting out in the morning, the railroads have been required to pay the watchman at a very high rate on account of their classification as hostlers, and pay time and one half for the time put in beyond eight hours. In case an engine leaves a terminal in the morning at 7 o'clock and arrives there in the evening at 6 o'clock, so that it must lay over thirteen hours, it is cheaper for the company to hire two men rather than pay the one man for thirteen hours at time and one half after eight hours. For example: We had a case at the end of one of our branches where we were obliged to pay out over $350 a month to have the engine watched (please understand that the watching is nothing more than keeping the fire going so that the engine will be ready for use the next morning.) The amount paid out for watching the engine represents one-half of the income from passenger fares."

Replying to Mr. Alfred's letter, Mr. Earle said that he did not intend to convey the idea that the railroads were responsible for the high cost of building materials any more than the producers were.

"I wrote these letters for the purpose of getting the views of the different commissions, companies and individuals, so as to set our own minds right and do the same for the consumers. We expect that most of them will produce the responsibility of record, and the Flint Board of Commerce has already done so, but the Detroit Board of Commerce has notified me that it will give the matter consideration," wrote Mr. Earle.

"My personal belief is that one Samuel Gompers, assisted by Woodrow Wilson and the Adamson law, has contributed largely to the high cost of building material. In 1901 I predicted that if we kept on reducing passenger fares and freight rates, and increasing taxes and commissions, both national and state, for them to report to, thereby increasing overhead expenses and reducing income, some day we would have a bankrupt railroad system covering this country from the Atlantic to the Pacific. Well, we have it. So I predicted right.

"In 1913 we were selling gravel for an average of 75 cents a ton—that is, washed and screened material. Today we are getting 85 cents a ton. Of course you understand that when we sell our gravel we have diminished the value of our holdings, somewhat different than a mercantile proposition. The more gravel we ship, the more factories will be built and the greater will be your business. Who pays the freight? The consumer, eventually. The contractor pays it, but it is charged up in the contract on the work. We do think so much of our product goes to Flint only, a short haul at a good profitable rate, we think, that you might say to us now that the old arrangement agreed to, of five cents more, that the first zone rate, shall prevail to Detroit."

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock. Fender and Hood Stock. Radiator Stock

Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

IN STOCK IN LANSING

Immediate Delivery

Kalman Deformed Square and Round Reinforcing Bars.

Self Sentering, Ribplex, Diamond Mesh and Herringbone Metal Lath.

Cold Rolled Furring Channels.

Bayley-Springfield Ventilated Steel Sash.

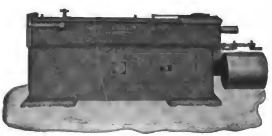
* * * * *

Our Engineering Service Department will detail your concrete work, cut and bend bars, make complete shop drawings of the reinforcing steel, and advise generally with your Architect or Construction Superintendent. We specialize on materials for non-inflammable construction such as WeiSteel Toilet Room Partitions, Duplex or Ideal Steel Column Caps and Bases, Steel Joist Hangers, Pressed Steel Joists for light load construction, Sidewalk Vault Lights, Wiremesh Metal Corner Bead, Concrete Road Reinforcing, Metal Picture Mould and Base, Face Brick, Hollow Tile, Brixment, Steel Cores for Concrete Floor Construction, etc.

THE BRIGGS COMPANY

Flint Lansing Grand Rapids Detroit

American Broaching Machines & Tools



MADE IN TWO TYPES, EITHER OPERATED BY SCREW OR RACK

American Broach & Machine Co.

F. J. LAPOINTE, Pres

Ann Arbor, Michigan



DETROIT, OFFICE:
305 Scherer Bldg. Phone Cadillac 5381

Digitized by Google

NEW MICHIGAN CORPORATIONS

FOR WEEK ENDED APRIL 2, 1921

Standard Paper Box Co., Detroit; to manufacture, buy and sell paper boxes and other articles; Edward C. Parker, 858 Delaware; George E. Watson, Leila Parker ..... $ 1,000

Max Bros., Detroit; to engage in the hardware and crockery business; general merchandise; Sydney L., Clara and Abraham H. Max. 9725 Cameron Ave., Detroit .....

Conwer-tandall Lumber Co., Bay City; to engage in business of buying, selling and dealing in lumber and building material of all kinds; Conwer D. Jackson, Thomas Conway, Bay City; George J. Randall, Algonac ... 21 000

Homer Sly Auto Co., Petoskey; to repair, alter, construct, manufacture, buy, sell and deal in automobiles trucks, etc.; Homer Sly, Sheldon Cole, Wilbert J. McDonald, Petoskey.

Port-Grand Rapids Sales Co., Grand Rapids; to buy, sell, lease, export and in any way deal in automobiles, trucks, motors and accessories; A. McGregor Wells, G. L. Hunsberger, etc., Wilburt E. Palmer, Flint. 50,000

Columbia Body Corp., Detroit; to manufacture and sell vehicle bodies of all kinds and do all things necessary and incidental thereto; Joseph B. Pospeshil, August Quinnel, James H. McTaggart, 45 Selden Ave., Detroit 75 000

Service Heat Treating Co., Detroit; general heat treatmeat of metals and their products; Heinecke, 2245 Hillger Ave., Herbert F. Halpin, Robert Bagshaw, Detroit .....

S. Champion Foster Advertising Co., Inc. Cass City; poster advertising, printed bulletin displays, commercial and electric signs, advertising novelties, etc.; William Bay, Cameron; Andrew B. Champion, Samuel Champion, Cass City .....

Clawson Auto Service Co., Clawson, to establish and conduct the manufacturing and selling of autos; general store business; Frank and Heber Hilton, George H. Hoffman .....

Detroit Purse Inner Tube Co. of Detroit; Hamtramck; manufacture and sale of automobile tubing and automobile tires, rubber mats and all articles made of rubber composition; George J. Holstein, 2121 Kilmurray Ave., Hamtramck Chemawski, Frank Moons, Detroit .....

Sutherland Heater & Felt Co., Detroit; buying, selling, jobbing and manufacturing articles of felt, metal, etc., for automobiles; Clarence L. Walker, 1078 Baldwin Ave., Joseph Jacobsen, John J. Boyne, Detroit 100,000

Birmingham Sand & Gravel Co., Detroit; buying and selling, wholesale and retail, of sand and gravel, lime, cement, coal building supplies; Edward J. Crowells, 1594 Pennsylvania ave.; C. Lee Hilme, Harold L. Biles, Detroit .....

Niagara Light & Power Co., Niagara Falls, N. Y.; O. C. Davidson, president, Iron Mountain .....

Miller-Bryant-Pierce Co. (F.), Aurora, Ill.; Fred T. Fisher, manager, 222 Commerce st., Dallas, Tex. .....

Many, Blanc & Co. (F.), Chicago, Ill.; Alfred Schmidt, Grand Rapids .....

Safety Release Clevis Co., Holland; manufacture and sale of steel clevises, automatic coupling and steel and iron products; Albert B. Huisebos, Henry Ketel, Gerrit B. Ten Cate, Holland .....

Cheboygan Tile & Brick Co., Inverness township, Cheboygan county; to manufacture and sell tile brick and other clay products; M. Gerow, W. L. Hagadorn, J. H. Cluse, Cheboygan .....

Warren Brick & Tile Co., Detroit; manufacture and sale of brick, tile and similar products; Louis Chernoff, 89 Glendale Ave., Abraham Chernoff, Abraham Nordoloff, Detroit 100,000

Webster Cigar Co., Detroit; manufacturing, buying, selling and dealing in cigars, tobacco and tobacco products; Samuel L. Gilbert, 640 Delaware ave., Samuel Gates, Detroit; Joseph B. Wertheim, New York City.

Delaute Realty Co., Port Huron; purchasing, holding and dealing in real estate; John M. Gleason, Burt H. Usely, Arthur R. Coutet, Port Huron.

Caroline Products Co., Detroit; to manufacture, buy, sell and deal in, at wholesale and retail, condensed milk and all kinds of dairy products; Glen F. Cowan, 8301 Grand River ave., James V. Oxtoby, McKee Robison, Detroit 10,000

Campbell, Smith & Co., Detroit; to deal in stocks, bonds and other securities; George W. Campbell, 3929 Fourth ave.; Robert C. Smith, Otto F. Barthel, Detroit .....

CHANGES OF NAME

Michigan Foundry & Machine Co. (name changed to Willis Pleton Co.), Detroit 12,000

Interstate Appliance Co. (name changed to United Appliance Co.), Jackson 40,000

INCREASES

Armstrong Machine Works, Three Rivers, from $15,000 to ..... $ 60,000

Kirsch Mfg. Co., Three Rivers, from $250,000 to 1,000,000

Tennyson Home Builders' Inc., Detroit, from $10,000 to 50,000

Knickerbocker Co., Jackson, from $60,000 to 150,000

Lang Furniture Co., Allegan, from $150,000 to 200,000

Detroit Casket Co., Detroit, from $50,000 to 175,000

Central Power Co., Detroit, from $50,000 to 75,000

Consumers Dairy Co., Jackson, from $20,000 to 30,000

H. E. Shaw Furniture Co. Grand Rapids, from $125,000 300,000

Northern Fibre Products (Wis.), Green Bay, Wis., Antonagaon, Mich., 5,000 com. n. p. v. to 6,000 shares com. n. p. v.; from $150,000 to 690,000

Hoskia-Moranville Paper Co., Menominee, from $150,000 to 1,000,000

Durant Hotel Co., Flint, from $750,000 to 1,500,000

Entiat Lumber Co., Muskegon, from $1,000 to 416,000

CHANGES OF ATTITUDE.

Delin Rack Mfg. Co., Escanaba ..... $ 15,000

Valley Serap Iron Co., Bay City 6,000

Dragon Homes, Inc., Detroit 10,000

Charlotte Mfg. Co., Charlotte 15,000

Swarta Tile & Brick Co., Detroit 40,000

Pensacola Fruit Growers' Ass'n, Detroit 5,000

Granite Stone & Supply Co., Detroit.. 10,000

Moore & Veale Real Estate Corporation, Detroit 5,000

Millington Opera House Co., Millington 4,000

Bra-Bee Mfg. Co., Detroit 2,000

National Housing Corporation, Detroit 1,000

Frankenlust Fuel & Feed Co. Bay City 1,500

Ottawa Leather Co., Holland 100,000

Acme Universal Joint Mfg. Co., Kalamazoo 15,000

Lenawee County Abstract & Title Co., Adrian 14,000

Industrial Development & Brokerage Co., Grand Rapids 17,000

Petoskey Investment Co., Petoskey 10,000

NOTICES OF DISSOLUTION.

Cook Car Journal Cooler Co., Flint.... $ 100,000

Davey Mfg. Co., Detroit 2,500

NOTICES OF WITHDRAWAL.

Dominion Construction Co. (F.) (Ont.), Toronto, Canada, Miss. Mich. ..... $ 150,000

Decker Davies & Jean, Inc. (F.) (Del.), Wilmington, Kent-Grand Rapids, 2,500 shares n. p. v.

Matthew Addy Co. (F.) (Ohio), Cincinnati, O.-Detroit 200,000

ACCOUNTANTS MEET IN DETROIT

Accountants from the mid-western states attended the regional convention of the American Institute of Accountants, in Hotel Statler, Detroit, April 4. Henry Steffens, Jr., city controller of Detroit, welcomed the delegates for the city and President Carl R. Nau responded for the institute. The principal topic of discussion was the federal income tax. The annual dinner was served in the evening, with Frederick C. Mosher, Detroit, as toastmaster.

Edward E. Gore, Illinois, spoke on "The Traditions of the Profession and Their Keeping." Archibald Broomfield, Detroit attorney, discussed "Some Recent Income Tax Decisions."

The profession of accountancy was organized first in 1887 as the American Association of Public Accountants. The first C. P. A. law was passed by the New York legislature in 1896. Now every state but one has such a law. The old association was merged into the present institute in 1896, which is closed to all accountants who cannot pass the required examination, the character of which is such as to prove the qualifications of all aspiring to a reputation as expert accountants. In Detroit there is estimated to be 1,000 public accountants, which includes principals, seniors and juniors, but only a few are members of the institute.

MICHIGAN QUARTZ SILICA CO.

The shareholders of the Michigan Quartz Silica Company, of Milwaukee, have just received a 5 per cent dividend, the third yearly payment since the company transferred its operations from the Michigan gold mine, west of Ishpeming. There are a good many shareholders in Marquette county. The report of the company shows assets of $131,152. The company owns the Michigan gold mine, which has been inactive for a number of years. Before moving to Wisconsin the company experimented with the treatment of quartz from the shaft, and while the best grade of silica was obtained, it was found that the transportation and other charges were much heavier than if a plant were established in Milwaukee. Edward Wehrle has been elected president and treasurer; Arthur E. Gross, vice-president, and Henry W. Pioss, secretary.

FOUNDRYMEN ORGANIZING

A meeting of the grey iron foundry men of the state was held in Lansing last week for the purpose of organizing an association to promote the standardization of foundry methods and practice and look after the other interests of the business. A committee was appointed with Chairman William H. Westwood, Lansing, to formulate the constitution and bylaws to be presented at the next meeting, in Grand Rapids, April 12. A. K. Hanchett, Big Rapids, was named secretary pending election of officers.

CRANE OPENS OWN OFFICE

Clyde C. Crane, who has been district manager in Detroit for the U. S. Gypsum Company, has opened an office at 400 Penobscot building and will handle building materials at wholesale. He will specialize in sewer pipe, tile, metal lath and a number of other lines.

THROWN OUT ON A TECHNICALITY

Because of the nature of the allegations embodied in the suit of the American House Wrecking Company against Henry and Edsel Ford and the Ford Motor Company to recover damages for abrogation of contract to dismantle the River Rouge naval training station, Judge Ormond F. Hunt, in Wayne Circuit Court, has dismissed the suit with the statement that the action should be tried in the court of law, not equity. The complainant company, according to the defendants, did not complete the contract within the specified time, whereupon the Ford company took over the work.

MANUFACTURERS MEET MAY 16

The annual convention of the National Association of Manufacturers will open in New York May 16, it was announced this week. Official representatives of more than 30 nations will attend the world social conference which is to be a feature of the convention. Charles E. Hughes, Secretary of State, will open this conference on the second day of the convention.

AERO SERVICE STARTS MAY 1

The Michigan Aero Service Company, recently organized, has leased 80 acres north of Lansing. This field will be equipped with a workshop and filling station. The company has received a consignment of 10 airplanes, which are being reconstructed to fit the needs of the corporation in its passenger and freight service. The company will start about May 1, doing a state-wide business.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

The New York Public Library



Fifteen Cents a Copy

Five Dollars a Year

APR 15 1921
UNIV. OF MICH.

Cut Motor Prices? "It Can't Be Done"

Squeezing Out the Salt Water

Boring Mill Operation

Stimulating the Bond Market

(Financial Section Starts on Page 22)

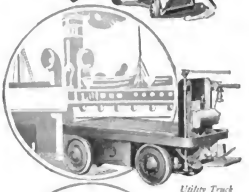
DETROIT, APRIL 16, 1921

Volume 27 Entered as Second Class Mail Matter at the Post-office at Detroit, Mich. *Number 16*

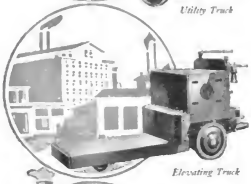
Digitized by Google



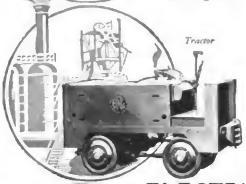
Good bye-- easy going days



Utility Truck



Elevating Truck



Tractor

COMPETITION has staged a notable come-back. No longer can easy, old-style methods of factory-operation permit your company to make profitable sales. Factory-management must share with sales-management the responsibility for sales-volume. Costs must be squeezed.

Take the single factory-management detail of material-handling.

Hand-truckage costs often prove *75% waste.* That in itself may give you the profit-margin you need against competition.

Let a Baker engineer dig out the facts in your plant and submit an economy-plan for moving your products and materials in and around your plant.

The saving quickly pays for the installation.

Wm F. V. Neumann & Sons
QUALITY MOTOR CARS
3068-3080 WOODWARD AVENUE
DETROIT

ELECTRIC TRACTORS AND TRUCKS

Baker

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Cut Prices? It Can't Be Done, Motor Car Manufacturers Declare

And Besides, They Say, It Wouldn't Do any Good; What Some of Them Have Written to This Paper

By MARC BRAUN

IF YOU have been putting off buying a motor car in the belief that prices are going to drop in the near future, you don't need to wait any longer. It does not seem likely, if makers and dealers are to be believed, that prices will be reduced soon. There may be a few isolated cases where manufacturers, for special reasons, may decide on a reduction before the summer is over, but taking the industry as a whole, such action would appear to be remote.

For some time the matter of prices has been much discussed in the trade and in the press, and, as is always the case, the views have varied. In one eastern financial newspaper, the claim was made that in order to bring a real improvement in the automobile business a reduction in prices was absolutely necessary. It was this article especially which prompted the Michigan Manufacturer and Financial Record to look into the matter rather closely. Some fifty representative manufacturers, distributors and dealers were asked for their opinions. The important facts brought out in this investigation may be summed up as follows:

1. The majority of manufacturers and distributors do not think there will be price reductions, although there may be a few makers who will do so.

Unwise at This Time

2. A price reduction at this time would not only be unwise but would not help the sale of automobiles.

3. It seems to be agreed that so long as prices of materials and labor are not considerably lowered, there can be no reduction in list prices, inasmuch as these two items are the most important to be taken into account.

It is evident that if sales had not increased during the last two months, prices of a majority of the motor cars, both passenger vehicles and trucks, would be lower than what they are. As a matter of fact, the writer was reliably informed that two well known concerns had new schedules all ready to be announced ten days after the closing of the Chicago show, last February, had the results of that show not been satisfactory. In the case of another manufacturer, it was said that a proposed price cut to go into effect last March was not put through because a majority of the dealers or distributors handling the car had reported such a satisfactory increase in sales and inquiries within a period of fifteen days that it was decided to delay the announcement. This concern, so the writer was informed, will now maintain its prices for the next six months at least.

One of the foremost parts makers in the country, when asked of his views because of his intimate knowledge of the situation, said: "A price reduction for 95 per cent of the motor car makers would be practically suicidal. They could not do so without seriously affecting their business, which, in many cases is now in none too good shape. If we were in January or February, the announcement of a reduction might be considered natural, because it could be said that it was intended as a stimulus for the season 'to begin soon.' Now, however, when the season is well under way, and after the success of the Detroit automobile show, and the success of most all the other shows, a cut could not have a wholesome effect. The public would be thinking at once that all automobile prices were so inflated that it would be best not to buy but to wait for further declines, and the result would be another and more serious slump. Another thing is that materials have not been reduced to a great extent, and while in some cases labor is lower, it is still very high—too high in many trades. This, however, does not necessarily mean that prices of all automobiles in the market are actually justified."

The purchasing agent of a Detroit company said: "We are increasing our production weekly; we are reducing our large stocks; our dealers are ordering more cars steadily; the general outlook is decidedly optimistic; yet all these favorable trends cannot be made the excuse for reducing prices, at least not during the present selling season. We, and every manufacturer, must figure that for months our sales were practically nil, that we lost money. A conservative business man will naturally conduct his enterprise along lines of safety and begin to replenish his stocks and start building up his reserves. If he were to cut his prices now, while we are still 'under the weather,' the chances are that there would be more people doubting his purpose and it would not increase his sales. Now is the time for all automobile manufacturers to display salesmanship; for the dealers to work hard and convince people that they are getting their money's worth and that general conditions do not warrant a price reduction."

The improved labor situation in Detroit may be taken as an argument that a price reduction is not needed to increase sales. Inasmuch as the greater percentage of the workers employed in the Detroit industries are in motor vehicle or parts manufacturing establishments, it is naturally upon the sales of vehicles that their employment depends. The report of the Employers Association for the week ended April 5 shows that 95,221 men were on the payrolls of the 79 concerns members of the Association. This is an increase of 28,000 within one month. And what is still better, of the 95,221 men employed, 85,677 are working full time. Only 30 days ago, out of 67,354 men working in these 79 plants, only 25,676 were on full time. There would be no such improvement in the employment situation if there were not a decided improvement in automobile sales. One depends upon the other.

Would Bring Demoralization

The distributor for one make of automobiles whose price has been the same for the last twelve months, and whose car has been selling steadily, said that if price cutting were inaugurated now by two or three of the larger makers it would surely lead to a demoralization of the industry. He believed that if a number of small concerns with rather limited output took such action it would pass almost unnoticed, but in the case of any of the well known larger producers, it would have a bad effect on the market. He said:

"The public would not understand it in the light in which it would be explained by the manufacturers. Last year, when price cutting was started, it did not result in increasing sales for most of those who did reduce their prices. On the contrary, it did more still further to reduce selling. It got prospective buyers skeptical. They got the impression that further cuts were to be made. It is obvious that if a manufacturer intends to reduce prices, he should do it before the selling season opens—for instance at the time he announces his models for the next year. But to do so in the midst of the selling season, just when sales are getting better, would be a decidedly wrong step.

"Of course, there are special cases to be considered. There may be manufacturers who still have so many unsold cars in stock that a price reduction is the only thing that possibly could help. But there is hardly a manufacturer who at this time could show that his labor bill, the cost of his materials and other expenses connected with manufacturing have been reduced to such an extent that a price reduction is warranted. Furthermore, with the possible exception of two or three makers, none has sold enough since the big slump of last year to allow him a fair profit. In fact, the increased sales now will only begin to help make up for some of the losses a great many makers have suffered during the last half year."

Digitized by Google

Some of the letters received from the manufacturers and distributors are given below.

W. C. Sills, general manager of sales, Chevrolet Motor Company, Flint—"In my opinion the reduction in price of a small amount would have been no inducement to get prospects to buy. Furthermore, it seems to me that price concessions of any large amount are not warranted by facts. First of all, the smaller production we have greater overhead per car. Secondly, up to this time there has been no great decrease in material costs. Personally, I do not anticipate any very heavy price reduction, if any, this coming season—certainly not until the price of steel and other basic materials is reduced considerably."

Percy Owen, president Liberty Motor Car Company, Detroit—"We believe there is no present reason justifying a reduction in the selling price of motor cars. You must remember that present prices are as low, and in many cases lower than they were last year when the volume of production was practically twice what it is today and afforded a better opportunity for the distribution of overhead. With decreased production, overhead costs per car have increased and we believe that many companies which reduced their prices may have to increase them. As a matter of fact, some increases have taken place since their reduction in price. The manufacturers found from last fall's experience that reduction in prices did not increase sales. As a matter of fact, it caused uncertainty and indecision on the part of prospects and greatly disturbed sales.

"While there may be some who may reduce prices, we feel that there will be a stiffening of prices and can see nothing at all in the trend of costs to justify decreases."

A. G. Selberding, general manager, Haynes Automobile Company, Kokomo, Ind.—"We do not believe there will be much change in the price of automobiles at this time. While there has been a slight reduction in the price of material, also some reduction in labor costs, yet a number of manufacturers are now getting started and in order to get one's cost of doing most any price for them, and how in the face of that fact prices can be lowered we do not know. Labor is the controlling factor, and if reductions cannot be made in labor, if materials are bound to go higher, and the first thing we know we will find prices soaring once more. The American people want lower prices but if we cannot reduce labor costs lower prices will be impossible.

"We may be wild on this proposition but this is as it looks to us, taking into consideration the troubles we have experienced with our labor after having cut it, and the further trouble that various automobile companies are creating by sending employment agents to Kokomo for the purpose of hiring men and offering them excessive rates."

H. G. Stiles, general sales manager, Kalamazoo Motors Corporation, Motor Truck Division, Kalamazoo—"In view of the wide variance of opinions as regards future price quotations, we would not care to go on record at this time with anything in the way of definite predictions, although of course we have our own ideas as to what we may expect. The betterment of business conditions which seems to be asserting itself at this time will unquestionably call for the use of a great many commercial vehicles, this demand increasing with the increase in general business. From what we have been able to learn, there is not an unusually large stock of finished trucks in the hands of the manufacturers and their distributors, and it will not take very long to wipe out this surplus and put back to work the idle trucks which are not being used at this time.

"When this occurs the factory will be called upon not only to take care of the normal demand but also to supply those buyers who held off making their purchases last year owing to general conditions, so that it sums itself up to the fact that the manufacturer will have to get into production very rapidly in order to fulfill the demand which he is going to find rather a difficult problem, as most of the organizations are pretty well broken up and new ones can not be put into operation at a moment's notice.

"This condition will go all the way along the line from the truck manufacturer to the unit builder on parts manufacturer and from him to the source of supply; so that even though one organization may find it easy to get started, another one back of it by virtue of the excessive demand may not find such an easy matter to get into full swing.

"Should all of this come about, it will necessarily mean that the manufacturer will work off his stock of high priced materials to a large extent, and gradually, through increased production all along the line, will be in a position to purchase materials at a somewhat lower figure, although it is our impression that reductions will be general, beginning from a material and labor standpoint, which should mean that no drastic steps will be taken by any reliable manufacturer, feeling, as they do, that the demand will equal their ability to supply.

"It is our impression that the price-cutting which has been going on has been brought about rather through an effort to liquidate speedily than for any natural reason or philanthropic ideas."

H. A. Biggs, vice-president, Studebaker Corporation, South Bend, Ind., and Detroit—"As you are aware, we made our reduction in prices last fall at a time that it was deemed advisable to do so in order to help the movement toward lower prices. We still consider that the manufacturers as did not reduce their prices at that time—and I am referring to the longer manufacturers that were in a position to purchase materials for some months to come—are now, or very shortly will be, in a position to reduce their prices. Beyond that I do not look for any reductions for some time to come."

J. M. Holt, secretary to R. C. Rueschaw, sales manager, Reo Motor Car Company, Lansing—"In the absence of both Mr. Rueschaw, sales manager, and P. E. Emerson, assistant sales manager, who are out of the city, we feel confident that the opinion that there is no reduction in sight at this time, and that price reductions would not increase business, is the opinion of this company.

F. D. Engle, sales manager, Transport Truck Company, Mount Pleasant—"We can see no reduction in the price situation on motor trucks for months. The reductions received from our suppliers have been very small and have been more than offset by decreased production. While it is true that orders for trucks have increased materially in the last thirty days, it is going to be impossible to get into normal production for a considerable time.

"It has come to our attention that nearly all, if not all truck manufacturers who reduced their prices last fall will be necessary to raise them again. This shows conclusively that they were unable to replace materials at the prices that warranted reductions. It is our opinion that we will not get into normal production until early in 1922. We do believe the crisis is past and business will gradually improve from now on."

A. C. Downing, sales manager, Detroit Electric Car Company, Detroit—"We do not look for any marked changes in prices of automobiles during the next eight or nine months. There may be a few concerns who will make some change after their guarantee runs out, but if their car was honestly priced last fall and they were warranted in making the guarantee, we do not know of any great changes that have taken place to warrant further reductions next July.

"We know that some of the concerns who materially reduced their prices last fall have made an addition to their prices since that time, thus showing a tendency toward price stability.

At the present time our car is just 23 1-3 per cent in advance of the prices during 1913 and 1914 on exactly the same car. We know that the costs of labor and material, rent and other fixed expenses are more than 33 1-3 per cent over the prices of the same materials in 1913 and 1914. Therefore we figure our cars honestly priced and cannot make any changes in the list prices."

A. S. More, president and general manager, Denby Motor Truck Company, Detroit—"It is our opinion that the next few weeks will see a reduction in price of steel announced by the United States Steel Corporation and that this announced reduction, together with the lower wages now being paid labor all along the line, will bring about lower selling prices on automobiles and trucks.

"The financial economists, such as Poor, Moody, Babson and Brookmire, all agree that steel is one of the last commodities to deflate, but that it is bound to be lower without much greater delay. The trade all along the line is expecting a reduction in steel, and until it does come, buying of iron and steel products is going to be greatly retarded.

"From our point of view, we don't know of a single thing which would revive truck business more than an announcement of a substantial reduction in steel, which would be passed along down the line, eventually reaching the ultimate buyer, who would thereupon show more interest in making the purchases he has long deferred."

W. D. Block, president, W. D. Block Motor Company, Detroit, distributor for the Laxington car—"Will say that I see no reason why there is no question in my mind but what the prices of automobiles must be adjusted and they must be adjusted at once. In my early state, as public sentiment is inclined that way, and it would be impossible for the industry to buck that sentiment for an indefinite period.

"I have given this question in the writer's mind but what a price decline or a price adjustment would tend more to stabilize the automobile industry than any other one thing.

"I have just returned from several of the National automobile shows and also attended a good many of the dealers' shows, and invariably the question of price has entered into the proposition, with the dealer also asking when the price was coming down and saying that his purchase would be delayed until some adjustment was made. In fact, some were as frank as to say that if they purchased a car at this time they would simply be encouraging the manufacturer to withhold any adjustment in price.

"The writer has been at several of the National automobile shows and also attended a good many of the dealers' shows, and invariably the question of price has entered into the proposition, with the dealer also asking when the price was coming down and saying that his purchase would be delayed until some adjustment was made. In fact, some were as frank as to say that if they purchased a car at this time they would simply be encouraging the manufacturer to withhold any adjustment in price.

"You undoubtedly are aware that most dealers all over the country are making long trades on used cars and some are even going so far as to cut their profit to secure customers. I know of several organizations that have instructed their salesmen not to pass up any reasonable deal. Practices of this kind, in my opinion, are going to demoralize the retail market. It is putting our business methods back to where we were some seven or eight years ago when everybody was cutting the other fellow's throat, so to speak, on the price proposition.

"There is no question in my mind but what some factories are giving a confidential discount or bonus to most of their large distributors, and they, in turn, are using this bonus or extra discount in trade allowances. To my way of thinking it would be much better if the factories would establish a new list price and cars be sold at that price, allowances on used cars being made at the market value. This would give the distributor and manufacturer the benefit of the business and the customer would not be led to believe that he was buying a car at a fixed list price and kid himself into believing he was a good buyer because the dealer made him a fabulous price on his used car.

"I am a firm believer in selling merchandise at the price which factories establish, believing that they have so fixed the price that is fair and enables them to make their share of the profit and that the purchaser is getting value received. We also discourage the prac-

(*Continued on Page 31*)

Digitized by Google

Squeezing Out the Salt Water

Business Interests Along the Great Lakes, Meeting in Detroit, Draft Amendments to the Seamen's Law

By F. W. HERSEY

PORT and hinterland communities on the Great Lakes have had the advantages of lake transportation for pleasure and commerce for so many years that the possibility of its elimination by legislation, rate warfare or organized labor's impositions never has occurred to them. Consequently when the LaFollette Seaman's Act, framed and enacted into law to promote safety at sea and improve the working conditions of crews, was before the national legislators prior to its passage in 1915 the fight against its provisions by the vessel owners, if noticed at all, was not considered of any concern to the lake ports and communities. If there was any thought regarding it at all, it followed the theory that the ship owners would have to accept less revenue, or perhaps might increase revenues in some manner.

Of course, the economic theory behind water transportation is that it is cheaper—must be cheaper to compete with rail facilities—and the theory has been tantamount to practice. The lake transportation facilities provided are such a boon to lake ports and territories adjacent that the rapid development of Michigan as a manufacturing state as well as agricultural has been stimulated and encouraged. The transportation on the lakes has been sufficient to show the value, in fact the necessity, of an all-water route to the ocean.

A Crisis Arrives

Following the passage of the LaFollette act the whole country entered a new era of production with swollen profits and unlimited demand. The requirements of war removed from the lakes many of the ships, leaving those not commandeered in possession of all the commerce with demand exceeding supply. Rates in effect and cargo volume to a certain extent overcame for the time being much of the hardships by the seamen's law.

We have come now to a new era demanding an accounting of extravagances and the introduction of economies. With rail rates the highest in history, water travel and commerce becomes even more important as one salvation for indnstry, to say nothing of its value as a recreational medium for that portion of the population not in a position to select its recreation regardless of costs. Besides being less expensive, lake travel is less hazardous, can be regulated to suit the time restrictions set by him who travels, and in every way is more convenient.

Had the lake communities realized all this consciously, and had they been awakened to the menace to lake shipping contained in the provisions of the seamen's act when it was proposed, the conference held in the Detroit Board of Commerce, Friday and Saturday of last week, would have been held in 1915, and it is likely that the bill would have been greatly altered. Instead of the "vested interests" stigma cast upon the efforts of the ship owners, the legislators would have heard from the Middle West—and they would have listened.

Possibly it may seem like locking up the barn after the horse is stolen to begin a campaign against the LaFollette act at this late hour, but very likely in effect the horse will be captured and returned so far as the lakes are concerned. If such is not the case it will not be the fault of the Detroit Board of Commerce and the workers in its Inland Waterways Committee.

The port and hinterland communities, having come to their senses as the result of the successive withdrawals of vessels from lake routes—vessels which have traversed these waters for years, are now uniting with the vessel owners in spirit, and are prepared to go to Washington on their own accord and responsibility and ask that the Great Lakes be eliminated from the drastic provisions of what was intended to be, and is by all the rules of legislative technique, a salt water measure and nothing else. The vessel owners are in the gallery in this case. They did their best and failed. Cheaper transportation and ship building as an important likeside industry are at stake.

There is no quarrel with ship owners, legislators or the unions. The problem is economic. The question is: Will Congress permit an act upon the statute books to deprive the Middle West lake region of its water-borne commerce because a few "landlubbers" of a former governmental regime did not know the difference between salt water and fresh water sailing?

Where the Trouble Lies

The cause of the present agitation is contained in three sections of the LaFollette act, Nos. 2, 13 and 14, the provisions of which may or may not be justifiable when applied to deep sea sailing. There is no argument about that. Their application to lake shipping was regarded by the conference as not only ruinous to the shipping but ridiculous in some cases.

For instance, Section 2 as it stands requires that every ship of more than 100 tons gross, operating on all waters except bays, sounds and rivers, shall maintain two deck and three fireroom watches; that no seamen shipped for deck duty shall be sent into the fireroom, stokehold or engine room for duty, and no engine or fireroom crewmen shall be assigned to duty on deck. The main reason why this law was approved by the legislators was to prevent the assignment of men who had been working in the heat of the fireroom and stokehold to deck duty with the danger of their becoming chilled by the change from extreme heat to cold, and to force ship owners to employ enough men properly to man the vessels without subjecting them to unreasonable hours and conditions of labor.

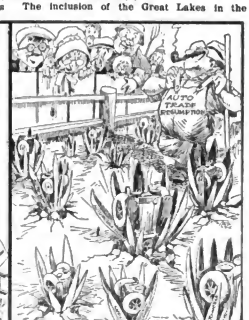
The inclusion of the Great Lakes in the



—Darling in the Chicago Evening Post
RELICS OF AN EXTINCT PAST



—Orr in the Chicago Tribune.
WITHOUT DESTROYING THE TREE



—Darling in the New York Tribune
FIRST OUT OF THE GROUND

Digitized by Google

waters subject to these requirements gave the unions a chance to provide jobs for more than ordinarily would be required for the short runs and small boats on the lakes. The section specified that the authority of the master was not to be limited, and in case of emergency he could muster his whole crew at any station where their services were most needed for the management of the ship.

How this provision worked in one case on the Great Lakes is illustrated by an experience described by H. H. Vaughan, of the Charcoal Iron Company of America, in a letter to the conference. This company operates a 1,500-ton boat on the lakes. When loaded this craft has a gross tonnage of from 2,400 to 2,500 tons and carries a crew of eighteen men. Its fireroom is equipped with gravity stokers which dump the coal upon the fireroom floor, whence it is shovelled into the fire boxes by the firemen. This equipment obviates the necessity of coal passers. Section 2 of the law, however, makes it obligatory on the company to employ three coal passers. Firemen cannot pass coal, neither can deck hands, according to union rules.

As there is not enough room in the fireroom for the three coal passers and there is no work for them to do, the company has been carrying them as "supercargo," paying the required wages and feeding them, season after season. It provides a soft snap for three able-bodied men, who naturally appreciate their union cards.

On one occasion when the master shipped more coal than could be stowed in the bunkers, part of it was piled on deck. As the bunker charge decreased, the stokers were asked to shovel the coal from deck to bunker. They refused on the grounds that they were firemen hands and could not do deck work. The fireroom hands refused to touch the coal because they were not deck hands, and the deck hands refused because they were not stokers, or firemen. The captain and mate shovelled the coal into the bunkers themselves.

H. W. Thorpe, of the Goodrich Transit Company, delegate to the conference, told of an occasion when one of his company's ships went ashore a few miles from Chicago. It was necessary to use the pumps to keep the hold dry. When the ship docked the fireroom crew demanded $1.25 an hour extra for furnishing power to the pumps.

Why Kirby Was Taken Off

Ollie Dustin, who was forced to take his ship, the Frank E. Kirby, off the Put-in-Bay and Island runs in 1920, said he did so because in 1919 the boat showed a loss of $9,000, which he attributed entirely to the seamen's law. In 1911 and 1913, he said, the boat grossed $19,000 less than in 1919 and the profit was $9,000, while in 1919 with $19,000 more in gross revenue, the loss was $9,000. Prior to the passage of the law the boat operated with four men in the fireroom, but after the passage of the law, ten were required. In the meantime wages and fuel costs had been increasing steadily. As they could not be met even nearly enough for his concern to break even, he was obliged to lay the boat up and she was for sale to anyone who believed she could be operated at a profit.

L. E. Williams, marine manager of the United Fuel & Supply Company, Detroit, said that his company's sand and gravel boats were required to carry three firemen to shovel for a seven-hour run, of which only three hours were spent between ports.

John Wise, Sandusky, another delegate, said that he operated a steamer to Put-in-Bay, a run of 2½ hours, with four stops, but was obliged to carry three firemen to shovel the six tons of coal necessary on the run.

These are only a few of the experiences recounted by delegates at the conference, but they suffice to show how the present law affects Great Lakes shipping. It should be mentioned here that the bulk freighters are not so seriously affected by the provisions of the law because of the character of their cargoes and the length of their runs.

Section 13 of the LaFollette law applies to the employment of seamen. It provides that all boats of more than 100 gross tons shall have a crew in which 65 per cent consists of able seamen. It further provides that an able seaman must have had three years' service at sea or on the Great Lakes, besides being at the least nineteen years old and physically qualified, but on the Great Lakes the requirements for an able seaman's rating is eighteen months' service, or three seasons, according to lake schedules. Where the applicant is a graduate from a schoolship, only twelve months' service is required, other conditions and qualifications being equal.

This section is a hardship to lake carriers in two ways, one of which is the fact that able seamen are not always easy to get, and inasmuch as the law specifies that no ship may leave port without the required quota of able seamen, the desertion, discharge or absence of one or more members of the crew with such ratings can and often does delay sailing. It also affects the ship owners' choice of their seamen and the unions. The second effect of this provision will be shown later.

Were the sailing conditions on the Great Lakes in any way similar to those at sea, the provisions of the law regarding able seamen would not be so harmful. So many small boats make short runs in shallow water, carrying excursion parties, or doing a passenger and package carrying business, that the necessity of having a majority crew of able seamen required, no other purpose than to give sea labor organizations power to use the manner in which the owner of the packet shall conduct his business and provide jobs.

It is under the provisions of Section 14, however, that the able seamen quota requirements works its greatest hardship on lake carriers. Section 14 prescribes the character and amount of life saving equipment to be carried. It is doubtful if the lawmakers had as much about the Great Lakes when they let this section go through. It was intended primarily for the protection of ocean liners where accidents of any magnitude not only imperil lives, but where the fight to save life may require living in open boats or on rafts for days at a time.

The section requires that boats of 100 gross tons or more shall carry life boats for at least 75 per cent of the passengers and crew, and that not more than 25 of these ships operate twenty or more nautical miles offshore. Ships sailing less than twenty nautical miles from shore must, between May 15 and September 15, have provision for 70 per cent of crew and passengers, and fifty per cent of these facilities must be life boats and the remainder life rafts.

What the owners of small excursion boats and freight-carrying craft object to in this section is the requirement that between September 15 and May 15 these boats operating three or more miles from shore shall carry seventy-five per cent life boats and twenty-five per cent rafts, whether or not these boats sail waters deep enough to cover all the decks. The effect of this provision is to shorten the summer season by from a month to six weeks on the lakes. It was pointed out in the conference that most of these boats sail in shallow water where if they sank at least one deck would be entirely out of water.

This section also requires that one or more able seamen must be assigned to every life boat and raft, according to the number of persons accommodated in the boat or on the raft. Consequently lake boats must carry enough seamen to man all the life boats and rafts whether there is any other work to be performed by them or not. As shown by deliegates, few of the lake boats have any need for the number of able seamen called for by this boat and raft provision, so that to comply with them in all respects many of the boats are carrying seamen for whom there can be no employment unless an emergency drives passengers and crew off the boat. Licensed officers are not permitted to act as able seamen in this capacity; in fact, under the section, they are not able seamen although the safety of boat, cargo and passengers is entrusted to their care.

A. A. Schantz, of the D. & C. Navigation Company, who pulled his Mackinac Island boats off because they were losing money, declared that if his boats carried the required number of life boats and rafts there would be no room for either passengers or cargo; in fact his boats could not carry this equipment as freight if every available inch of room was taken up. If they were towed, he said, when his Put-in-Bay boat reached the destination, the last life boat would be leaving Detroit. In lake waters, he said, the life rafts were better than boats because they could be kicked off and handled easily by the passengers. With wireless equipment and boats passing every four minutes in the lake season, if a boat foundered or burned, passengers would not be floating about longer than fifteen minutes.

The Objections Summed Up

Summed up, the objections to the three sections as voiced in the conference were based upon these disadvantages: The unnecessary expense of three watches in the fireroom where the working hours were much less than sixteen hours and less than nine hours in most cases; the difficulty of being able to ship able seamen whenever needed, and the absence of any need for able seamen to the extent required in lake navigation; the shortening of the navigation season and the added expense resulting from the drastic life boat and raft requirements, all of which resulted in cutting revenue and increasing expense.

To draft proposed amendments which would modify these sections for lake navigation only was the purpose for which the conference was called. It was successful in every way. It was called at a most opportune time, the details were well prepared and the sessions ably conducted. Delegates, or boards of them, were more than 100, came from almost every lake port and commercial association of the lake territory from Duluth to Buffalo. It was a meeting for producers, manufacturers, shippers and ship builders. Vessel owners and transportation companies were represented merely to provide information concerning the effects of the law.

The conference closed Saturday with the stage set for the presentation of resolutions urging amendments to the LaFollette act, to the legislatures of all the lake states; presentation of the same resolutions to congressmen and senators from the lake districts, and the submission to Congress of a set of amendments prepared by the Detroit Board of Commerce, revised and approved by the conference committee on amendments, and approved by the conference. Also the conference left with the Board of Commerce authority to send one or more representatives to Washington with the amendments, and later arrange for a delegation to go to the capital to attend the hearings on them.

The efforts of one delegate from Buffalo to have embodied in the draft a provision decreasing the time of service necessary for rating as able seaman to twelve months for the sea and six months for the lakes created the only difference of opinion, and as the delegate was practically alone in his contention the amendments as prepared were approved. It was the opinion of the conference that the law as a whole contained many just and wise provisions, and that all the lake territory could or would ask was that these sections which were driving shipping from the lakes be modified.

Section 2 was amended to read that only two watches be required on Great Lakes vessels where the runs were less than sixteen hours or

(*Continued on Page 32*)

Digitized by Google

Boring Mill Operation

Something About These Descendents of the Lathe And Work They Perform; Considerations in Buying



The photograph at the left shows the operation of boring the rear head for an automatic twist drill machine. These holes are 5½ inch diameter by 11 inches deep; 2½ inches diameter by 6 inches deep, and 2 inches diameter by 6 inches deep, the nine holes being finished complete in ten hours. The limits required are extremely close. The photograph was taken in the plant of Schweppe & Wilke, Detroit. At the right a water jacketed, rigid, journal box, babbit lined, is being bored. The finished bore is 2 15/16 inches, with a 3 3/16 inch counterbore. The limit of accuracy is .0005 inch. Fifteen pieces are finished daily. The photograph was made in the plant of the American Blower Company, Detroit. Photographs by courtesy of the Charles A. Strelinger Company. The machine in each case is a Universal.

By JOHN J. RALPH

THE ORIGIN of boring machines dates back to about the first of the last century. James Watt and his steam engine tronhlem were the direct cause of boring machine development. His first cylinder was only fifteen inches in in diameter but it was more than three-eighths of an inch out of round! He even tried stuffing it with an old hat to make it tight. There were others interested in steam engines and it was not long before a boring machine was brought out.

The boring machines are direct descendents of the lathe—in fact the lathe today is very frequently used for a boring machine, more so on the other side than here.

Boring on a Lathe

Boring on a lathe is done in two ways, the one chosen depending on the size of the lathe, the size of the piece and kind of boring to be done. The first, and more familiar way in this country, is to bolt the piece to the face plate, if it is large, or hold it in the chuck if it is small. The boring bar is then put in the tool post and the hole is bored. Here the work turns and the tool is stationary as in outside turning. The second way is to take off the compound rest slide and bolt the piece to be machined to the saddle. Practically all of the larger lathes and some of the smaller ones have Tee slots in the saddle for this purpose.

A bar is placed between centers and driven by a dog from the head-stock face plate. For small work a tool is placed in the bar and provision is made for radial adjustment so that the position of the point can be changed at will to regulate the diameter of the hole to be bored. Where the diameter of the hole to be machined is large, the tool is mounted on an arm with a slide which permits of radial adjustment. Lengthwise feeding is done with the saddle.

With this apparatus the length of hole that can be bored in the lathe is somewhat less than half the distance between the centers, and if the lathe is not long enough another arrangement is necessary. The piece is set up the same way but the saddle is locked in place and the tool is fed along the bar.

Present day machines are merely developments of these ways of boring in the lathe. The chucking or face plate method has developed into the boring mill and the vertical turret lathe. The bar method has developed into several distinct types of horizontal machines.

Practically all boring machines belong to the "heavy" class, for articles light enough to be moved easily by hand are usually machined in ordinary lathes or in horizontal turret lathes of either the automatic or semi-automatic types.

With the increase of machining and the resulting specialization of tools, these various machines have gradually been made more special, and at the same time the range of work that could be done on them has been increased.

The boring mill and turret lathe have added turning, both straight and taper, facing, and even screw cutting. They have been arranged so that a whole series of tools can cut at the same time. The horizontal machines have developed by adding to themselves the functions of the drill press and the milling machine.

The Face Plate or Chucking Machines

The face plate or chucking machines are used for machining pieces which are broad and short rather than long and slender, both for boring, turning and facing.

At first when shops were small and every machine in it had to be used for everything that could possibly be done on it, the only chucking or face plate machine was the lathe. Gaps were made in the bed and the head stock was mounted on raising blocks to admit pieces of large diameters.

The next step was a lathe with the tail stock end cut off. The head stock was mounted on one foundation. In front of this a pit was dug in which an enormous face plate was hung. The cross slide was placed on a foundation in front of that. There was no tail stock. There are still some lathes of this type to be found in the old shops. They were satisfactory while cuts were light, when time was not so costly as it is now, and present day close machining limits were not required.

There was difficulty in balancing the castings. If they were not balance the rotating speed varied, resulting in uneven and inaccurate cutting and broken tools. The weight of the enormous castings hanging on the face plate and projecting several feet made it almost impossible to maintain accuracy and was very hard on hearings and drive.

The Boring Mill

This forced the development of the vertical boring mill in which the spindle was vertical and the face plate was no longer merely a part to bolt the work to, but, in the larger size, aided the support of the piece, being partially supported on annular bearings. The drive was also transferred to the face plate, which now became known as the table. From the planer was borrowed the method of support of the tools, double housings supported a cross rail from which tools heads depended, somewhat like the planer tool bead but simplified because no provision need be made for the non-cutting return stroke.

In the large modern machines the housing is mounted on rails which extend the range of the machine materially. Out-board tool posts are also used, so increasing the number of tools which can be used at one time and the range of the work that can be done.

As cutting speeds became higher and the demand for accurate work more exacting, the inaccuracies due to unbalanced work on horizontal spindle machines became more and more noticeable. This resulted in the putting on the market of smaller boring mills and finally the development of the vertical turret lathe.

The features of the side bead boring mill are the same as those of the vertical boring mill, the difference being in the use of a column instead of a planer housing to support the cross rail. To it there has been added a turret on the cross slide and a vertical slide

Digitized by Google

which permits of another tool head. With this arrangement it is possible to machine both inside and outside at the same time and to make all of the cuts on many complicated pieces with but one setting of the tools.

This type of machine finds a wide use in machining flywheels, motor truck wheels of the solid type, railway wheels and a large number of other similarly shaped parts formerly machined in lathes. They are made today in a size range from 24 inches to 64 inches.

The first of the horizontal boring machines to be perfected was the cylinder boring machine. This consists of two supports at each end of a bar. Between them is an iron head and foundation plate. There is no provision for changing the height of the bar, nor for raising the floor plate. One of these supports carries the feed and the power drive. The bar carries an arm which in turn holds the cutting tool. Several sizes of bars can be used, bushings being inserted in the bearings to accommodate the small bars.

Large steam engine, pump, gas engine and refrigerating machine cylinders are usually machined on this type of tool. Those made especially for locomotive work often have two spindles, one to machine the cylinder and one for the pistons.

In boring long cylinders it has sometimes been necessary to make provision to avoid effect of the bending of the bar, supported on both ends although it is. As the cutting tool starts near one head and finishes up near the other, the bore will follow the curve of the bar. While this is usually slight, with a light bar it may be noticeable.

In order to face up the ends of the cylinders square with the bore, radial arms are placed on the bar with radial feeds connected to each head. These are fed by means of a screw actuated by a star wheel.

The Horizontal Boring Machine

The horizontal boring machine is the machine that looks most like a lathe of all of them. Not long after it was first got out, the manufacturers realized that these machines was set up for any particular piece the tool might just as well do a lot of other things, so provision was made to do it. Today it is known as the horizontal boring, drilling and milling machine.

It has a heavy solid foundation, on one end of which is the column head which carries the boring bar. Unlike the head of a lathe, this one can be moved up and down. At the other end of the bed there is another column, known as the back rest. This carries a bearing to support the outer end of the boring bar.

The spindle has a long support in the driving head and is often used, when boring, without further support. For face milling the cutter is fastened directly to the end of the spindle. A cross rail can be bolted to the head and tall column and forms a support for a milling cutter which is used to machine flat surfaces on top of castings instead of planing them.

On the bed there is a table with power movement, both along the bed and across it, similar to that of a carriage and tool slide of a lathe. The carriage, however, is much larger and stiffer and has a top with Tees for bolting the parts to. Very often a circular turntable is mounted on this table. Where this is done all of the boring, drilling and reaming parallel to and all the milling perpendicular to the base surface can be done at one setting with a material increase of accuracy.

There is still another type where the head is fixed in position and the table is elevated, being supported on screws.

In both of these types there is power drive of the spindle, the work is held fixed in position and the bar is fed in and out. Ordinarily, only comparatively small work is bored on them—that is cylinders up to, say, three feet in diameter and three feet long. Larger work can be done but where there is much of it a cylinder boring machine is usually purchased.

The moveable column horizontal boring machine is very similar to the horizontal boring machines just described, in that the driving head is moved up and down the column and there is an outer column used for supporting the boring bar. Instead of having a moveable table on a bed the entire column is set on ways and is moved by power in front of the stationary work.

This movement is added to give rapidity and range in setting the machine for the different operations of drilling, tapping and milling as well as boring. The drive giving the column movement should be sufficiently strong so that very heavy milling can be done with a face mill. With large pieces this saves much awkward planer and setting work.

The entire line of horizontal boring, drilling and milling machines is very versatile. They are applicable for work from the size just too heavy to be handled easily by hand, up to the very largest. The problem of jigs does not enter as much as in most lines of work, because of the large average size. They are used, of course, but it is seldom that large work is built in large quantities and the economy of jigs decreases with the number of pieces of a kind made and also with the size of the jig.

As in all cases where there is little or no jigging, the auxiliary tool equipment to be used with machine tools is an item of importance. There should be a sufficient supply of bolts, jacks and other holding devices so that the mechanic will not be tempted to slight the fastening.

There is no appliance which will be of more assistance in increasing the output of the horizontal boring machine than the circular turntable. This is mounted on the base table and with its aid all parts of the casting can be worked on at one setting. If the table is kept in shape and the graduations are accurate, this fact will save many hours of setting up time even where the size is moderate..

The handling service for machines of this size is the speed limiting factor in many plants. For the larger machines the overhead electric crane is the only possible answer. With the smaller machines, more likely to be on production work, it is equally costly to have insufficient, slow or poorly placed transport service.

Too often the hand power chain hoist is the only means of moving pieces on and off the mill. There are few plants where electric or air hoist service, on substantial jib cranes would not be a big profit producer. A machine coats as much when idle as when busy. Adequate crane service turns idle time into production time.

Automobile Cylinder Boring Machine

The automobile cylinder boring machine is one of the latest developments of the machine tool line and is a descendent of the drill press rather than of the lathe. In these machines there are horizontal tables with vertical spindles over them. These revolve, carrying the cutting tools, and are fed into the cylinders. For shops with small production they are simple, the cylinders first being rough bored and later reamed on the same machine.

Where the production is large there is an elaborate machine having a circular horizontal table with several stages and a series of jigs. The cylinder is placed in its jig at Station 1. It is then carried under the first set of spindles at 2 where it is rough bored. Another cylinder is now put in at the loading stage. At the same time a cylinder which had already

(*Continued on page 30*)

Growing Two Bonds Where One Grew Before

THE BUSINESS of selling bonds is one that has always seemed to stand on an unusually high plane as a calling in life. It represents in many ways the acme of fiduciary relations and is one in which no temporary foundation of service will suffice. It is one also wherein liability to serve continues until the last maturity is called in and paid.

I have always been impressed with the promptitude with which several houses have taken up defaulted issues at various times when in point of legal liability it was unnecessary. But the sense of moral responsibility in these instances has been so deeply appreciated that the bond houses concerned have not waited for a possible prod of legal enforcement.

Again, the thought comes to mind that it is a business wherein the elements of physical effort and mental alertness are nicely combined, for neither knowledge without constant effort, nor effort without knowledge, count for much. A real bond salesman is both student and athlete. And looking further into the membership requirements there is a long period of apprenticeship much like that a young doctor goes through with; so that a prospective bond man must come and go and hold an almost unholy love for the game, so to speak, in order to outinst the discouragements and heavy-going he encounters during his apprenticeship.

As I look back there comes to mind an incident in my own experience which illustrates the point about discouragements and heavy-going. After my third year in college I took a position with a bond house as a salesman and my first trip out was to Omaha. I had been told that Omaha, at that time, was a great market for mortgages but that it was a virgin field for bonds. So I dug up a couple of prospects and walked in on the executor of a large estate who was known to be a heavy mortgage buyer. I had learned the contents of my circular so well that I could repeat it forward or backward, and after preliminaries were over started in to sell the executor a block of the bonds in question. He listened patiently and I talked on glibly, gaining a confident feeling as I went on that he was just about to take on the entire issue. But great was my dismay, when I paused for breath, to hear him say, "It is surely very kind of you to come way out here with this proposition but we get all our bonds from the American Surety Company."

That man didn't know an investment bond from a surety bond, and I believe that even today, in spite of Liberty bond drives and all the publicity which has been given the bond form of investment, there are many more like this executor who can be converted.

Another class of purchasers which it seems is being overlooked is the foreign element in Detroit. There was upwards of a million dollars in the hands of the Italians, Poles and Greeks over in the East Side of Detroit about a year ago. While this fund may have

(*Continued on Page 29*)

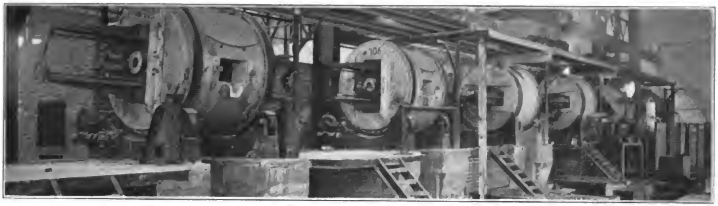
By PHIL S. HANNA

A talk to the Bond Men's Club of Detroit, at the University Club, Friday, April 8.

Digitized by Google

Changing Over to Electricity

The Detroit Copper and Brass Rolling Mills Expect To Effect Notable Economies and Improve Products





Above is shown a battery of six Detroit Electric Rocking Furnaces for brass smelting recently installed in the casting shop of the new manufacturing building of the Detroit Copper & Brass Rolling Mills. Each of these furnaces has a maximum capacity of 2,500 pounds to the heat, against 200 pounds for the crucible which they replaced. At the left, a "close up" of one furnace, showing mold table in position, with molds set for bar brass. At the right, section of the brass sheet and strip rolling equipment, showing the application of electric motors to the dual rolls.



IN KEEPING with the spirit of the hour—increased production at lower costs—the Detroit Copper & Brass Rolling Mills plant equipment is being electrified, the result of which will be, according to the expectations of Alex Henderson, works manager, a saving of at least 30 per cent in power costs and an increase in productive power of 50 per cent. In addition to these advantages, it is believed the substitution of electric power for steam will increase working space, make a cleaner plant and greatly improve working conditions. Likewise the reduction in the number of men necessary will effect a saving.

The installation of Westinghouse, Allis-Chalmers and General Electric motors has been going on for months and will continue until the equipment is complete. At present approximately 12,000 horsepower in electric motors has been installed in the tube, brass and copper wire, sheet and strip brass mills and the melting and casting shop. The sheet copper mill is being equipped at present.

The copper and brass rolling mills of the Detroit concern are the oldest in this territory. During the war these mills earned the reputation of being able to roll the largest brass sheets of any plant in the United States. Eighty per cent of the condensor plates used by the Emergency Fleet Corporation were rolled in these mills, some of them rolled from 4,600-pound brass billets into sheets an inch and a quarter thick and 12 feet in diameter.

Electric Furnaces Installed

Even the uninformed layman who was familiar with the general appearance of the mills as they were before and during the war would realize on a second visit that something revolutionary had taken place. Only one new mill has been built recently, but the transformation in the older buildings has been so marked as to give one the impression that they are all new. The sheet and strip brass rolling mill is a new unit in every respect. It is 625 feet long and 50 feet wide, built of concrete and steel, with three bays. Overhead there is a sawtooth roof and under foot a Creolite (cedar block) flooring. Its wide area of glass is set in Fenestra sash, providing all the light possible.

At one end of the building is the melting and casting shop, and it is in this shop that the greatest increasing in productive power and decrease in production costs will be accomplished. The old crucible pits in which the numerous 200-pound crucibles turned out their quota of metal for so many years have been covered, and in their place stands a battery of six Detroit Electric Rocking furnaces, occupying only 270 square feet of space, where the crucible equipment covered 10 times as much. Two more furnaces are to be added later which will further increase the tonnage.

Each of these furnaces has a capacity of 2,000 pounds of yellow brass, as rated, but can be loaded up to 3,000 pounds at a heating. With a 2,000-pound load the electric energy required is 225 kilowatt hours. The costs a ton have been estimated as follows: Electric energy, 225 kilowatt hours at one cent, $2.25; refractories, 50 cents; electrodes, 63 cents; labor, $1.42; incidentals, 50 cents; interest and depreciation, 43 cents; total, $5.48 per ton melting cost. The number of pounds of electrode per ton of metal melted is estimated at from 2½ to 3½.

Where the loss of metal by oxidization and other conditions in the crucible process has been from 2½ to 5 per cent, the company expects to show no greater loss by the use of the electric furnaces than from ½ to 1 per cent, which, added to the cost of coke, extra labor and ash disposal, will mean a saving of from $10 to $20 on a ton of metal. Forty minutes is the time allowed for one heat for a ton of metal, as against a time allowance of from two and one-half to four hours for a 400-pound crucible. The maximum life of a furnace lining is set at 1,200 heats. With the complete set of eight furnaces the possible daily production of the plant, in yellow brass, extrusion billets and flat bars, has been estimated as high as 360,000 pounds, although this is regarded as a little high. Running 10 hours a day under ordinary conditions, the furnaces would turn out 250,000 poonds, with an increase of 60,000 pounds at a 2,500-pound loading per furnace.

Where another important saving both in time and money will be made is in the charging of the furnaces. This work will be done by the five-ton Shaw electric crane installed in this shop. It will be possible to lift the scrap to the deck over the furnaces and dump it into the hoppers above them with comparatively little labor. Storage for coke and ashes, with the necessary handling labor for both, is elim-

(*Continued on Page 36*)

Digitized by Google

Allegheny

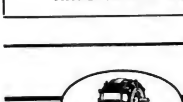
STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729



SIX feet of earth conceals the errors of many a physician. Several feet of masonry may hide the defective work of an electrical contractor.

No post-mortems need be held over the performances of this organization.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT



R. H. Collins Joins Durant

President and General Manager of Cadillac Resigns to Resume Connection With Old Chief

RICHARD H. COLLINS, president and general manager of the Cadillac Motor Car Company, Detroit, since 1917, has resigned to become associated with William C. Durant, former president of the General Motors Corporation, in his new enterprise, the Durant Motors, Inc. The precise position Mr. Collins will occupy is not announced, but it will be one of responsibility, as indicated by the hint that it is to be a "commanding position." Through all his years of labor in the automotive industry Mr. Collins has built up and continually strengthened his reputation as an executive of high caliber.

Since Durant, himself a dynamic builder and executive, first "discovered" Dick Collins in Kansas City fourteen years ago, when he was drumming up business for farm implements, Mr. Collins has been one of the "right bowers"



R. H. COLLINS

of the creator of the General Motors Corporation. It is only natural then that Mr. Durant, a successful picker of men, should seek the services and counsel of his protege in his new venture.

Mr. Collins is western born and bred, and started out in life with little schooling, but a knowledge of men and the endurance built from trying to wrest a living from the soil. He was born in Kirkland, Ill. When he was a youngster his parents moved to a ranch in Kansas. His father started with a good herd of cattle and fair prospects, but Texas fever killed off his cattle and left the family "stone broke." "Dick" had to go to work as a delivery boy for a licensed traders' store on the Osage Indian reservation at a trifle more than nothing a week, and long hours.

He developed selling ability from the start, which best manifested itself while a clerk in the store. He dealt chiefly with the Indians, who, in those days, were not so completely "civilized" by the flow of oil and mineral land money, the automobiles and finery of the pale-faces. They still carried their tribal weapons and their chief ambition was to get "lit" up with "fire-water" and scalp somebody. He learned a lot about human nature as a raw product, also about the possibilities of farm machinery and implements.

When he had collected eighteen years and enough of the wild west atmosphere, Mr. Collins left the reservation for Kansas City and went to work for the John Deere Implement & Vehicle Company, Moline, Ill. During the subsequent twenty years he was with this concern, Mr. Collins sold implements to dealers so successfully that he became western manager of the company, with headquarters in Kansas City. That was where Mr. Durant ran on to him.

At that time Durant was promoting the fortunes of the Durant-Dort Carriage Company, Flint, and he needed a selling director for the Kansas City branch. Mr. Collins not only could sell but he knew how to teach and make other men sell, which was the quality that Durant needed in his organization. He made Collins manager of the Kansas City branch, a position he held three and a half years.

By that time Mr. Durant had made the General Motors Company, the forerunner of the corporation of that name. He needed a sales manager for the Buick plant in Flint and chose Mr. Collins for the job. For the six years thereafter, during which the corporation control shifted to a committee of bankers, Mr. Collins kept his head and drove his sales organization forward with great energy and success. He was more than a sales manager, he was a valuable counsellor and aid to Durant himself. Consequently, when Mr. Durant regained control of the General Motors Corporation, he immediately made Collins his personal assistant, with headquarters in New York and Detroit.

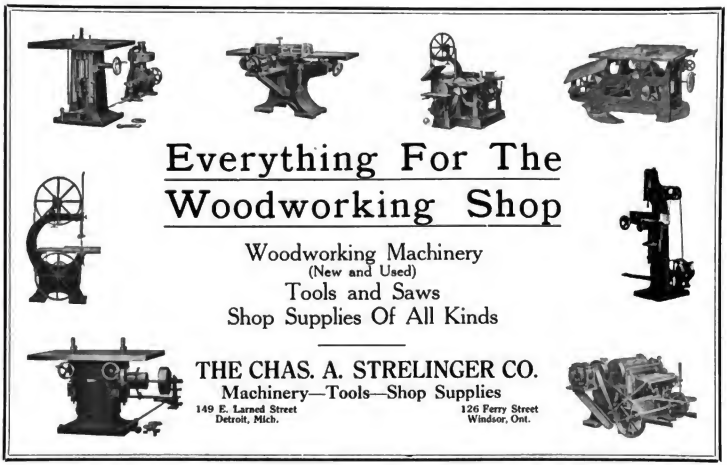
In that position Mr. Collins began to handle corporation affairs in a large way. He successfully put through a deal whereby the corporation took over the Samson Iron Works, Stockton, Cal., and put the corporation in the tractor field.

When Henry M. Leland retired as president of the Cadillac, and his son, Wilfred, as general manager, to devote themselves to the construction of aeroplane motors for the war program, Mr. Collins was called from New York to become president and general manager of the Cadillac company. During his incumbency the new Cadillac sales and service building and the new manufacturing unit of the company was planned and constructed. The reputation this company had for building a fine product and backing it with superior salesmanship and service has been conserved and enhanced by Mr. Collins. His task now is to help put a new car into the field.

MAXWELL NEARING REORGANIZATION

With the institution last Friday of a temporary receivership, the Maxwell Motor Company, Inc., took the last step in accomplishing its reorganization. When the formalities of the receivership have been complied with, the new company will have clear title to all the properties. W. Ledyard Mitchell, president of the company, was appointed receiver. Under the terms of the order of Judge Arthur J. Tuttle the property must be sold for not less than $10,915,000 and all claims against the company must be filed with the special master in chancery not later than April 25. When the plans have been fully consummated the reorganized company will receive $15,000,000 of new money which has been available for some little time but was held up because of these proceedings. The way then will also be open for working out the amalgamation of the Maxwell and Chalmers corporations.

Digitized by Google



The Week in The Legislature

Condon Bill, Requiring Abstracts of Title To Motor Cars, Passed; Other Public Business

[By Staff Correspondent]

LANSING, April 11.—The Condon Bill was passed by the House last week, and with the signature of the governor will become a law July 1, and will be in full force after October 1. This bill requires all automobile owners to obtain from the state department a certificate of ownership, which is an abstract of title to the car. The owner must file a description of the automobile, together with the affidavits of two responsible persons that the representations of ownership are true. When a transfer is made, indorsement of the transfer must be made on the owner's certificate, which is then filed with the state department and a new certificate issued. All second-hand dealers, except distributors who take in their own cars in trade for new, must have a license to deal in automobiles, the license to be $25 for a year, or $15 for six months. The purpose of the bill is to do away with deals in stolen cars.

The House defeated the Johnson bill, which would have made automobile drivers at fault, in cases where they run into and kill other persons, liable on charges of manslaughter or negligent homicide. It was declared that the bill as drawn would prove dangerous and unjust in many cases. The Johnson bill would impose the penalties on drivers whenever fatal accidents resulted from speeding or driving in a reckless, careless or negligent manner. The bill was then laid on the table to be taken up later.

The House likewise defeated the Byrum bill, which would prohibit local dealers and agents from receiving commissions on materials for road and building construction work of the state and municipalities in cases where such purchases did not pass through the hands of such dealers or agents. This bill was also laid on the table.

The Senate has passed the Evans bill, which increases the highway bond limit for each year from $5,000,000 to $10,000,000, which may be issued for trunk line highway construction, and an increase in the interest rate from 5 to 5 1-2 per cent. In connection with the move of the state administrative board to bring about more efficiency, the state highway department may be the first to be hit as it is believed the overhead expenses are far too large, and that many savings could be made.

An administration bill introduced by Senator Charles Tufts, Ludington, would transfer the duties and powers of the Michigan Securities Commission to the Michigan Public Utilities Commission and abolish the former body. The securities commission has as its duty, the right to authorize increases in capital stock or flotation of bond issues, and has authorized the sale of billions of dollars of bond and stock securities.

Senator Ernest J. Bryant, Lenawee, introduced a bill which would levy a tax of 5 per cent upon the gross income of motor driven vehicles using the state highways for a profit. A measure of similar nature lost in the House.

The House passed the Smith senate bill which requires railroads to establish joint rates in cases where two or more companies use the same lines.

After eliminating corporations and exempting tangible property from taxation on an ad valorem basis, the House passed the Mosier joint resolution proposing an amendment to the state constitution by which the legislature would be authorized to enact an income tax law affecting personal incomes only.

HARDIG JOINS CAMPBELL-EWALD

Joseph L. Hardig, advertising manager of the motor bearings division of the Hyatt Roller Bearing Company, has joined the staff of the Campbell-Ewald Company, Detroit, to assist in sales promotion work.

Previous to his appointment as advertising manager of the motor bearings division of the Hyatt, Mr. Hardig was assistant advertising manager of the motor equipment division of the General Motors Corporation. In this capacity he directed advertising of the Remy Electric Company, Klaxon Company, Harrison Radiator Company and Jaxon Steel Products Company. He also acted as advertising manager of the Remy Electric Company for several years.

Mr. Hardig will handle the advertising of the motor bearings division of the Hyatt Roller Bearing Company.

GMC ASSIGNS MOTT TO DETROIT

C. S. Mott, Flint, vice-president and director of the General Motors Corporation, has been made chief of the advisory staff to succeed Alfred P. Sloan, Jr., and will make his headquarters in the General Motors Building, Detroit. Mr. Sloan will be connected with the New York production end.

TRUCK COMPANY CUTS PRICE

The price of the trucks of the Four Wheel Drive Automobile Company, Clintonville, Wis. has been reduced $700.

Digitized by Google

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.



America's Headquarters for
Second Hand
Electrical
Machinery
Overhauled in our shops and
SENT OUT "as good as new"
with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

The Bellefontaine Bridge & Steel Co.
Engineers, Fabricators and Erectors
STEEL BUILDINGS AND BRIDGES
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6858.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Port St., E.
DETROIT

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

KING BUSINESS GAINS

H. Alperin, sales manager of the King Motor Car Company, Detroit, advises this paper that the company is receiving very encouraging and substantial orders from its distributors throughout the country, who report that business in their respective territories is increasing. The factory is progressing in good shape and the company expects to be in active production by the end of this week.

FRANKLIN OUTPUT SOLD

The H. H. Franklin Manufacturing Company, Syracuse, N. Y., maker of Franklin automobiles, reports that during March 1,005 cars were shipped, this being the total output of the factory. On April 1 orders for 843 cars for April delivery were on hand. The plant has been on a 100 per cent basis—40 cars a day—since February 10.

SEWELL CUSHION WHEEL ELECTION

The Sewell Cushion Wheel Company, Detroit, on April 1 paid the regular quarterly dividend of 2 per cent on preferred stock and 8 per cent on the common. At the annual meeting, April 5, the following directors were re-elected: Charles Rider, Arnold B. Cooper, Herbert J. Sewell, Ralph S. Moore, John H. Hammes and Walter T. Sewell. The directors re-elected officers as follows: H. J. Sewell, president; J. H. Hammes, vice-president; R. S. Moore, secretary, and W. T. Sewell, treasurer.

PACKARD'S PRODUCTION SCHEDULE

H. H. Hills, vice-president of the Packard Motor Car Company, Detroit, addressing the Detroit Real Estate Board last week, announced that the company was employing 2,700 men in its factory and that it was probable that the number would be doubled by the end of June. The present output, he said, was 800 cars a month.

SHIPMENTS INCREASE 63%

The report of the traffic committee at the meeting of the Detroit and Cleveland Automobile Chamber of Commerce, April 5, indicates greatly increased activity in motor car shipments and sales. The shipping record of factories producing two-thirds of the total volume indicates that complete figures for March will show an increase of 63 per cent over February shipments. A year ago the March shipping board was the heaviest of any single month on record and exceeded February by 20 per cent. Shipments for March this year will be 42 per cent of this record month a year ago. In February shipments increased 58 per cent over January. This increase in the previous year was 13 per cent. The figures for March will amount to 16,500 carloads, in addition to which 10,000 machines were driven overland from the factories. In February there were 9,920 carload shipments by rail and 7,491 machines driven overland.

FORGE CONCERNS ON 50% BASIS

The Atlas Drop Forge and Federal Drop Forge plants, Lansing, are operating on a 50 per cent basis. The Atlas company is working on a diversified line, such as automobile and truck business, gas engine, agricultural implements and railroad equipment. The gas engine business shows signs of improvements, while the two companies see the motor industry reviving. The Atlas company expects to reach capacity production within a few days.

OLDS BUSINESS LOOKING UP

That the Olds Motor Works, Lansing, is rapidly returning to normalcy is indicated by the steady increase in production and the number of orders received. The April manufacturing schedule is the highest since last summer, with production for the year practically organized. During March the plant turned out 2,500 Oldsmobile Fours. The production of Eights is getting well under way on both models. The General Motors spent $2,000,000 in new machinery, tools and apparatus to produce this model, and the installation of machinery, which was begun last fall, has been completed.

The boom of business at the Oldsmobile plant has helped a number of other Lansing industries, including the Motor Wheel Corporation, Melling Forge Corporation, Rikerd Lumber Company, Michigan Brass & Iron Company, Gerson-Carey Company, Michigan Screw Company, Ryan-Bohn foundry and the body factories.

Edward Ver Linden, general manager of the Olds, has returned from New York with an order for $1,750,000 worth of Oldsmobiles from the Gotham distributor. This order means 1,000 passenger cars to be delivered before May 1. Twenty-five per cent of the order is for enclosed cars.

REPUBLIC PROMOTES CRISP

Glenn S. Crisp has been elected assistant treasurer and assistant comptroller of the Republic Motor Truck Company and Republic Truck Sales Corporation, Alma, according to announcement of Col. Frank E. Smith, vice-president and general manager. Mr. Crisp has been identified with the Republic organization five years, during which time he has occupied important positions in the financial and accounting divisions.

FLINT AND KAZOO IMPROVEMENT

From Flint come reports of increasing activities in the automotive plants. Five hundred and fifty cars were shipped over one railroad alone, week before last, and it was expected that the total would reach 700 last week. The largest driveaway ever sent out of the Vehicle City for one dealer left the Buick plant last week—75 cars being started for Detroit. Of that number, 67 were reported to have been sold at the Detroit automobile show.

At the monthly meeting of the Kalamazoo Automobile Dealers' Association, last week, it was reported that the demand for new and used cars in that city was about 80 per cent of what it was at this time in 1920 and 1919. The warm weather has proved a stimulant.

CONDITIONS IN AKRON

Reports from Akron are to the effect that tire sales for April will be considerably larger, as against March—70 per cent in the case of Goodyear. Firestone is operating two eight-hour shifts and Goodrich and Miller are at 50 per cent of normal, with orders ahead of production in the case of the former. The Mohawk Tire & Rubber Company is reported to be operating at 35 per cent of normal, with orders double production and 30 per cent higher than in January or February. The Portage Rubber Company, which is operating on an 80 per cent basis, is said to be expecting to reach 100 per cent within the next 30 days.

STUDEBAKER'S OUTPUT

A. R. Erskine, president of the Studebaker Corporation, is quoted as having announced that the Corporation will be producing 85,000 cars monthly by June and that this basis can be maintained indefinitely.

Digitized by Google

AUTO BODY'S OUTLOOK

The Auto Body Company, Lansing, has added 150 men to its force within the last two weeks and has increased its production to take care of releases of orders authorized by various motor companies. Such releases have been made by the Scripps-Booth, Auburn, General Motors Truck and Olde Motor.

A conference has been held by officials of the Auto Body and the Briscoe Motor Corporation relative to the resumption of production for the latter. The Auto Body had started on releases for the Briscoe concern this spring, when notified to hold up this production temporarily. With the Briscoe reorganized and refinanced a still greater output is looked for.

The Auto Body Company holds the contract with the Olds Motor Works for the new Oldsmobile Eight.

BRISCOE'S PLANS

According to the Wall Street Journal, the reorganization of the Briscoe Motor Corporation, Jackson, involves putting the factory on a production basis of about 75 cars daily. It is understood, the Journal adds, that the company has the financial backing of the Tilden interests, Chicago, who have furnished all or part of the $2,000,000 additional capital announced last week as having been acquired. Stockholders are being offered 100,000 shares at $20 a share. The market for the outstanding 90,000 shares of no par value has been around $24. Clarence A. Earl, former vice-president of Willys-Overland, has been elected president. The deal whereby W. C. Durant sought to obtain the factory for Durant Motors, Inc., is said to have fallen through.

The Briscoe general executive staff is now as follows:

Clarence A. Earl, president and general manager; H. F. Wardwell, vice-president; J. R. Findlater, vice-president, Pacific coast manager; John Fletcher, treasurer; LeRoy C. Allen, assistant treasurer; L. E. Latta, secretary; Kelly R. Jacoby, general sales manager; R. N. Cowham, assistant general sales manager; D. Minard Shaw, advertising manager; R. M. Chapman, assistant to C. A. Earl; Victor Janisch, chief engineer; J. C. Cunningham, general superintendent; T. W. Tinkham, assistant general superintendent.

D. A. D. A. ANNUAL MEETING

Guy O. Simons, president of the Simons Sales Company, Detroit, was elected president of the Detroit Automobile Dealers' Association at the annual meeting in the Detroit Athletic Club, Detroit, Monday evening. A. L. Zeckendorf declined re-election. The meeting was also a celebration of the success of the Twentieth Annual Automotive Show. Other officers elected were: H. R. Graham, Owen & Graham vice-president; R. H. Williams, Williams & Hastings, secretary; Walter Judd, Miller-Judd Company, treasurer; Charles Hathaway, LaFayette Distributing Company, director; Walter J. Bemb and Mr. Graham, delegates to the National Automobile Dealers' Association convention, Hotel Statler, Detroit, April 19.

S. A. E. TO UNITE PIONEERS

When the Society of Automobile Engineers meets in West Baden, Ind., this summer for the annual meeting, Howard Coffin, vice-president of the Hudson Motor Car Company, Detroit, will make an effort to get together all the old time automotive engineers dating from 1910 or earlier and interest them in the Old Timers Club.

TRUCK MANUFACTURERS' MEETING

For the purpose of discussing changes in the service and spare parts distribution methods, the Motor Truck Manufacturers' Association of America met in Hotel Wolverine, Tuesday.

WILLYS FOSTORIA PLANT RESUMES

Closed for six months, the Fortoria ignition unit plant of the Willys-Overland, Inc. has reopened for production.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

Purposes of New State Ass'n

What Trucking, Bus and Storage Company Operators, Organized Last Week at Grand Rapids, Hope to Do

MICHIGAN is the latest state to have an organization of trucking, bus and storage company operators. Delegates representing the several hundred cartage men of the state assembled at Grand Rapids April 6, and organized the Michigan Highway Transportation Association. Officers elected were:

President, E. Foster Moreton, Detroit; first vice-president, E. M. Radcliffe, Grand Rapids; second vice-president, W. G. Stone, Hillsdale; treasurer, H. G. Beebe, Battle Creek; secretary, W. H. Hardy, Lansing; directors, the above and Henry Stevens, Flint; F. H. Stevens, Saginaw; Edgar T. Raseman, Kalamazoo; E. A. Hopperstead, Muskegon; Charles J. Foster, Cadillac; C. L. Aiden, Benton Harbor; Henry Wellman, Hastings; A. Alexander, Battle Creek; W. J. Lantrange, Mount Pleasant, and L. J. Flanagan, Marquette.

State headquarters will be in Lansing, in Mr. Hardy's offices, with the Fireproof Transfer & Storage Company.

The coming of the state organization is the result of about two years of preparation and continuous development of the cartage industry to a point where the state began to recognize it as one of the important units in its transportation system. There has been put into completion a heavy program of highway construction, which made possible the establishment of motor truck and motor bus lines between cities where other methods of transport were either incompleted or where they had not yet been developed. The importance of Michigan as a motor truck manufacturing state also went far toward stimulating thought along lines of organized trucking transport. Michigan has come to recognize the development to such a degree that the 1921 Legislature has given much consideration to regulation and taxation of the cartage industry, which really provided the incentive for getting the state organization going.

The objects of the Michigan Highway Transportation Association are strictly along the line of what concerns the best interests of the industry. Clearing of information of mutual benefit to members in different sections; education in costs of operating vehicles of all varieties under varying conditions; preparation of sound legislation for the furthering of the industry; opposition to inimical legislation, national, state or local; co-operation with local officials in preventing any kind of highway practices that might arouse opposition to trucking; development of new sources of business; educating the public in the possibilities of the truck and creating good will and interest in highway transport.

The Grand Rapids meeting was held at the Hotel Pantlind, and about 60 delegates from fifteen counties attended. E. M. Radcliffe, Grand Rapids, affectionally known among his compatriots as "Rad," presided. "Rad" is secretary of the Grand Rapids storage and cartage men's local body. He furthered harmony and gave breadth to the discussions on various subjects that vitally interested the delegates.

The informal discussion which marked the

(*Continued on Page* 19)

COMMERCIAL HAULING

Detroit—Members of the Detroit Transportation Association will hold their regular meeting, April 19, at the new offices at Third and Howard streets. The work of the month will be reviewed and convention plans discussed.

President E. Foster Moreton, of the Association, is anxious to expedite acceptances from persons who will be able to attend the convention in June. It is hoped to be able to charter the steamer "Noronic," provided that sufficient reservations are forthcoming. This would call for a three-day cruise, beginning June 13, into Georgian Bay, with stops at several Canadian cities.

Dump truck hauling is occupying much time of the Association officers. Owners of such equipment recently have accepted much work without first determining whether or not the rates received were adequate. Cost data has been prepared and much work done in addition to make it possible for dump truck operators to know what operation is costing.

Detroit—The Wayne Furniture Packing Company and the Schroeder Moving Company have been consolidated, the former's firm name being retained. Officers are: President, C. W. Schroeder; vice-president, H. J. Schroeder; general manager, S. U. Blake. The company has added to its equipment by the purchase of a dust-proof van, which was an exhibit at the Detroit automobile show.

Detroit—The trip of E. Foster Moreton, president of the Detroit Transportation Association, and his party to the state meeting at Grand Rapids last week was eventful. At South Lyons he ran into a local crime wave and was subjected to search by a local deputy. Beyond Lansing the party left the main road in the night and regained it only with difficulty. Returning, the automobile suffered a broken axle and the car limped into Lansing in the small hours.

Lansing—The Legislature is expected to be quite merciful to the trucks this session, thanks to some effective missionary work done in the state house. At least two more years are needed before the industry can be properly stabilized and put on a firm basis, during which time, the legislators were shown, it would not be wise to hamper it with too much regulation. The Legislature appeared entirely willing to allow the time and expects the leaders in the hauling industry to come forth with constructive legislation at the 1923 session.

Lansing—The Michigan motor vehicle license tax and all other licenses and fees in connection with it, for the first three months of this year totaled almost $5,000,000, according to the apportionment account made to the auditor general by the state department. The entire amount for 1920 was $5,644,583 and for 1919, $5,719,433, while for this year it is estimated the tax will total between $2,000,000 and $8,000,000. Half of this amount is paid back to the county in proportion to the sum it has paid into the state treasury. All of the tax is to be used for highway purposes, the state's share being used for payments on state rewards. Wayne county's total of $1,497,723 received by the state department during the first three months was $1,489,028, and the county receives back $744,514. Ingham county paid in $124,860, and receives $62,430. Kent paid $234,929, Oakland, $157,929; Saginaw, $139,527; and Genesee, $146,252. The lowest is Keweenaw, with $44.85.

Digitized by Google

Something About the New Cartage Assn. Secretary

Meet a new secretary.

W. H. Hardy, manager of the Fireproof Storage & Transfer Company, Lansing, has been intrusted with the delicate and arduous task of getting the newly organized Michigan Highway Transportation Association started and functioning. This action was taken at Grand Rapids last week, when cartage operators, movers, bus line men and storage company heads assembled.

Mr. Hardy looks 30, but his experience with transportation matters and his advancement make a story that would indicate more years than that. He started life with the idea of "teaching the young idea how to shoot," and



W. H. HARDY

after having been graduated from the Reed City High school, went to learn pedagogy at the Mt. Pleasant normal.

The express business claimed him first, however, and for several years he was with the American Express Company, as agent at Grand Haven, cashier at Cleveland, route agent at Bay City and local agent at Lansing. He left that field to enter the purchasing department of the Duplex Truck Company, Lansing. He is now secretary-treasurer and general manager of the Fireproof Storage and Transfer Company.

Mr. Hardy intends to get behind the Association and push it to the limit, so that the rapidly expanding interests of Michigan may have a central point from which to wage their fight for progress.

Detroit Chapter, A. I. B.

[Members of the A. I. B. are invited to contribute news items or other matter which may be of interest to the Detroit Chapter.]

Secretary A. J. Chapp, of the Detroit Chapter of the American Institute of Banking, reports that the various chapters of the Institute are staging elimination debates to ascertain which teams will participate in the annual debate at the Minneapolis convention in July.

On Friday, April 8, there was a debate at Toledo, under the auspices of the chapter in that city, which was won by the New York team. The subject was: Resolved, That Congress adopt a bill identical with the Johnson house bill 14461 of the last session of Congress (restriction immigration). New York took the affirmative and Chicago the negative.

The Detroit Chapter sent a delegation of 100 members by special interurban car.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins — Detroit Pins Hardened Straight — Headless Shackle Bolts
Valve Roller Pins — Oil Pump Plungers — Universal Joint Pins
Roller Clutch Pins — Roller Bearing Bolts Straight — Small Gear Shafts
Differential Gear Pins

Detroit Machine Tool Company
6945 St. Antoine St. Telephone Market 575

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:30 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

PLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Need an Elevator?

Ask LEITELT

Modern Designs

Superior Construction

LEITELT IRON WORKS

Office and Factory

315 Mill Ave., Grand Rapids, Mich.

Eastern Michigan Service

1900 N. Mich. Ave., Saginaw, Mich.

DETROIT ENGINEERING NOMINATIONS

The following nominations have been made for president of the Detroit Engineering Society for the ensuing year. M. W. Taber, Auto Manufacturers' Service Company; J. R. McColl, Ammerman & McColl; L. E. Williams, marine manager, United Fuel & Supply Company; E. S. Reid, vice-president and chief engineer, Northern Engineering Works; W. F. Zabriskie, vice-president and general manager, Gabriel Steel Company, and A. L. Trout, consulting civil engineer. O. H. Dawson, of Kendrick & Dawson, is nominated for secretary-treasurer without opposition. The election will take place at the annual banquet, April 29.

TRANSPORTATION NEWS

Rail :: Commercial Hauling :: Water

Chicago—The United States Railroad Labor Board has declined to put into effect a temporary wage reduction, retroactive to April 1, as asked by the Michigan Central Railroad Company and 25 other lines. In denying the petition the board announced that the only fair course appeared to be to hear at one time and decide in one finding just what constitutes a reasonable wage for all classes of workers. Monday, April 18, was set as the date of the beginning of this hearing. Besides the Michigan Central, the other railroads operating in Michigan affected by the decision are the Detroit & Mackinac, Ann Arbor, Chicago & North Western and the Lake Shore & Michigan Southern. Henry Shearer, vice-president and general manager of the M. C., says the decision of the board will not affect the proposed wage cut. He said it bears only on the retroactive clause.

Detroit—The Municipal Railways system has been placed on the city tax rolls at $1,500,000, or half the actual value as represented by $3,021,461.44, the amount of money so far expended in its construction. Plans for the Mack and St. Jean avenue crossings over the lines of the D. U. R. have been submitted to the D. U. R. engineers.

Lansing—The Michigan Public Utilities Commission has approved the sale of the Michigan Connecting Railway by the J. H. Moores estate, of this city, to the Grand Trunk Railroad Company for $40,000. The railroad spur gives service to many factories in the southeastern part of the city.

Detroit—Freight loading thus far for April shows a slight increase over the month of March, but transportation conditions are far from satisfactory, according to H. O. Halsted, superintendent of car service of the Pere Marquette Railway. This applies to all kinds of freight, and the increase is largely made up by the movement of grain and hay, of which there are still large quantities in the state. Loading for the month of March this year is showing better than March of last year, for it was during that month that the switchmen's strike developed.

St. Louis—Reductions in salaries of executives and wages of employes will be made by the Missouri Pacific Railroad as a part of its plan of retrenchment. Approximately 30,000 employes will be affected.

Detroit—Judge F. L. Covert, Circuit Court, has decided that the D. U. R. must adhere to the split fare plan provided in the franchise for the Pontiac-Birmingham line, the split fare to be operative between Birmingham and the Six-Mile road, President Place of the 22 cents now charged. Judge Covert holds the franchise as valid.

Philadelphia—The Pennsylvania Railroad Company's proposed 12 to 20 per cent cut in wages has been accepted by the freight and accounting clerks here, but rejected by all the other organized employes. The reductions would affect 16,000 employes.

Lansing—Time saving concessions of value to Michigan country shippers of livestock were obtained from the railroads by the traffic department of the State Farm Bureau at the recent "Two for One" hearing in Chicago. The railroads were induced to change the present rule providing that they shall have six days to place livestock cars at country shipping points, to four days, and to agree that in case they were unable to furnish a double deck car ordered, they would supply two single decks within the four-day time limit. The new ruling reads, "Four days after the next 7 a. m. after ordering car." Tariffs will be issued as soon as they can be published and will affect shipments to both Buffalo and Detroit.

Washington—Class and commodity freight rates from points in southwestern Michigan to points on eastern trunk lines and in New England territories will remain as listed despite the efforts of the South Bend Chamber of Commerce, the Michigan Traffic League and Manufacturers' associations of Michigan and Indiana to obtain a re-grouping with lower rates. The various associations filed a complaint against the railroads with the Interstate Commerce Commission to the effect that existing rates in this territory were relatively unreasonable and prejudicial to the shipping interests of southwestern Michigan. This complaint was filed last January and the I. C. C. last week ruled that existing rates must stand, with the exception of Holland, which is taken from the 92 per cent group, while Watervliet is included in it.

PETOSKEY TRANSPORTATION CO.

The following have been elected directors of the recently organized Petoskey Transportation Company: A. B. Kilbe, J. B. John, John L. A. Galster, Henry Vanderberg, J. C. Buckbee, L. A. R. Moore, Joseph A. Magnus, Louis Seelba, W. N. Andrews, Homer Sly and John A. Kilze. Officers elected: A. B. Kilbe, president; J. B. John, first vice president and general manager; John L. A. Galster, secretary and treasurer. The capital stock of the company is 100,000 shares of preferred stock, par value $10. There are also 100,000 shares of common stock without par value. All stock is fully paid and non-assessable.

NEW PHONOGRAPH PLANT

Negotiations whereby the Cheney Talking Machine Company, a subsidiary of Marshall Field & Company, Chicago, obtains a five-year lease from the Berkey & Gay Furniture Company of its large plant in Mill avenue, Grand Rapids, have been closed. The consideration is estimated to be nearly $1,000,000. This deal, according to advices from Grand Rapids, gives to that city a leadership in the manufactnie of phonograph cabinets. The capacity of this plant is 300 cabinets a day.

WILL SUPPORT WATERWAY

The up-river city of St. Clair, home of the Diamond Crystal Salt Works and other industries, has formed a chamber of commerce which bids fair to play an important part in shaping the future of that city industrially. The membership is said to be more than 100 out of a population of only 1,500, and the organization is receiving enthusiastic support At a meeting Tuesday, April 12, Tom L. Munger, of the Board of Commerce, spoke on the advantages of the proposed St. Lawrence waterway, and the organization decided to take an active part in the promotion of the development by sending representatives to Washington to plead for the bill. Resolutions also were passed commending the proposed revision of the Seamen's act. Officers are: President J. J. Gannon, director of the Diamond Crystal Salt Company; secretary, Chase Crissey, cashier of the State Savings Bank.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700



Midwest Engine Co., Indianapolis

The Machine Shop

The relation of the machine shop to other processes is vital. We have designed and supervised the construction of many classes of shops.

LOCKWOOD, GREENE & CO.

ENGINEERS

1227 Washington Boulevard, Detroit

Boston Atlanta Chicago New York

Cleveland Charlotte Philadelphia

Lockwood, Greene & Co. of Canada, Ltd., 285 Beaver Hall Hill, Montreal, P. Q.

Compagnie Lockwood Greene, 47, Avenue de l'Opéra, Paris, France

For accurate Keyseats in the Shortest time

BAKER BROS. KEYSEATERS

Have the following advantages:

1. Cutter bar supported on both sides of work.
2. Any size and shape piece chucked by moving the column.
3. Micrometer feed.



Made in five sizes
Let us show you!

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

AUGUST N. JOHNSON
MACHINE CO.
MANISTEE, MICHIGAN

MACHINE AND
BOILER SHOPS

General Repairing

MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS

BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING

We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

MAIN
1491
SPRUNK
ENGRAVING CO.
Commercial Artists
and Engravers
700 MARQUETTE BLDG. DETROIT

PHOTOGRAPHER
STUDIO BUILDING
4638 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Washington—Representatives of the National Federation of Construction Industries have presented to James J. Davis, Secretary of Labor, plans for a conference of contractors, manufacturers of building materials, architects, engineers and workmen, looking to the launching of a national building campaign, May 1. The Secretary has indorsed the plan.

Eaton Rapids—Work has been started on a one-story factory building for John B. Davidson, who will occupy it was a textile making plant. The building will be 200 by 65 feet in dimensions. Mr. Davidson was for a number of years general superintendent of the Eaton Rapids Woolen Mills.

New York—Announcement of an advance of $2 a ton in the price of bars, plates and structural steel is made by the Republic Iron & Steel Company. The increase is to cover rising costs of production, accordiog to John A. Topping, chairmun of the board of directors.

Saginaw—F. P. Little, superintendent of the Toledo-Ludington division of the Pere Marquette Railway, says the chief engineer's office of the road has about completed plans for a $1,000,000 bridge over the Saginaw river here, at the site of the present Potter street span. It is probable the bridge will not be built until 1922.

Detroit—Among the jobs awarded by architects and reported in the weekly statement of the Detroit Builders and Traders' Exchange are the following: General contract on the brick and steel warehouse building for the Contractors Equipment Company; alterations on an engine house; a brick and concrete show stable to be erected for the Michigan State Fair Association, and several residences and minor jobs. Among new work being prepared by architects are two theaters, a hotel, several stores and residences.

Detroit—A total of 447 building permits were issued during the week ended April 9, the total outlay represented being $2,729,865, or more than three times as much as for the previous week, when cost involved was only $830,690. Of the total, $1,545,600 comes under the heading of alterations and additions, and concerns work at the Cass Technical High School. Of the 447 permits, 308 were for new buildings and 139 for alterations and additions.

Detroit—Building Commissioner John C. McCabe has announced that 1,131 building permits were issued during March, the construction cost involved being $5,650,930. The amount is more than $3,000,000 below the March record for 1920.

Monroe—March permits totaled 29 the cost involved being $27,170. It was the best month in the last four months.

Saginaw—Total outlay represented in the 195 permits issued during March was $111,844, a considerable increase over February but below the March, 1920, record, which in money was $160,928. The gratifying feature was that nearly half of the money involved was for 22 dwellings to cost $54,500. There were 56 permits for garages and minor buildings, the cost being $41,294.

Jackson—Seventy-eight building permits were taken out during March, involving an expenditure of $65,485. Of the total, $49,315 was for new construction work and $16,170 for repairs or alterations.

Lansing—C. C. Ludwig, of the Republic Sales Company, and Ralph W. Ballantine, manager of the insurance department of the Michigan Mortgage Investment Corporation, have leased the Moores block. The property is 136 by 132 feet. The lessees' plans have not been announced, but both a hotel and office building have been proposed.

Detroit—Nummoth coal-bunkering docks are being constructed at Jacksonville and Fernandino, Fla., by Jewett, Bigelow & Brooks, miner operators in Kentucky and West Virginia. The docks are for loading export coal to Mediterranean ports.

Lansing—With the permit obtained, work was started the first of this week on the construction of the ten-story Prudden store and office building on the site of the structure destroyed by fire some time ago. The Rickman Contracting Company, Kalamazoo, has the contract and P. L. Rickman has personal supervision of the structural work. The building is to be completed by the first of next year.

Detroit—A two-story, reinforced concrete garage, 100x90x25, to cost $110,000, will be erected on Canfield, between Cass avenue and Second boulevard by F. J. Whitney, 408 Detroit Savings Bank building. Nathan Sverdloff, 944 Savings Bank building. Nathan Sverloff, 944 Marston avenue, will construct a two-story brick and stone store and flat building on Twelfth street, between Clairmount and Taylor avenues. The cost will be $9,000.

Lansing—During the last week of March 34 building permits were issued in Lansing, bringing the total for the month to 164, or 45 more than for March, 1920. The total estimated expenditure for building was given as $240,501.

Jackson—During the week ended April 9 permits taken out represented an aggregate expenditure of $36,566. Of this amount $19,676 was for 13 garages; $14,165 for four residences and $2,800 for miscellaneous jobs.

Battle Creek—March permits showed plainly the improvement in business. The total cost was $59,375, an increase of more than 100 per cent over February and four times as much as was expended in January, when the total was $13,525. The general outlook is that April also be a good month.

Detroit—The need of additional court rooms and offices in the Wayne County Building may cause the county supervisors to order the addition of two stories to the building, which was constructed so that such an enlargement would be possible.

PAINE-WEBBER BOOKLET

The recent circular issued by Paine, Webber & Company analyzing the finance of Sears, Roebuck & Company contains some matter of unusual interest. Besides showing the unusual earning power of this company under normal conditions, the circular points out that an original investment in 1907 has now grown to nearly ten times its size at the beginning by means of stock dividends.

SAGINAW B. & L. BUYS HOME

The Saginaw Building & Loan Association has purchased the old Bank of Saginaw building at 406 Court street, now occupied by the Paul Krause shoe store, according to an nouncement by John L. Jackson, president of the Association. Occupancy will be had at the expiration of the present lease, which has two years to run, after which time the building will be remodeled into a modern banking office. This association is one of the oldest business organizations on the west side of Saginaw, having been founded 33 years ago.

Robert Y. Speir, heretofore vice-president and cashier of the Capital National Bank, Lansing, becomes vice-president and manager, the title of cashier going to Hon. Frank E. Gorman, as announced elsewhere in these columns.

Digitized by Google

(Continued from Page 14)

morning session revolved itself into a symposium on local conditions and rates. The delegates compared notes on many phases of their business and discussed inter-city business, moving, local delivery, jitney operation, dump truck hauling, etc. Many of the delegates listened for the first time to general discussions of their business.

The first year's work for Secretary Hardy will be largely one of organization. He is preparing an office for the Association, with a clerk in charge who will act as his secretary for all association matters.

The following attended the meeting:

W. G. Stone, Associated Truck Service, Hillsdale; Henry H. Stevens, Flint; F. H. Stevens, Stevens Brothers, Saginaw; A. H. Shank, Shank Fireproof Storage Company, Grand Rapids; J. Zevalkink, Columbian Storage Transfer Company, Grand Rapids H. G. Beebe, Union Truck & Storage Company, Jackson; Ben Zevalkink Columbian Storage Transfer Company, Grand Rapids; Louis Stonehouse, Stonehouse Cartage Company, Grand Rapids; W. C. Wheeler, John Wheeler Cartage Company, Saginaw; T. W. Hastings, Hastings Truck Company, Kalamazoo; W. H. LaFayette, LaFayette Transfer Company, Muskegon; M. G. Moon, Moon Brothers, Cadillac; C. G. Foster, Charles J. Foster Company, Cadillac; F. W. Richmond, Associated Auto Urban Lines, Grand Rapids.

O. L. Alden, Alden & Son, Benton Harbor; Theodore Green, Green & Company, Benton Harbor; W. Dowding Dowding Truck & Transfer Company, Flint; Henry Wellman, Hastings Transfer Company, Hastings; K. W. Becker, Becker Cartage Company, Hillsdale; Robert Sallows, Emmerson Truck & Storage Company, Battle Creek; Sam Thompson, Muskegon; John R. Salter, Muskegon; J. W. Thunfors, Muskegon; Z. V. Morningstar, Muskegon.

J. D. Cooper, Jitney Lines, Muskegon; L. M. Becker, Becker Brothers, Hillsdale; W. J. Le Strange, Mount Pleasant; F. J. Gaffnett, Mount Pleasant; J. W. Emmerson, Emmerson Storage & Sales Company, Battle Creek; E. A. Hopperstead, Hopperstead Transfer Company, Muskegon; L. Peherson, Motor Transit Company, Muskegon; George Wilson, Wilson Cartage Company, Detroit; Charles Wilson, C. & H. Wilson Company, Detroit; E. Foster Moreton, Moreton Truck Company, Detroit.

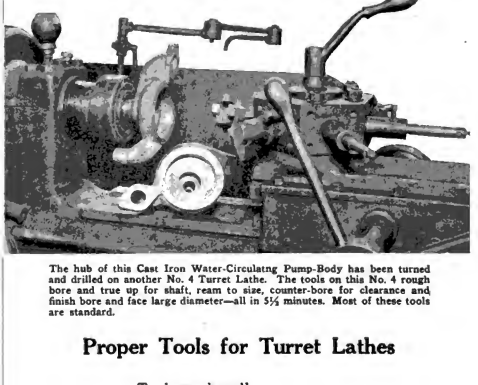
Fred J. Keesis, City Cartage Company, Detroit; F. L. Henk, Detroit Transportation Association, Detroit; L. R. Blodgett, Elliston Packing & Storage Company, Grand Rapids; David E. Burns, Republic Motor Truck Company, Alma, L. G. Van Loon, Van Loon Moving Company, Muskegon; Thomas O'Brien, O'Brien Cartage Company, Detroit; E. M. Radcliffe, Radcliffe Storage Company, Grand Rapids; H. Kammen, Kammen & Vanderstel, Grand Rapids; H. V. Wood, Associated Truck Lines, Grand Rapids; James De Good, De Good Transfer Company, Grand Rapids; S. Helmus, Helmus Brothers, Grand Rapids; A. L. Martin, Central Storage Company, Grand Rapids; A. De Groot, De Groot Transfer Company, Grand Rapids; H. H. Hardy, Fireproof Storage & Transfer Company, Lansing.

The Michigan Manufacturer and Financial Record was made official organ for the state association and will conduct a motor trucking news department within its columns and assist the state officials in every way to build up a strong membership, as well as to tell all its readers what is happening in the storage and transfer field.

WINTER SUCCEEDS F. W. ALLEN

Walter Winter is now manager of the foreign department of the American State Bank, Detroit, succeeding Fred W. Allen, who resigned recently to return to Chicago, where he has become associated with the Northern Trust Company.

Mr. Winter hails from New York and has had considerable experience in foreign exchange and international banking. He has been connected with the foreign department of the National City Bank, New York; Knauth, Nachod & Khuene, and A. H. Whan & Company, foreign exchange auditors, and also has spent some time in London with the Deutsche Bank and in Paris and Hamburg with the Bourse de Paris.



The hub of this Cast Iron Water-Circulatng Pump-Body has been turned and drilled on another No. 4 Turret Lathe. The tools on this No. 4 rough bore and true up for shaft, ream to size, counter-bore for clearance and finish bore and face large diameter—all in 5½ minutes. Most of these tools are standard.

Proper Tools for Turret Lathes

To do work well
a turret lathe must be equipped
with the proper tools.

Tools make or mar
a good turret lathe.
Re-tooling a turret lathe
often doubles its production.

In our catalog
we illustrate turret lathe tools
for all kinds of work,
bar or chucking,
and if you desire,
we help you select
the right tools for your work.

Send for our Small Tool Catalog.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company

CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

MICHIGAN MANUFACTURER
FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, APRIL 16, 1921

Steps in the Right Direction

TWO encouraging and significant bits of news have come out of Lansing during the last week. One of them is that Secretary of State Charles J. Deland has by dint of discharging some forty superfluous employes reduced his biyearly budget by $180,000—from $1,088,000 to $608,000—and the other that immediately after the Legislature adjourns an "efficiency survey" is to be undertaken by the State Administrative Board to prune wherever possible in all departments.

These are steps in the right direction and Mr. Deland and the Administrative Board are to be congratulated. Most every time the Legislature meets, the state officials have all ready for its consideration divers and sundry ways and means of raising additional revenues to meet new expenses. There has been in the past all too little thought about how economies could be effected. With a budget this year which probably will be two or three million dollars higher than two years ago, it would appear that splendid opportunity is afforded for practice with the carving knife. It is too bad that the Legislature did not immediately after going into session inaugurate what the Department of State and the Administrative Board are now taking up. Perhaps if it had, there would have been no need for consideration of the corporation tax and the state income tax and the other levies which have been or are about to be enacted.

Just how much the state officials will be able to lop off as a result of their investigation, or, knowing how much they could lop off, will lop off, we do not, of course, venture to predict. But the saving possible is considerable. There has been some criticism of the State Highway Department, among others. The statement has been made that this department is "loaded up" with surplus employes and equipment—that, in fact, its outlay could be reduced 50 per cent without sacrificing efficiency. Just how much of that criticism is honest and sincere and how much may have been inspired by persons unfriendly to Commissioner Rogers would be hard to say, but the Department will not suffer from an inquiry into its affairs.

The Administrative Board, once it has got started, should go all the way down the line, looking carefully and impartially into the affairs of all the departments and institutions, cutting out any overplus of employes that may be found. We have an idea that some of the institutions especially will bear investigation. Certain nasty charges against some of these institutions have been made in the Legislature, and it is only fair that inquiry searching enough to prove or disprove them should be made. Incidentally, the investigators may find opportunity to cut expenses by a few hundred thousands of dollars here and there.

With the process of deflation ruthlessly squeezing the false enthusiasm out of business the country over, with prices being forced downward, with the prevailing stern necessity for reducing expenses everywhere, it is high time that the process be extended to the administration of public business. The cry now is not, "How can we spend more money?" but "How can we keep from spending money?" Taxation should go down with prices. And the quickest way to reduce taxation is to reduce the expenditures to meet which taxes are collected—just as the only way to reduce prices of commodities is to reduce the costs of production and sales. The orgy of reckless money spending is past; we have gone over into an era of getting value received. Let's get it, both in public and private business.

Mr. Ralph Stone, president of the Detroit Trust Company, has well expressed in a letter to Mr. Deland what the state's feeling toward that official should be for his action in starting the ball rolling. Mr. Stone writes:

"It takes considerable political and personal courage to do a thing of this kind, and the instance is so conspicuous a one that I want to go on record with most hearty congratulations and thanks to you for bringing it about.

"Most of the effort nowadays seems to be centered upon devising new ways of raising money by taxation to operate federal, state and municipal governments. I think public officials charged with this responsibility generally recognize that the cost of government can be lessened by reducing the expense of running it, but I regret to say very few public officials have the courage to cut their own budgets. Your case is so conspicuous a one that it cannot help but attract very wide notice. I hope it will offer a contagious example."

Let us sincerely hope it will.

Putting the Waterway Through

IT SEEMS TO BE the consensus of opinion among those who have followed with any degree of continuity the hearings conducted by the International Joint Commission on the proposed Great Lakes-St. Lawrence Deep Waterway that the Commission will recommend to the Canadian Parliament and the Congress of the United States that the waterway is highly desirable and should be built. The evidence adduced for the Commission's enlightenment has been so conclusive, and the position of what opposition there is has been shown to be so selfish, that it would seem to be difficult for the Commission to escape the conviction that here is a great public necessity in the way of which nothing should be allowed to stand. From Montreal and New York on the east, on through Cleveland, Detroit and Chicago to Winnipeg on the west, there has been brought forward a preponderance of testimony showing from every angle the incalculable benefits which would accrue to the business of the two nations through the opening of this inlet and outlet of world commerce. Not only that, but some of the country's foremost engineers and builders have come forward with facts and figures to prove that the power to be developed along the route would of itself alone pay the cost of the improvement. The project has been shown to be feasible from an engineering standpoint. Nothing, therefore, would seem to block favorable action at this stage.

But the battle for the waterway will not have been won should the Commission's findings be what everyone expects. The opposition has another line to fall back upon, and there it will wage a determined fight. The battle lines next will be drawn in the Canadian Parliament and the American Congress. The Eastern interests who have contested the West's case make up for whatever lack of numbers they may possess by the fact that they are well financed and skilled in the business of influencing legislation, and no one need expect anything else than that they will bring to bear on the lawmakers every means of persuasion at their command. Those who have carried on the fight for the waterway must be prepared for a real test of wits. In the hearings before the Parliament and the Congress they must be ready to present a case in which not a loophole may be found and must draft for the task of presentation the ablest minds among their number. They must not allow themselves to be lulled into a false sense of security by the fact that the Joint Commission's report is favorable. The report will not be enough.

So, to put the waterway through it will be necessary to

Digitized by Google

PUT IT THROUGH, just as Grant said when asked how he was going to Richmond that he was "going to Richmond." The same earnestness and thoroughness which has characterized the hearings before the Commission must mark the hearings before Parliament and Congress, and, in addition, every precaution must be taken in choosing the men to steer the battle on the floor and in making sure that the bill does not run into conflicting currents of self-interest among the lawmakers and be swallowed up in defeat.

Doctoring Up Liberty Bonds Again

WHEN our always well-meaning chairman of the Ways and Means Committee of the House of Representatives, Hon. Joe Fordney, was quoted in the Detroit Free Press last week as favoring a plan which would compel the Federal Reserve Banks to give lower interest rates on loans secured by Liberty bonds, we thought at once of the six-footer trying to cover himself with a five-foot sheet. You will no doubt scent the connection between the two, but there is one. First, however, it should be remarked that a special interest rate on such loans would not be the panacea for discounted market values. Many no doubt would jump at a chance to borrow on their Liberty bonds provided the rate of interest paid on the loan were not appreciably greater than the interest received on the bonds, but that would be the only attraction short of making a sale at par.

Most borrowers now know, when they borrow on collateral, that they give the lender a pretty broad control over their property so pledged. They know by experience that if the lender becomes uneasy he can, and may, sell the collateral at the best market obtainable without much ado or ceremony. They know that pay day comes around eventually and that anything short of a sale of their bonds requires the loan repaid sometime. So the proposal becomes one largely of providing a cheap method of obtaining loans for those who have use for the money. Certainly any banker who suspects that a borrower is trying to "sell" his bond through the medium of borrowing on it will side-step quickly.

But above all this proposal brings us right back to the old proposition of trying to make the five-foot sheet cover the six-foot man. If the Federal Reserve Banks extend any number of millions of loans on Liberty bonds they will have so much less for business; so it's a case of making the sheet cover the feet and expose the neck, or vice versa. Instead of pushing the market value of the bonds up to par, the more probable result of an arrangement such as suggested by Mr. Fordney would be to push the market value down a few pegs. Leaving out the tax feature, Liberty bonds are below par because more people wish to sell them than wish to invest in them, and any plan which might result in a greater volume of bonds being offered for sale can only further depress the market.

Eventually enough taxes will have been paid in to reduce the debt of the United States and reduce the available supply of government bonds for investment, and this operation, together with cheaper money, will do the trick that hundreds of "short-cutters" would like to perform.

Suspicion and Sales

MEN who espouse publicity know no limits. They proceed on the general proposition that the "light of day" works for ultimate good in every case. But here and there one runs across fellows who cannot be classed even as moderate publicists, and it is from them that one hears the familiar argument, "we are a closed corporation" and "we do not believe in advertising our gains or our losses." But these friends will subscribe to the proposition of giving the customer plenty of information about the product offered for sale.

A certain friend in the close corporation class will no doubt be interested to learn that he lost quite a considerable sale of goods last week because a prospective purchaser was unable to obtain any information about the finances of the producing company. Nowadays, more than ever before, nobody wants to buy a car or a truck that he suspects may some day be an "orphan." A car may be the finest and prettiest but the finances of the producer may be within twenty-four hours of bankruptcy, and if the producer hangs to the old-fashioned plan of refusing reasonable publicity, he should not be surprised if there is lack of confidence on the part of some of his prospective customers.

It were much better to let the prospective buyer in on an unsatisfactory state of affairs than to inspire suspicion and rumor of conditions far afield from facts. And letting friends and customers and creditors in on the facts does not mean sensational stock market movements. It is a fact that everyday experience in Detroit demonstrates that there is more juggling of stocks of companies which withhold information than there is in those which make it a practice to give the public frank reports of condition. The discriminating purchaser should be afforded the means to judge for himself whether he is buying an "orphan" or whether his car will have a guardian the rest of its natural life.

Short Measure Stuff

YOU NEVER CAN TELL

I'm thankful that the sun and moon
Are both hung up so high
That no pretentious hand can stretch
And pull them from the sky.
If they were not, I have no doubt
But some reforming ass
Would recommend to take them down
And light the world with gas.
—John M. Eaton, in the Weekly Bulletin.

And yet, my friend, one never knows,
When some resourceful gent
Will pick the sun and moon and stars
From out the firmament.
They sold blue sky for stocks and bonds,
The deals were pretty raw,
And now they're taking Heaven's blue
And making Sunday law.

* * *

Men wanted to tear down buildings.
—Newspaper want ad.
Page Mr. Sandow or Delilah's beau.

* * *

Detroit members of the American Legion plan a Coxey expedition on Lansing in the interest of the bonus. Maybe they want to cop that six-million dollar deficit.

* * *

But after everything is said and done in this matter of naval disarmament, it becomes a question of whether someone is to rule the waves or waive the rules.

* * *

Prisoners Saw Bars
In Jackson Jail Break
—Newspaper Headline
Must have been pleasant to watch.

* * *

DEMPSEY VS. CARPENTIER

Now that it's really coming off,
In some spot quite a way from here,
There'll be a lot of talk on how
To sound the name of Carpentier.

Your doughty foreigner will claim
It proper to harp on the "a,"
And let the name roll off the tongue
Like this: Gay-orr Carr-pon-tee-a.

And some who use the English tongue
Without the aid of book or mentor,
If argued with will tell the world
The right way is to say Car-PEN-ter.

Still many more will speak of him
As if he worked with saw and burr;
And nailed together houses for folks
Like any union Carpenter.

But all the dead game sports will grunt,
And say, "I'l really makes me sick;
The thing to call this Frenchman is
"That guy wot Dempsey's gonna lick."

* * *

A THREE WEEKS' VACATION, PAGE ELINOR GLYN.

I suppose you all wonder what happened to the Rootown correspondent for the past three weeks. Oh, yes, I've just been enjoying my spring vacation. Seeing the weather has been kind of rainy, the people of Rootown and vicinity have had plenty of time to visit for the past week.
—By the Rootown Correspondent in the Fremont, Mich., Times-Indicator.
—A. F.

Digitized by Google



FINANCIAL

By PHIL S. HANNA

IT IS UNFORTUNATE that a man like B. C. Forbes should fall into the error of hasty conclusion. We do not know, of course, if he is responsible for the heading "Bankers Thrive, Industry Wails," which appeared over his letter of April 7 in the Detroit Journal, but we do know that Mr. Forbes concluded hastily when he assumed that a rising Federal Reserve Bank ratio is a positive signal for loosening credit restrictions. Here are the figures of the combined Federal Banks of December 30, 1920, and April 8, 1921, upon which reserves are figured:

Dec. 30, 1920, total gold	$2,059,333,000
April 8, 1921, total gold	2,264,010,000
Gain	$ 204,677,000
Total deposits	$2,948,844,000
Total deposits	2,651,301,000
Loss	$ 337,543,000

Naturally with a dropping off of about 11 per cent in deposits and a gain of about 10 per cent in gold, the ratio of gold to deposits will rise from 45 to 52½, as it would rise to 100 per cent if deposits dropped down far enough to be equal to the amount of gold in the Federal Banks. The point Mr. Forbes missed is that the reserve ratio in not a true index of the member banks' loanable funds. The ability of any bank to lend money rises or falls with the rise or fall in deposits, and loans must be paid as fast as deposits fall. The official figures of the Reserve Banks show total deposits (including deferred items and uncollected items) fell off $337,543,000 between December 30 and April 8, whereas during the same period loans and investments were paid off to the extent of $725,424,000, of which $204,677,000 is represented by a gain in gold.

Admittedly the figures prove a remarkably favorable improvement in the position of the Reserve Banks, taken as a whole. But let us bear in mind that the deposits in the Reserve Banks represent merely the legal reserves of the member banks and in no sense are they a conclusive guide as to the ability of the member banks to take on new loans. The gain in gold is a gain in strength of the Reserve banks, due, not to eased credit conditions in 1,001 smaller cities, but, in the opinion of competent observers, more to the fact that Europe is sending gold to this country rather than suffer exchange discounts. The reduction in loans and investments of $725,424,000 shows that the member banks are liquidating their borrowings but in so doing their own reserves went down $337,543,000.

In order to prove that "the necessity for curtailing loans is long past due," one must look into the condition of his home banks for positive conclusions. Let us take the Detroit banks for example. In the week between March 31 and April 7 deposits decreased $3,967,000, while the banks increased their borrowed money obligations $5,975,000. Between December 30 and April 7 deposits dropped from $407,000,000 to $375,000,000 without a corresponding reduction by borrowers of their loans. Neither of these exhibits would lead any sane man to conclude that Detroit banks were in position to take on new loans.

Having noted the Detroit situation, let us look at the banking situation elsewhere, and study the figures reported by 830 large banks located in various parts of the country:

	Loans and Investments	Deposits	Borrowed Money	Cash and Reserve	Ratio of Borrowed Money to Loans and Inv.
Oct. 1, 1920	$15,082,434,000	$14,298,972,000	$2,184,491,000	$1,484,000,000	14.6%
April 1, 1921	15,902,713,000	13,821,565,000	1,685,313,000	1,363,575,000	10.6%
	+820,279,000	−477,407,000	−499,178,000	−120,425,000	−4.0%
	−3,241,673,000	−777,407,000	−459,136,000	−131,133,000	−2.0%

It will be noted first that the reduction in loans and investments is approximately equal to the drop in deposits and borrowed money obligations combined; and second, that cash and reserves have not fallen in exact relative proportion, the percentage of cash and reserves October 1 to deposits being approximately 12 per cent and the same percentage April 1, being about 11½ per cent. Had cash and reserve increased in proportion to deposits it would be perfectly normal to assume that these 820 banks, taken collectively, were building up reserves by refusing credit to their borrowers, and Mr. Forbes' statement that the time to loosen up had come would be justifiable. But the fact is, as the figures plainly show, in spite of the splendid improvement, that more than 10 per cent of the loans and investments represent borrowed money, which condition is not by any manner of means an indication that the reducing process should be stopped.

Moreover, even on April 1 the total of borrowed money was $112,000,000 more than cash and reserve. There is much improvement in this respect, for on October 1 the difference was $475,000,000 the same way, but a well managed business institution having current liabilities in excess of current assets would not think of showing caution to the widest under these conditions and it is the more unthinkable that public men should propose a less measure of caution for our banks so long as quick liabilities remain warped out of line with reserves.

All of these proposals to short-cut the hard road merely slow up recuperation. They create false hopes in the hearts of those who are not clearly informed as to the facts. What the country needs most today is a law against financial Don Quixotes and another law requiring a more intensive study of arithmetic.

New Corporations

Note—Owing to an unavoidable delay at Lansing this week's list of new incorporations did not reach the editors in time for insertion in its regular position. It therefore appears in the financial section, which "closes" last. On Page 34 will be found the list mailed out weekly by the Secretary of State, which was used in the belief that the Manufacturer's tabulation, which is especially prepared by the paper's Lansing correspondent, Mr. Bliss, would not be available. Readers will note the much greater detail of the accompanying list.

For Week Ended April 9, 1921.

Grand River Brookline Co., Detroit; buying and selling real estate; to purchase property for subdivision purposes and sell same; incorp. A. Marshall, 1409 Elmhurst ave., Stephen F. Cheney, Robert C. Jackson, Detroit ..... $ 750,000

Munger Power & Light Co., operations in Merritt township, Bay county; office at Munger; production or supplying of electricity, power, lighting, fuel and other purposes to the public; Edward Schreiber, A. J. Schabel, Gustav Gellin, Munger.. 8,000

Art Metal Construction Co. (F.) James-town, N. Y., E. O. Hultquist, 551 Book bldg., Detroit 6,000,000

P. Russell Co. (F.) Tulsa, Okla., Mark S. Walker, 306 Majestic bldg., Detroit .. 414,894.50

Friedhorn Construction Co. (F.) Wilmington, Del., Earl J. Hoffman, 353 Ford bldg., Detroit ..... ——

Howland Battery Co., Detroit, manufacturing and selling storage batteries and battery accessories; Joseph I. Cox, 6536 16th st., Loren W. Brumitt, George A. Howland, James Romas, Detroit ..... ——

Attwood Brass Works, Grand Rapids; to purchase, manufacture, assemble and sell brass and other goods; Charles F. Attwood, Charles E. and Lillian E. Attwood, Grand Rapids.. ——

Trudell Fisheries Co., Tawas City; to fish, buy, sell, and deal, engage in business of fishing; Louis and Edward A. Trudell, John Cope, Tawas City ..... ——

Grand Ledge Lumber Co., Grand Ledge; to deal in lumber; Levi Marshall, Archibald H. Wright, John M. Marshall, Ionia 26,000

Sunica State Bank, Sunica; commercial and savings bank; Abraham Lincoln Lawrence, Agnus Erhorn, John Henry Ahrens, Sunica 20,000

Altenet Hotel & Sanitarium, Mount Clemens; to carry on institution for treatment of disease and instructions in hygiene; C. A. Allen, Dr. C. H. Burton, Charles H. Gatz, Mount Clemens 100,000

Mud Creek Thresher Co., Bay Port; buying, selling and dealing in clover hulling; L. A. Notter, Pigeon; Allan A. Wilfong, also trustee, Bay Port 5,000

Robert Stephenson Land Co., (F.) Milwaukee, Wis.; Gustavus A. Bloch, Menominee 100

Rexford Harvey Trading Corp., (F.) Wilmington, Del., Rexford Harvey, 117 Congress st., W., Detroit 1,000,000

Sperlich & Uhlig Co., Detroit; to manufacture, buy, sell and deal in electrical appliances, equipment and devices; Herman A. Sperlich, 11 Colorado ave., Hilda M. Parks, 12 Herman Uhlig, Edward F. Wunch, Detroit.. 300,000

Caverley Iron Works, Detroit; contractors, manufacturers and setters of structural steel, ornamental iron work, etc.; Hattie J. Caverley, 3177 Garland ave., E. Merrill Hesser, Harry J. Caverley, Detroit 25,000

Detroit Auto Fuelizer Co., Detroit; manufacturing and selling automobile accessories, particularly improved type of fuelizer; John Farkas, 3256 Hunt ave., Peter H. Griesser, Andrew Horsch, Detroit.... 20,000

Ravenna-Conklin Electric Light & Power Co., Ravenna; to generate electric current for light and power purposes by water power or other means and to sell same; John A. Currie, Frank E. Thatcher, Tom F. Rogers, Ravenna 120,000

Flint North End Groceries Assn., Flint; buying and selling of groceries, meats, flour and other merchandise used in small retail stores; Sam Kotwicki, John Kroslicki, Stanley Niedzielski, Flint 6,000

Harding White Brothers & Ripley, Inc., Muskegon; to engage in general building, contracting and construction work and all matters incidental thereto; J. Frederick Harding, Clifford J. Ripley, Muskegon; Orval C. White, Muskegon Heights 10,000

Lamping Milling Co., Ludington; to manufacture, buy, sell and deal in grain, flour, feeds and grain products, Luman W. Goodenough, Farmington; Harry McRae, Vaughan Kilpatrick, Detroit 10,000

Diebold Safe & Lock Co., (F.) Canton, O., C. F. Walker, Detroit, manager.. 180,000

Auto Inn Building Co., Jackson; erection of building for offices, storage purposes, salesrooms and general repair; Louis C. Watkins, Grass Lake; Rayner Field, Royal W. Conswell, Jackson 50,000

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Bankers Land & Inv	9½	10
Burroughs Adding Machine	140	150
Columbia National Fire	15	17
Commercial Fin.	15	20
Detroit Mortgage, com.	3	3½
Detroit Mortgage, pfd.	5¾	8¾
Detroit Copper & Brass	12	20
Detroit National Fire	25	36
Detroit Life	55	65
Eureka Croesus	85	90
Federal Bakeries Co.	25	30
Federal Discount Co.	7	8
Fisher Body	85	95
General Necessities Corp.	10½	12
Gladys-Belle Oil, com.	27	39
Gladys-Belle, Oil, pfd.	52	54
Great Lakes Engineering, new	11	14
Great Lakes Engineering, old	53	65
Hoover Steel Ball	12	15
Hayes Wheel Co.	13½	14½
Interstate Fire	25	27
Invader Oil	120	135
Invader Oil (new)	70	70
Jackson Cushion Spring	7½	7¾
Jewett, Bigelow & Brooks Units	9½	10
Jewett, Bigelow & Brooks, com.	6½	7½
Kelsey Wheel	48	48
Little Wonder Stove	1¼	1¾
Monroe Binder Board	39	41
Detroit Motor Bus	3	9
McCord Manufacturing, com.	10	10½
McCord Manufacturing, pfd.	40	50
Michigan Copper & Brass	16	17
Mich. Fire & Marine	75	80
Noble Oil, com.	48	50
Petoskey Portland Cement	12	13
Peninsular Fire Ins.	21	30
River Rouge Paper	12	15
Trippensee Mfg. Co.	6¾	7½
Union Mtge. 100% com.	9¾	10½
Union Mtge. 99% com.	7½	8½

Motor Stocks	Bid	Asked
Briscoe Motors	16	18
Columbia Motors	5	5¼
Chalmers	1	2
Chevrolet	185	190
Cole	230	270
Crow Elkhart	55	60
Cleveland	41	45
Curtis Aeroplane	3	5
Durant Motors	20	23
Elgin Motors	5¾	6¼
Haynes	150	175
Hupp	14½	16
Keystone Tire	13¾	14
LaFayette Motors	30	60
Liberty Motors	6½	7½
Liberty Motors, pfd.	40	60
Lee Tire	25½	26½
Locomobile	2	3
Maxwell Motor	5	5½
Mercer	4	5
Mitchell Motor	8	9
Motorbus	4	9
Nash	190	225
Pierce-Arrow Truck	32½	33¼
Republic Truck	17	18
Saxon Motors	4¾	5
Scripps Booth	25	28
Stearns	24	26
Stevens Duryea, units	65	77
Stromberg Carburetor	35	36
Studebaker	76	78
Willys-Overland	7½	8
Wilson Truck	6½	7½

Grand Rapids Stocks

American Public Utilities, Common	7	- 13
American Public Utilities, pfd.	13	- 21
Commonwealth P. H. & L., com.	11	- 12
Commonwealth P. H. & L., pfd.	28	- 32
Citizens Telephone Company	4¾	- 4¾
United Light & Railways, com.	26	- 27½
United Light & Railways, pfd.	59	- 61
Cities Service, Bankers' Shares	27½	- 28
Cities Service, com.	230	- 240
Cities Service, pfd.	66¾	67
Cities Service, Debenture "B"	124	-125
Cities Service, Debenture "C"	92	- 94
Cities Service, Debenture "D"	84	- 86

Quotes by Howe, Snow, Corrigan & Bertles, April 12.

ROBINSON GETS MICHIGAN DISTRICT

E. Robert Robinson, who recently was appointed a national bank examiner, has been assigned to the Michigan district, with headquarters at Grand Rapids. Robinson was connected with the Grand Rapids National City Bank at one time and before receiving his recent appointment was a state bank examiner.



Who Will Divide Your Estate?

Some day your estate will be divided. At that time one of two things will happen.

Either the division will be according to the terms of a will which you have made—

—or the division will be according to state inheritance laws which may or may not fit your family's needs.

It is your duty to your family to make a will now; it is your duty and privilege to name a thoroughly responsible executor in that will.

A trust company is the best executor for—unlike an individual executor, it never dies—never falls sick—never fails from lack of experience.

The Union Trust Company adds its 30 years of experience to the many good points of a trust company as executor.

It will do for your family what it has done for hundreds of others—it will see that the terms of your will are faithfully and effectively carried out.

A phone call or a letter will bring literature which you will find most useful in solving your problems.

Union Trust Company

First trust company in Detroit

Digitized by Google

MANAGED BY MEN YOU KNOW

We Serve Business in Unusual Capacities

There are many unusual calls for the impartial, responsible trusteeship and management of the Grand Rapids Trust Company.

Clubs and organizations employ us as trustee to receive funds and handle accounts. Individuals serving as treasurers of various bodies delegate the responsibility to us. Partnerships being dissolved name us to collect accounts and pay bills.

Parties in dispute and litigants readily agree on the appointment of such a disinterested agency to act in important, confidential capacities.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan
CAPITAL AND SURPLUS, $450,000.

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

A Bank with a Reputation; 70 Years of Service.
THE DETROIT
OLDEST BANK IN MICHIGAN
SAVINGS BANK
Main Office: Washington Blvd. at Grand River
41-47 Fort St. West, Penobscot Building
14 Branches

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED.
(In thousands of dollars)

RESOURCES	Apr. 8, 1921	Apr. 1, 1921	Apr. 9, 1920
Total gold reserves	2,264,010	$2,246,439	$1,957,490
Legal tender notes, silver, etc.	217,824	214,792	129,816
Total reserves	2,481,834	2,461,231	2,087,306
Bills discounted:			
Sec. by U. S. Government obligations	926,021	950,658	1,410,069
All other	1,218,731	1,263,997	957,469
Bills bought in open market	103,607	122,491	422,241
Total bills on hand	2,258,359	2,337,086	2,789,779
U. S. Government bonds	25,347	26,720	26,798
U. S. Victory notes	18	19	68
U. S. certificates of indebtedness	253,678	250,358	339,919
Total earning assets	2,537,402	2,613,183	3,156,564
All other resources	588,356	598,023	824,002
Total resources	5,607,795	5,672,436	6,067,872
LIABILITIES			
Capital paid in	101,226	$ 101,127	91,160
Surplus	202,036	202,036	120,120
Deposits:			
Government deposits	48,053	82,099	8,777
Due to members—reserve account	1,661,938	1,672,402	1,850,960
Other deposits	35,325	34,732	190,606
Total deposits	1,745,316	1,789,233	1,960,342
F. R. notes in actual circulation	2,853,964	2,908,153	3,080,217
F. R. Bank notes in circulation—net liability	167,152	169,772	190,157
Deferred availability items	445,193	467,270	575,412
All other liabilities	52,993	50,855	50,464
Total liabilities	5,607,795	5,672,436	6,067,672
Ratio of total reserves to deposit and F. R. note liabilities combined	53.5%	52.4%	42.3%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against deposit liabilities	64.7%	62.1%	48.6%

*Calculated on basis of net deposits and F. R. notes in circulation.

Banks and Bankers

GORMAN MADE LANSING CASHIER

Frank E. Gorman, state treasurer, who has been connected with the treasury department fourteen years, has been made cashier of the Capital National Bank, Lansing. Mr. Gorman will continue to act as state treasurer during the remainder of his term. Robert V. Speir will continue as vice-president of the bank, with the added title of manager. Albert A. Elsesser, who has been handling the bonds and credit files, and Marshall A. Westfall, auditor, have been named assistant cashiers.

DETROIT GETS GUARANTEED TITLES

Stockholders of the Union Trust Company, Detroit, have organized the Union Title & Guaranty Company, which has acquired the records, equipment and business of the Union Trust Company abstract department. The new company will render a guaranteed abstract and title service to Detroit, a title protection which few cities outside of New York and Chicago now enjoy. The principle of operation is that like insurance. For a small fee the company guarantees title to property and relieves owners of worry about possible loss on account of faulty prior conveyances. The management will be the same as that of the abstract department of the trust company and will be in charge of I. T. Cowles and his assistant, H. D. Hahn.

NEW VAULTS ABOUT COMPLETE

The new vaults which have been in process of construction the last few months for the State Bank of St. Johns are practically complete and shortly will be ready to use. Fifteen tons of steel and 88 barrels of cement were used in the construction and the stronghold is now on a par with many of the larger banks. This improvement is preliminary to a complete remodeling of the bank, which will be completed before fall. Plans call for a new stone front. M. M. Weller is president and F. L. Thome cashier.

PONTIAC CLEARINGS GAIN

For the five days ended April 7 Pontiac bank clearing totaled $368,679.02, a gain of more than $100,000 over the previous week, when totals were $256,856.33.

G. R. RAILWAY EARNINGS

According to the annual report of the Grand Rapids Railway Company, submitted to City Manager Locke, net income for the year ended December 31, 1920, was $147,920.26. Gross earnings were $1,804,293.32, operating expenses $1,338,312.68 and fixed charges $613,050.90. Bills payable were $736,578.23. Reproduction cost is given as $8,382,553, with encumbrances of $3,700,000. The last preferred dividend was declared Novemb.r 1, 1918, and the last common March 1, 1919.

NEW BRITISH TARIFF

According to advices from London Great Britain will soon apply a duty of 33⅓ per cent on scientific instruments, optical glass, hosiery, magnetos, needles, metallic tungsten and synthetic chemicals. And a further duty of 33⅓ per cent may be added to other articles articles offered for sale at prices below cost of production, or at prices which because of currency depreciation are below those at which similar goods can be made.

FISHER OHIO BODY PASSES DIVIDEND

It is reported that action on the preferred dividend on Fisher Ohio body stock has been deferred until such time as the common stockholders of the company have indicated their acceptance or refusal of the Fisher Body Corporation exchange offer. It is stated that about 30,000 of the 40,000 shares of Fisher Ohio Body common required to make the exchange effective have been deposited and that the preferred dividend will be payable just as soon as the exchange becomes effective.

Digitized by Google

Who's Who In Michigan Finance

Harry L. Brimmer, Cashier of the First State Bank of Petoskey

THERE'S something in the atmosphere of the west shore of Michigan that seems to make the younger bank employes get ahead rapidly. The latest addition to the ranks of rising northwestern Michigan bank officials is Harry L. Brimmer, who became cashier of the First State Bank of Petoskey by action of the board of directors at the March meeting.



H. L. BRIMMER

Mr. Brimmer put in six years as accountant to the superintendent of steamships of the Pere Marquette Railway, at Ludington, and went to France with the Eighty-fifth Division in July, 1918, where he served a year. Upon being discharged from the army in the fall of 1919, he joined the First State Bank of Petoskey as commercial teller, which position he held until Chester D. Masters resigned. He was then appointed assistant cashier, and now has been advanced to the cashiership.

The First State Bank of Petoskey has had a splendid growth, as is evidenced by total resources of $937,343.54, February 21, 1921, compared with similar totals of $723,815.99 on February 21, 1918. Capital, surplus and profits were $84,500 and total deposits $849,843.49.

The bank takes pride in its slogan "First bank to incorporate in Emmet county."

Michigan Bond Items

Lansing voters last week passed favorably on the issuance of nearly a million dollars in bonds for sewers, paving and bridge construction, but failed to give the required majority to bonds for a fire station.

The latest issue of Detroit city bonds, bids for which were opened Saturday, April 9, are being offered by the successful bidder, which is a syndicate comprising the following: Guaranty Company, Harris Trust & Savings Bank, E. H. Rollins & Sons, First National Company, National City Company, Bankers Trust Company, Detroit Trust Company and Keane, Higbie & Company. The total issue is $13,573,000 and the bonds are issued in various maturities and at different rates of interest, 5, 5¼, 5½ and 6 per cent. The bonds are issued for bridge, sewer, hospital, park and general improvement purposes. According to the announcement, the net bonded debt with this issue included is less than 3¼ per cent of an assessed valuation of $1,693,007,720, with water debt and sinking funds deducted. The charter of the city provides for a net debt not to exceed 4 per cent. Prices have been set which give purchasers a yield of about 5.75 per cent for the 1922 maturities, running down to 5.20 per cent for the 1941-51 maturities.

Fifty thousand dollars of Michigan highway improvement bonds due in 1925 are being sold by Watling, Lerchen & Company, Detroit. The denominations available are $1,000 and the price is on a 5.80 per cent basis.

A mild stir was created early in the week by the announcement of the Detroit Mortgage Company that for a limited period it would offer its first mortgage real estate bonds at prices to yield the investor 7 per cent. Heretofore 6 per cent has been the ruling rate with the majority of the mortgage companies.

THE OLDEST HOUSE IN MICHIGAN

BONDS—THE SAFEST FORM OF INVESTMENT FOR YOUR SAVINGS—We have a bond secured by a first mortgage on properties worth *six and one-half times* the entire outstanding issue. The yield is 8¾%. Such an investment combines safety with high interest on your money. Descriptive circular on request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIME SAVINGS BANK
FORT E. GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russell
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
16th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Local and Correspondent

Adequately to meet the individual requirements of customers—whether local or out-of-town—is the objective toward which our efforts are invariably directed—and to succeed substantially in this the Dime Savings Bank has for 36 years been especially EQUIPPED TO SERVE.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE APRIL 12th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.			100			6%		Quarterly	Apr. 1, 1921	1½%		3%		$3,000,000
Am. Lt. & Trac. Co., com. XD	89½	89¾	100	114 - 69	204 - 55	6%	4%	Quarterly	Feb. 1, 1921	1½	1¾%	1½	1¾ %	$25,271,900
Do., pfd. XD			100			6%		Quarterly	Feb. 1, 1921	1½%		1¾%		$14,286,700
Auto Body Co.	7¾	7¾	10	8½ - 4¼	12½ - 8¼			Quarterly	Jan. 20, 1917		25%			$1,074,000
Do., pfd.			10	10 - 10	10½ - 10½	0%		Semi-Ann	Feb. 1, 1921	3%		6%		$527,600
Bower Roller Bearing Co.			10	17¾ - 17	29¾ - 16				July 1, 1920	10%				$666,000
Charcoal Iron Co. of America, com.	2		10	3½ - 2	3½ - 1¾				Apr. 1, 1919	2%				$2,879,350
Do., pfd.	23½		10	25 - 23½	25 - 23½				July 1, 1919	3%				$3,217,350
Cities Service Co., com.	238	248	100		365 - 230½	*8%		Monthly	Apr. 1, 1921	1½%	1¼%	2%	5%	$42,877,899
Do., pfd.	66½	67¾	100		70 - 65	9%	1	Monthly	Apr. 1, 1921	1½		2%		$76,528,499
Cookville Lead & Zinc Co.			1	16 - 12¾	20 - 11½				Nov. 1, 1917	10%				$300,000
Columbia Sugar	11¾		10	14½ - 10¾	20¾ - 11¾	12%		Quarterly	Apr. 1, 1921	2%		5%		$3,000,000
Commerce Motor Car Co.		10	10	12 - 6¼	18 - 6¼				July 1, 1920	10%				$500,000
Com. Pw. Ry. & Light Co., com.			100	16 - 12¾	45½ - 10½				Nov. 1, 1917	1%				$18,585,900
Do., pfd.			100	36 - 34	72 - 23	16%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,583,000
Continental Motor Co., com.	6¾	6¾	10	7¾ - 6¾	14½ - 8¾				Dec. 20, 1920	1%				$7,396,369
Do., pfd., XD	81	84	100	100½ - 93	100½ - 93	7%		Quarterly	Jan. 15, 1921	1¾%		1¾%		$2,151,700
Detroit Iron & Malleable Works	90		100	98 - 88	96 - 93	6%		Monthly	Apr. 1, 1921	½%		2%		
Detroit & Cleveland Navigation Co.	70	75	50	75¾ - 71	105 - 67	8%		Quarterly	Apr. 1, 1921	2		4½%		$6,038,000
Detroit Creamery Co.	20½		10	23¼ - 20½	38¾ - 10	8%		Quarterly	Apr. 1, 1921	2½%		5½%		$1,600,000
Detroit Edison Co., XD	96	96½	100	98 - 92½	114 - 93¾	8%		Quarterly	Jan. 15, 1921	2		2%		$27,665,200
Detroit Forged Co.			100			8%		Quarterly	Mar. 1, 1921	2%				$15,000,000
Edmunds & Jones, com.			None	14¾ - 9¾	34 - 9¾	$2.00		Quarterly	Jan. 1, 1921	50c		50c		$ 40,000 sha
Do., pfd.			10	27 - 18	78 - 78	7%		Quarterly	Jan. 1, 1921	1¾%		3½%		$843,200
Federal Truck	21½	23	10	22¾ - 18	82 - 16¾				Jan. 1, 1921	1½		1½		$2,000,000
Ford Motor Co. of Canada	277	279	100	290 - 217	460 - 250	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.			10	13½ - 10¼	28 - 11	Varies		As Decl'd	Oct. 1, 1920		8%			$1,952,760
General Motors			10	18 - 12¾	42 - 12¾	$1.00		Quarterly	Feb. 1, 1921	25c		25c		20,465,300 sha
Godchaux Sugar, com.			None		59¾ - 39½									170,000 sha
Do., pfd.			100			7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$4,800,000
Hanna Furnace, com.		27	10	26 - 23										$1,895,000
Do., pfd.			100			8%		Quarterly	Mar. 15, 1921	2%		2%		$750,000
Hall Lamp Co.		13¾	10	13 - 12¼	32½ - 16	Varies		As Decl'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	23½		10	25 - 23½	34¾ - 23½	Varies		As Decl'd	Feb. 1, 1921	1½%				$1,200,000
Holland-St. Louis Sugar Co.			10	10 - 7	19½ - 7¾				Oct. 15, 1920	0%				$2,000,000
Iron Silver Mining Co.	20	60	10		25 - 6				July	2c		2c		$2,000,000
B. B. Kresge, com.	134	145	100	96¾ - 96¾	151 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$10,000,000
Do., pfd.			100			6%		Quarterly	Apr. 1, 1921	1½%		3½%		$2,000,000
Linderman Steel, com.			10	24¼ - 15¼	24¼ - 15¼	6%		Quarterly	Apr. 1, 1921	30c		60c		$1,068,000
Lincoln Motors, Class A	18	18¾	10	21¾ - 17¼	50¾ - 15¾				July 20, 1920	$1.20				$750,000
Mexican Crude Rubber Co.	6		10	9¾ - 6¾	13¾ - 9¾				Dec. 1, 1914	3%				$750,000
Michigan Drop Forge, com.			10		30 - 15	$3.00		Monthly	Apr. 1, 1921	25c		$1.00		$ 12,500 sha
Do., pfd.			10		90 - 90	7%		Quarterly	Apr. 1, 1921	1¾%		2½%		$250,000
Michigan Stamping Co., com.	17	18¾	10	18½ - 17¾	30 - 16¾	6%		Monthly	Mar. 25, 1921	1½%		3¾%		$1,300,000
Michigan Sugar Co., com.	7½	8	10	8¾ - 6¾	13¾ - 6¾			Quarterly	Mar. 25, 1921	1½		1½		$7,471,100
Do., pfd.	8	8¾	10	8¾ - 8	9¾ - 9¼	10%		Quarterly	Dec. 15, 1920	1½%				$3,793,700
Mobile-Detroit Theater Co.	10	16½	10	16 - 10	21 - 10	*10%			Jan. 10, 1921	1½		5%		$350,000
Motor Products	42	44	None	43 - 37½	60¾ - 37¼				Feb. 2, 1921	$1.25		$1.25		1,100,000 sha
Motor Wheel	10¾	10¾	10	11¾ - 8½	13¾ - 8½	*8%		Quarterly	Mar. 25, 1921	2%				$4,945,949
Murray Mfg.			10		23 - 23				Oct. 1920	1%		3%		$733,450
National Grocer Co.,	7¼	7½	100	8¼ - 7¼	12¾ - 7¼	*8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.			100		157 - 90	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Chas. F. Noble Oil & Gas Co., pfd. XD	108	110	100	1 - 26-1 00	1 - 00 - 105	*18%		Quarterly	Mar. 22, 1921	4½%		4½%		$1,000,000
Packard Motor Co., com.	10¾	10¾	10	12 - 9¾	28¾ - 9½				Oct. 31, 1920	2½%				$11,886,100
Do., pfd.		72¾	100	75 - 70½	97 - 70½	7%		Quarterly	Mar. 10, 1921	1¾%		1¾%		$15,295,500
Paige-Detroit Motor Car Co.		22½	10	23¼ - 12	45½ - 12			Monthly	Dec. 10, 1920	1%				$2,000,000
Parke, Davis & Co.		87½	25	90¾ - 87½	112½ - 93	*16%		Quarterly	Apr. 1, 1921	4%		8%		$11,841,918
Penberthy Injector, pfd.		98	100			8%		Quarterly	Apr. 1, 1921	2%		4%		$500,000
Reo Motor Car	21½	22	10	23¾ - 17¾	20½ - 16¾	10%		Quarterly	Apr. 1, 1921	2½%		2½%		$5,297,250
Scotten-Dillon Co.	16½	18	10	21 - 18¾	35 - 29	8%		Quarterly	Jan. 3, 1921	2%	50%	2%	50 %	$1,500,000
Timken Axle, com.	30¾	31¼	10	34¾ - 26¾	52¾ - 26	12%		Bi-Month	Jan. 10, 1921	2%		2%		$3,000,000
Do., pfd.			100		93½ - 84	7%			Mar. 1, 1921	1¾%		1¾%		$5,000,000
True-Con. Steel Co., com. XD			100	28½ - 19	29¾ - 9¾	10%		Quarterly	Jan. 15, 1921	2½%		4%		$1,450,250
Do., pfd.			10	9¾ - 9¾	9¾ - 9¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,822,200
U. S. Radiator, com.			100		31 - 20									$4,000,000
Do., pfd.	80	90	100		95¾ - 80	7%			Jan. 25, 1921	1¾%		7%		$1,000,000
Waring Hat Co., com.			None											
Do., pfd.			100			8%		Quarterly	Apr. 1, 1921	2%		4%		
Western Knitting Mills	14	15	None	11 - 8½	30¾ - 8½				Nov. 25, 1920	50c				$ 140,650 sha
White Star Line		35	50		23¾ - 17½				Aug. 23, 1920	3½%				$750,000
Wolverine Portland Cement Co.		3¾	10	3 - 2	5¼ - 2¼				Dec. 18, 1917	1%				$1,000,000

*Old 500-570: new 63¼-27 $7% in 1911, 7% in 1920, only dividends since organized. †Extra dividend. ‡Scrip. ‖Book value, $959,400, Ed. A. J. ¶Book value, $3,219,327, Godchaux. Book value, $2,377,504 00. Western Knitting Mills. Book value $5,084,450. Motor Products. ‖Old. ‡Taken from other exchanges

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 1, 1921	Apr. 12, 1921
Canada		99	99	8909
London	4.8655	3.6275	3.8500	3.9100
Switzerland	.1930	.1829	.1802	.1738
Paris	.1930	.0598	.0706	.0710
Belgium	.1930	.0625	.0743	.0724
Holland	.4016	.3162	.3375	.3460
Italy	.1930	.03465	.0266	.0460
Greece	.1930	.0762	.0735	.0735
Spain	.1930	.1328	.1393	.1399
Austria	.2026	.0023	.0024	.0030
Berlin	.23821	.01315	.0158	.1625
Denmark	.2680	.1795	.1910	.1815
Norway	.2682	.1795	.1860	.1810
Sweden	.2682	.2045	.2190	.2250

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Apr. 12, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	90.10	82.80	90.00	91.06	89.20	99.78	99.84	99.88
U. S. Liberty 1st 4s	87.40	85.60	85.32	85.80	83.00	94.80	98.00	94.12
U. S. Liberty 2nd 4s	87.44	86.20	84.10	85.00	81.58	93.84	93.04	94.10
U. S. Liberty 1st 4½s	87.78	86.26	85.50	85.18	82.46	98.14	98.50	....
U. S. Liberty 2nd 4½s	87.82	86.86	84.34	85.00	80.20	94.08	98.70	....
U. S. Liberty 3rd 4½s	90.76	90.04	87.20	85.22	81.68	94.10	94.44	....
U. S. Liberty 4th 4½s	87.70	86.46	84.96	85.56	99.75	100.10	....	....
Victory Bonds, 4½s	97.56	96.68	94.90	98.50	94.00	99.08	98.88	98.32

Digitized by Google

Lansing Stocks.

	Bid	Asked
Auto Body Co.	7½	8½
Auto Body, pfd.	7½	8
Duplex Truck Co.	6½	6¾
Bates & Edmonds Motor Co.		15
Motor Wheel Corp.	9⅞	10¼
First Bond & Mortgage Co.		35
Michigan Motorcycle Co.	9	10
Michigan Screw Co. (ex. stock div.).	13	28
Lansing Co.	38	42
Atlas Drop Forge Co.	34½	36
Federal Forge Co.	8¾	10½
Novo Engine	23	26
Barker & Fowler	8½	10½

Quotes by O. M. Murchey & Co., April 12.

D. U. R. COMPARATIVE STATEMENT

	Dec. 31, 1920	Dec. 31, 1919
Land, buildings, plant, equipment (see Detail No. 1)	$61,333,728.63	$61,379,411.20
Ontario Hydro-Elec. bonds, net	1,230,000.00	
Sandwich, Windsor & Amherstburg Rail-way bonds	110,000.00	
Land sales contract	200,285.00	
Ins. Reserve fund	154,058.92	91,003.26
Inventories of materials and supplies on hand	2,423,583.45	1,396,249.08
Accounts receivable	273,129.31	66,547.15
Government bonds	315,000.00	340,000.00
Cash	662,657.54	527,133.84
Total current	$ 1,153,386.85	$ 393,710.99
Deferred charges	108,935.31	48,935.31
Capital stock	$67,017,376.17	$63,828,309.83
Bonds and debentures (See Detail No. 2)	$15,000,000.00	$15,000,000.00
Deferred maintenance payment on real estate purchased	35,526,500.00	35,767,500.00
Notes payable	437,800.67	449,039.53
Accounts payable	4,543,652.98	400,000.00
Accrued pay roll	586,335.70	585,842.50
Accounts payable	1,994,304.11	1,068,280.64
Accrued interest on bonds	197,527.07	229,322.90
Unclaimed dividends	165.00	165.00
Unredeemed tickets	312,799.37	295,271.10
Accrued expenses, taxes, etc.	110,770.53	96,770.53
Unredeemed bonds	5,000.00	*3,644.13
Provision for Federal taxes	150,000.00	200,000.00
Total current	$ 7,873,055.03	$ 3,878,197.90
Reserves for contingencies	$ 491,312.40	$ 548,745.18
Reserves for injuries and damages	825,745.30	364,739.54
Reserve for insurance	237,027.07	213,517.62
Reserve for bond discount	100,860.02	94,077.08
Reserve for discount on Hydro-Elec. bonds	307,193.39	
Total reserves	$ 1,962,139.57	$ 1,518,079.42
Surplus (See Detail No. 3)	3,257,732.37	6,223,492.93
	$37,017,278.17	$63,828,309.83

*Account interest on floating debt.

Detail No. 1—Cost of Properties

Land, buildings, plant, etc., Jan. 1, 1920		$69,140,638.52
Less sale of S. W. & A. Ry.		1,742,329.49
		$67,398,309.03
Add capital exp. during 1920		2,618,443.92
		$70,014,158.95
Less reserve for depreciation and renewals—		
Balance Jan. 1, 1920	$7,761,227	
Charged to operation	419,200	
Charged to income	200,000	
		8,380,427.32
Balance Dec. 31, 1920		$61,633,726.63

Detail No. 2—Bonded Debt

D. U. R. 4½ bonds due Jan. 1, 1932, out	$14,555,000.00
Underlying U. K. bonds	2,905,000.00
Underlying subsidiary bonds	8,676,500.00
D. U. R. 7% notes due April 1, 1923	4,490,000.00
	$33,536,500.00

Detail No. 3—Surplus Account

Balance surplus, Jan. 1, 1920	$ 8,226,492.93
Net income for 1920	1,233,576.19
	$ 9,460,033.12
Less dividends	$1,200,000
Discount on sec. sold	2,285 1,202,285.45
Balance Dec. 31, 1920	$ 3,257,782.37

PACKARD REDUCES INVENTORY

The balance sheet published in connection with the offering of $10,000,000 Packard ten-year 8 per cent notes presents an interesting comparison with the balance sheet of August 31, 1920. Quick assets on February 28 were $36,254,000 against current liabilities of $13,464,000 and inasmuch as it is stated that the proceeds of the notes will go to redtice bank loans, the new financing will not materially change this relation. In comparing this statement with that of August 31, 1920, there will be noted a decrease in surplus account of $2,640,000 which is accounted for by a reduction in the inventory account of $2,500,000. On the other hand plant account has been increased about $2,600,000. The balance sheet follows:

ASSETS

Current—	Feb. 28, '21	Aug. 31, '20
Inventories, less reserve	$24,276,263	$29,369,227
Cash	5,844,323	4,314,809
Accounts and notes	6,134,497	6,234,917
	$36,254,986	$39,909,054
Plant	$24,546,000	$21,936,423
Incompleted development	390,211	
Patents, etc.	1	
Securities and investments	432,375	297,635
Deferred charges	231,010	703,257
	$61,966,883	$62,803,276

LIABILITIES

Current—		
Accounts payable	$ 536,890	$ 4,087,549
Accrued & matured interest	1,811,133	2,334,465
Notes payable, banks, etc.	10,800,000	5,000,000
Customers' deposits and miscellaneous	316,021	
Reserve for depreciation	$13,464,072	$12,442,004
Common stock	$ 3,712,805	$ 2,500,000
Preferred stock	14,789,800	15,233,500
Surplus	31,117,323	30,787,772
	$61,966,803	$62,803,276

*Book value $26,776,263, less $2,500,000 set aside for depreciation.

†Includes miscellaneous liabilities.

BANKERS' CONVENTION DATE SET

The thirty-fifth annual convention of the Michigan Bankers Association will be held Monday and Tuesday, June 6 and 7, 1921 at the Hotel Statler, Detroit. Secretary Brown advises that the convention days will enable delegates who arrive on Saturday and Sunday a splendid opportunity for sight-seeing and recreation, and that the ladies are cordially invited. Every bank officer and director is eligible.

McGILL JOINS MT. CLEMENS SAVINGS

H. J. McGill, Port Huron, for the last two years a state bank examiner, has become cashier of the Citizens Savings Bank of Mount Clemens. W. H. Flory, heretofore cashier, is advanced to a vice-presidency.

KALAHAR GOES TO HARBOR BEACH

B. A. Kalahar, formerly of Frederick, where he was cashier of the Frederick Bank of Dismore & Kalahar, has become cashier of the State Bank of Harbor Beach. For the last eighteen months he has been a state bank examiner. Roy Bricker, formerly cashier of the State Bank of Harbor Beach, has removed to another city to take a bank position, but the details are not available at this time.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric		3
Economy Baler Co., com.		10½
King Trailer Co., pfd.		3
Hoover Steel Ball, com.	14½	15½
Mich. Milling Co., com.		7½
Motor Products Co., com.	42	44
Prod. Foundries, com.	2½	3
C. A. Sauer Co.	8	9

Quotes by Langley, Hildner & Co., April 12.

NOTE—No Change in Detroit Stocks

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.	19	25
American Box Board, pfd.	9½	10
Bardeen	17	18½
Bryant	18¼	18⅝
Eddy, com.	46	47
Eddy, pfd.	9⅜	10
Hawthorne	12	12¾
Kalamazoo, new	20	22
Parchment, stock	12½	13¼
Parchment, rights		2¼
King	18¼	19⅛
Leo units	152	160
Mac Sim Bar	13	13⅝
Michigan	17½	18½
Monarch	13½	14
Rex	18	18¾
Northern Michigan Pulp	100	120
Standard	29½	30
Sutherland	9⅜	10¼
Walervliet	19½	20½
Western Board		20½
Banks		
First National	236	
Home Savings	170	180
Kalamazoo City Savings	190	200
Kalamazoo National	150	152
Miscellaneous		
Barley Motor, com.	25	50
Farley Motor, pfd.		35
Hayes Wheel	14	16
Kazoo Loose Leaf	14	15
Kazoo Corset		10½
Utah-Idaho Sugar	6	7½
Kalamazoo Sanitary Mfg.		10¼
Limousine Body	10	12

Quotes by Olmsted & Mulhall, April 12.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,362,994	$121,493,204
January 13	90,172,447	130,337,009
January 19	101,336,982	131,341,007
January 26	79,015,607	97,941,653
February 2	97,996,926	91,772,332
February 9	73,606,423	101,609,306
February 16	70,021,933	101,393,770
February 23	87,711,034	137,787,671
March 2	38,235,592	137,093,364
March 9	75,762,352	118,677,867
March 15	96,836,483	133,175,052
March 22	80,136,495	148,937,653
March 29	69,091,371	118,461,985
April 6	78,155,971	104,306,331
April 13	83,631,367	126,981,307
Month of		
January	389,430,333	467,221,370
February	302,641,333	438,246,303
March	377,676,840	570,426,229
April		540,576,940
May		484,286,859
June		686,703,267
July		522,634,146
August		532,389,986
September		521,532,923
October		516,426,750
November		466,033,440
December		453,991,245
Yearly totals, 1920		$6,103,373,903
Yearly totals, 1919		$4,694,333,153

Detroit Listed Bonds

Sales During Week

Det. Edison Debs., 1936, $1,000 at 96.
Det. Edison Debs., 1981, $3,000 at 102¼, $2,000 at 102⅝, $500 at $102⅝.
Det. Edison 5s, 1940, $5,000 at 89¼.
D. C. Gas G. M., 1923, $1,000 at 90.

THE BABY TYPEWRITER STAND

SAVES SPACE and TIME

$6.50 F.O.B. DETROIT



A strong, well-built Stand, five-ply oak, veneered top. Will last a lifetime. Easy to move about Suitable for small office and home use.

Write for free local offer.

Auto Parts Mfg. Co.
1321 Trombly Ave.
Detroit, Mich.

Digitized by Google

Miscellaneous Finance

SUPERIOR STEEL EARNINGS

The Superior Steel Company reports earnings of $857,320 in 1920, after deductions for charges, sinking fund and federal taxes. The balance after providing for dividends on the first and second preferred stocks was equal to $8.92 a share on the 60,000 shares of common stock, compared with $7.90 in 1919.

STUTZ COMPANY BALANCE

The Stutz Motor Company's balance sheet December 31 shows total assets of $8,032,522 and surplus of $5,404,414, compared with total assets of $7,404,352 and surplus of $5,772,958 on December 31, 1919.

MOTOR PRODUCTS DIVIDEND

The Motor Products Company, Detroit, has declared a quarterly dividend of $1.25 a share on the capital stock payable May 1 to owners of record April 20.

PENNSYLVANIA RAILROAD INCOME

Gross revenues of the Pennsylvania Railroad Company in February were $37,506,974, an increase of $2,729,512 or 7.8 per cent compares with the similar month of last year. Net operating deficit after deduction of expenses was $2,577,081, a decrease of $7,651,839 or 74.8 per cent compared with February, 1920.

LANSING CREDIT MEN ORGANIZING

A credit association is being organized in Lansing to be affiliated with the National Association of Credit Men, and a $10,000 stock company is under way in this connection. It is expected that this stock will all be subscribed within a week, when a meeting of the stockholders will be held and officers elected. The credit association will be under the management of six executive committee, which will retain a paid manager and assistants.

DISTRIBUTING MAPS

Fenton, Davis & Boyle, Detroit bond dealers, are distributing a useful Rand-McNally map of Michigan which carries their striking slogan: "An excellence of service in a business of better bonds."

P. M. STOCKHOLDERS INCREASED

Owners of common stock of the Pere Marquette Railway on January 1, numbered 2,860, against 2,853 a year ago and 1,920 on January 1, 1919.

GRATON & KNIGHT ANNUAL STATEMENT

ASSETS	Dec. 31, 1920
Factory, plants, real estate, buildings, equipment, less reserve for depreciation	$ 4,353,606.91
Investment in stocks and bonds of other companies	349,526.89
Cash on hand, in banks*	$1,571,215.40
Accounts and notes rec.	*1,803,124.92
Manufactured products*	12,299,242.80
Govt. bonds at market	8,845.94
	15,682,429.06
Redemption funds on deposit for gold notes	4,040.00
Treasury stock at cost (1,355 common, 35 preferred)	105,125.00
Prepaid insurance, interest, taxes, etc.	162,460.34
	$20,655,188.20

LIABILITIES	
Preferred stock	$ 6,802,400.00
Common stock	2,000,000.00
Gold notes (see Contra)	4,040.00
Capital of constituent companies not owned including proportion of surplus	53,521.34
Notes and accts. payable and accrued liabilities	7,759,996.08
Reserves	198,358.16
Surplus after allowances for adjustment of plant values	3,929,862.62
	$20,655,188.20

Note: *Cash and accounts receivable include amounts owing from foreign fires and balances shown are after allowances for loss due to exchange.

*Manufactured products, etc., are at cost or market, whichever lower, and are carried in the statement at $2,299,721 less than cost values as shown by company's records.

President W. M. Spaulding says in part: "Without entering into a discussion of the many diversified causes of the stagnation in the business, it is sufficient to state that we have rounded out the year with the sales of this corporation by far the best in its history, with the single exception of our war contract period in 1918, and ended the year in strong financial position. It is gratifying to note that irrespective of the large depreciation in inventories, net decrease in surplus, after payment of dividends of $790,028, is only $1,302,212.15. January, 1921, has shown considerable improvement over December and February and March up to date a still further improvement."

Graton & Knight are one of the foremost manufacturers of belts and other leather products in the United States, and control the following subsidiary companies: Graton & Knight Inc., Atlanta, Ga.; Graton & Knight Mfg. of Wisconsin; same of California; same of Texas; Belting & Leather Products Association, New York; Bickford & Francis Belting Co., Buffalo, N. Y.; Bradford Belting Co., Cincinnati, O.; Canadian Graton & Knight, Ltd., Montreal; William Coupe Corporation, South Attleboro, Mass.; Dickey Belting Company, Lewiston, Maine; Graton & Knight, Ltd., London, Eng.; E. B. Ladew Company, Inc., New York; New York Leather Belting Company; Shultz Belting Co., St. Louis, and United States Oil & Supply Co., Providence, R. I.

CITY TO PROVIDE JOBS

By using double shifts on the re-surfacing work to be started May 1, Detroit will be able to employ about 2,500 men. The construction of Municipal Railway lines will employ another 2,500.

Purchasing Agents' Association of Detroit, recognizes that business confidences should not be violated, and never permits this at any meeting.

Publicity Office 10 Garfield Building Glendale 8319

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Recent Dividends

Company	Rate	Stock of Record	Payable
American Cigar, com.	2% Q	May 2	April 15
American Light & Traction, com.	1¾ Q cash	May 2	April 12
American Light & Traction, com.	1¾ Q stock	May 2	April 12
American Light & Traction, pfd.	1¾% Q	May 2	April 12
American Gas & Electric, pfd.	1¾% Q	May 2	April 16
American Shipbuilding, com.	1¾% Q cash	May 2	April 15
American Shipbuilding, com.	2½% extra cash	May 2	April 15
American Shipbuilding, pfd.	1¾% Q cash	May 2	April 15
Central States Finance Corp.	4% s. a.	May 2	April 1
Chicago Pneumatic Tool, com.	2% Q	April 25	April 15
Crucible Steel, com.	2%	April 30	April 15
General Motors, com.	25 cents Q	May 2	April 15
General Motors, pfd.	$1.50 Q	May 2	April 15
Gen'l Motors, 7% deb.	$1.50 Q	May 2	April 15
General Motors, 7% deb.	$1.75 Q	May 2	April 15
Hupp Motor Car Corp., com.	2½% Q	May 2	April 15
International Nickel, pfd.	$1.50 Q	May 2	April 18
Kelsey Wheel, pfd.	1¾% Q	May 2	April 21
Kelley-Springfield, com.	3% Q stock	May 2	April 15
Kelley Springfield, 8% pfd.	$2.00 Q	May 16	May 2
Miami Copper	50 cents Q	May 2	April 16
Middle Westn Utilities, pfd.	$2.00 Q	May 2	April 16
Middle West Utilities, pfd.	$1.50 Q	May 14	April 30
Penn Marquette, prior pfd.	1¾% Q	May 2	April 14
Stewart-Warner	50 cents Q	April 20	.....
Truscon Steel, pfd.	1¾ Q	April 15	April 5
Truscon Steel, com.	50% stock extra	April 15	April 5
United States Rubber, com.	$2.00 Q	April 30	April 15
United States Rubber, pfd.	$2.00 Q	April 30	April 15

The Kelly-Springfield Tire Company has omitted the regular quarterly cash dividend on the common stock, but has declared the other regular dividends.

The Northern Pump Tool Company has passed action on the common stock dividend due at this time.

The United States Smelting, Refining & Mining Company has passed the quarterly dividend on the common.

Directors of the Punta Alegre Sugar Company have reduced the quarterly dividend from $7 to $1.75 a share.

The American Beet Sugar Company has passed the dividend on the common stock, making the following announcement:

"The high figure paid to the farmers for beets, based as per contract upon the average ruling prices for sugar during the year has been the greatest factor in augmenting the cost of the sugar produced, resulting in a slight profit only for the year ending March 31, 1921. The financial condition of the company is thoroughly sound."

The Midvale Steel & Ordnance Company has passed its quarterly dividend of 75 cents a share.

The Crucible Steel Company of America has declared a dividend of 2 per cent on the common stock, to be paid from undivided profits.

Public Utilities

Grand Rapids—The State Supreme Court has issued an order requiring the Michigan Public Utilities Commission to show cause why it will not undertake to fix gas rates in this city. The commission refused to act on the petition of the citizens and its position was approved by the attorney-general of the state. The franchise under which the company was operating has expired and the Grand Rapids Gas Light Company has increased its rates to $1.50 on its own authority.

Detroit—The Michigan Manufacturers' Association has gone on record as favoring the Osborn bill, which would put all the state utilities under the control of the Michigan Public Utilities Commission, Detroit being the one exception. By this move it is hoped to pave the way for rate increases needed to make the utilities going concerns.

Lansing—The Michigan Public Utilities Commission has reduced the telephone rates for hotels 15 per cent. The Commission when it took charge found that many hotels obtained unusually low rates and increased them 125 per cent. Protests resulted in the present cuts.

Digitized by Google

SOLD TO NET 7%

Clayton & Lambert Mfg. Company
Detroit, Mich.

$550,000.00

First Mortgage Six Per Cent Bonds

Security: First Mortgage on land, buildings, machinery and equipment, the value of which is more than twice the amount of the loan.

Maturities: Three to ten years.

Income Tax: Mortgagor agrees to pay not to exceed 4% of the Federal Income Tax.

Denominations: $100, $500, $1,000.

Price: To yield 7% from date of delivery with accrued interest.

AMERICAN LOAN AND TRUST COMPANY

Griswold and Larned Streets Detroit, Mich.

Built by Thrift

The success of an organization formed solely to render service, is best measured by the degree to which that service is used.

The following table of premiums received by the Michigan Mutual in each of the nine years since its organization, is a graphic story of the ever-growing confidence of the insurance buyers of Michigan in the ability of this company to serve its members better, and for less money than any other insurance organization in the state.

Premiums by years

1913	$92,990
1913	$149,414
1914	$187,240
1915	$235,657
1916	$435,571
1919	$756,197
1918	$1,109,815
1919	$1,492,739
1920	$2,340,544

Let us show you how to put YOUR insurance on a thrift basis. Write NOW—today. A postal will do.

Michigan Mutual Liability Company

Real Estate Exchange Building
Detroit Michigan
Home Office: Cherry 3525 Grand Rapids: Lawyers' and Mortgage Bldg. Telephone: Cadillac 2470

Growing Two Bonds Where One Grew Before

(*Continued from Page 8*)

slumped no doubt there is much of it left and they are putting their money into remittances back home, hoarding much of it and entrusting much of it to their countrymen who run private banking enterprises. And no niggardly amount is going into real estate and blue sky investments. Why not open a branch office in Hastings street or Gratiot avenue in charge of a foreigner but assisted by one of your own boys? The banks invaded this field successfully and the banks and the foreigners themselves are both better off by the arrangement.

Moreover, Detroit has an annual crop of newcomers, many of whom, judging by some of the letters received in our office, have never been solicited to buy bonds. To get into touch with these people I would suggest getting information from the moving van people, from church pastors, from lodges and clubs and college alumni associations. There is never a time when a newcomer to town is so easily approached as upon his arrival.

It strikes me also that the bond men could combine for the purpose of spreading investment propaganda. Nearly every modern line of business keeps a constant stream of advice, education and invitation running to prospects whom it considers may become ultimate customers. I would like to see more ground floor offices, without screen and curtains which give one a feeling that he is passing a morgue, and the business popularized so that people will know as much about bond houses as drug stores.

But no consideration of the future bond market can be discussed very satisfactorily without going to some extent into the general business outlook. I think we all agree that the growth of any bond house depends on a steady increase in the aggregate of liquid wealth in the country, and it is difficult right at present to see any considerable increase in the conversion of property wealth into money wealth notwithstanding the enormous surplus of property wealth now in the hands of the American public. Exchange of goods for goods makes for prosperity but does not make business for the seller of securities. Dr. Lichtenstein, of the First National Bank of Chicago, has figured the surplus of crops, ores, goods and commodities of all kinds produced by this nation to be about $8,000,000,000 more than our normal consumptive power, and if some means could be devised to put this surplus into the hands of purchasers outside of the United States, it undoubtedly would add to the prosperity of the nation and incidentally help the bond business.

Now the suggestion I have to offer in this matter may not strike everyone as practicable but when one is miles from town an finds himself running out of gasoline he will entertain many suggestions that would not be considered if he were standing in front of a filling station, and the substance is as follows: Why could not the Investment Bankers' Association act as a medium through which the surplus goods and crops of this country could be exchanged for long-time notes of desirable foreign purchasers? If a farmer's surplus has to go to waste he might much better exchange it for a one, two or three note of a purchaser in France, even though the latter is a poor risk at present. And a factory with piles of goods lying in stock might likewise dispose of part of its unsaleable surplus. Eventually the notes of the French purchaser will be paid and at that time the holders on this side will have money for investment. And if the bond dealer is the chief factor in turning unsaleable goods into money, it strikes me that he will have made a customer of the holder of the notes.

With some refinements in the process, this exchange of our surplus goods for long-time notes of the foreigner is precisely what the new $100,000,000 foreign trade bank proposes to do.

Looking further into such a proposal I can see prospects of a broad market for the notes so taken in exchange for goods. In the event of cheaper money and the creation of such a market you as a bond dealer could go, for instance, to a farmer who has taken such notes and trade him some of your own issues. The manufacturers who have obtained such paper in exchange for their surplus goods are certain to let them go as soon as a market appears.

But the crowning advantage of the successful working out of the plan is the favorable effect on the business of the United States. Just picture in your minds, if you will, the energizing effect on both parties to the transaction if some giant over night could remove from our granaries and our warehouses all our surplus goods and place them in the hands of the foreigners who so badly need them. It seems easy to picture the revival of business over there, the return of confidence and the widespread employment, which a loan of such goods might result in in Europe, where-

Digitized by Google

FOR the first time in the financial history of Michigan a Bond House of the magnitude of this Corporation offers First Mortgage Bonds at a price to net 7%.

We feel that this is the best investment offering ever made in Michigan. You may now purchase a serial Gold Bond—a unit of a direct closed First Mortgage secured two to one by Detroit improved property—to produce 7%.

These bonds have been selling on a 6% basis.

Considering the collateral security, the tax exemption features, and the unqualified guaranty of this $7,000,000 Corporation—we feel justified in stating that at 7% these bonds are unexcelled.

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. R. Dunham, Representative.

COURTESY
SERVICE
SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN



WAKE UP!!
IT'S TIME TO BUILD

"Build for the ages with UNITED supplies"

UNITED FUEL & SUPPLY CO.
BUILDING SUPPLIES & COAL

as on this side of the Atlantic we would have occasion to commence in earnest the production of another surplus to send over next year, and sell largely for cash.

It seems certain, on the other hand, that unless this nation does accomplish the exchange of its surplus property wealth for some form of money wealth, within another crop year we shall be as poor as regards liquid wealth as the man who is "land poor." We shall in fact be property poor, which means an entirely different form of living, and there is not one man in ten who is willing to go back to that age when we were broken up into small units, taking from the land merely what we needed to clothe and feed ourselves, and paying little or no attention to exporting a surplus. That system does not spell growth in bond sales or much growth in anything but in the number of small farms which would be necessary to preserve the equilibrium between producer and consumer.

But after summing up all the suggestions offered in this dissertation there is one method of increasing business which is always applicable to your problem, and that plan involves a liberal use of the product of two of America's foremost manufacturers: Fleischman's yeast and O'Sullivan's rubber heels.

Boring Mill Operation

(*Continued from Page 8*)

been roughed is being reamed under a second set of spindles at 4 thus finishing the cylinder bore.

There are similar multiple spindle boring machines for machining the openings for the valves. In this case there are two spindles for each cylinder, so making a pretty busy machine.

Choosing Your Boring Machine

The boring mill and the boring machine have never been cheap machines and never will be. They have a long life if properly cared for and the good ones are exceedingly accurate.

Unless the moderate sized shop is one working on standard stuff in quantity, it is ordinarily poor judgment to have more than one of the same size. If there is already in the shop one of those versatile large machines, even if it does not have all of the most modern features, the machine to install is a small high production machine. Similarly, if there are a series of small high production machines with occasional work which is so large as to strain them, the installation of a larger, more versatile machine is indicated.

The modern machines have been very carefully elaborated. They have made provision for getting the utmost out of the modern tool steels and by the addition of further heads, turrets, or by making them available for other kinds of work, have largely increased their productive capacity.

It is possible to buy the simple machine, with but few attachments and a comparatively limited range of work, or very highly specialized machines. Some have been manufactured for many years. Others have been put out recently. It will pay to inquire carefully among users to find out how well machines in customers' hands are doing and what their drawbacks are before purchasing, because they cost much money and they earn dividends only when producing.

When purchasing a horizonal boring machine for making jigs it is essential to select the most accurate, rigidly made, long lived one that can be bought. The percentage difference in cost will not be very great and will soon be made up by savings in tool room manufacturing and assembly time.

Digitized by Google

Motor Car Price Situation

(Continued from Page 4)

tice of making other than market values on used cars.

"In your letter you quote that a number of automobile dealers, when asked their opinion regarding price reduction, stated that this did not bring more business. I am sure that most dealers have confronted the same class of people that we have, and I am willing to go on record as saying that price reduction will certainly increase business.

"The public are looking for it and the sooner this adjustment is made the quicker the confidence of the people will be established. I do not wish to be misunderstood, however, and will explain that I do not believe that any one or two or three manufacturers, in establishing their prices, would have effect, but I do believe that if all manufacturers who have not already readjusted their price list would do this, there is no question in my mind what results would be very beneficial."

H. Krohn, vice-president, sales division, Paige-Detroit Motor Car Company, Detroit—"It would seem to the writer that everything depends upon the demand and the sale of motor cars.

"Conditions are improving and if they continue to improve and motor car manufacturers are doing a fair business it would be ridiculous, regardless of the possibilities of reduction, to cut prices, because they are well aware of the fact, and they had a good sample last fall, that the public does not buy on a falling market.

"There is, of course, always a likelihood of some manufacturer, because his own particular condition isn't satisfactory, getting excited and making a cut, believing that will stimulate his business. I do not think that holds good with the old line, large representative manufacturers, but rather with the smaller manufacturers who are not thoroughly organized."

R. E. Gardner, Jr., vice-president for sales, Gardner Motor Company, St. Louis, Mo.—"We are one of the companies that reduced their price last October, making a cut of $100. This reduction was in no way justified, as since that time we have been doing business at less than cost. We figured, however, that in a reconstruction period it is necessary for everyone to take their loss one time or another. We decided to take ours at once and have it over with. Our high priced inventory has now been absorbed and we are working on lower priced stuff.

"I think probably those companies that did not reduce their price but guaranteed it instead until June or July, will make some reductions. The ones that have already reduced, I do not believe can hope to make further reductions during 1921.

"I do not believe that the price reductions this summer will bring any more business, even to those making the reduction, and I feel quite sure it will unsettle the entire situation again and will do more harm than good.

"From our standpoint, we would much rather have all prices remain at their present status until late in the fall or early spring. We know, as far as we are concerned, there will be no change in our present price for this year, unless some very unusual circumstance, which cannot be foreseen at this time, should occur.

"We find our business increasing every day—particularly in the northern and eastern sections and along the western coast. This quarter will be a distinct improvement over the last quarter of 1920, and from present indications the second quarter of this year should develop business double that of the first."

S. A. Dwight, Grand Rapids, distributor for the Auburn and Crow-Elkhart passenger cars and Tower trucks—"Relative to price reduction of automobiles, will say that I do not think this would be a wise move at this particular time. Of course the cars that I am handling have already been reduced. Business always seems to be poor on a declining market. Think that the prices should have been reduced on many of the makes some time ago, but, of course, this is my personal opinion only."

H. R. Williams, general manager, M. A. Young, Detroit, distributor for the Peerless and Chandler—"We believe it would be impossible for any of the automobile manufacturers to reduce the price of their product at this time. The demand for more cars is increasing daily, and we believe the period of depression is over.

"Most manufacturers have reduced their prices during the depression and have stood considerable loss by so doing. They would therefore be unable to reduce the prices further at this time. It would not stimulate buying, but rather hold the conservative buyer up until prices are settled.

"We believe the automobile manufacturers appreciate these circumstances and do not consider further price reduction for some time."

W. J. Doughty, Detroit, distributor for the Franklin—"Regarding the price on automobiles being reduced, can only speak from our particular product and the way things have worked out with us.

"Beginning last fall, there was an undoubted buying depression. The H. H. Franklin Manufacturing Company took measures to counteract it. The principal thing was price reduction and an extensive selling campaign to spur the sales force throughout the United States on to better efforts.

"This action increased sales from about sixteen cars a day in the United States until at the present time they are building fifty cars a day at the factory and are about 1,500 cars behind on orders. They are loading cars that are exactly three hours old, which shows you how close the sales are to production.

"Ninety per cent of prospective purchasers of automobiles to whom our salesmen talk are of the opinion that prices are too high. I personally agree with them that the prices of most automobiles are entirely too high, and think that a general reduction in price would be beneficial to automobile sales."

E. T. Strong, general sales manager, Buick Motor Company, Flint—"No revision in the prices of the 1921 Buick models is warranted and, furthermore, we see no possibility of a price revision during the life of the present selling agreements with our trade. This announcement is based entirely on manufacturing conditions as they exist today and are likely to continue to exist during the current season.

"Buick cars have never been built to a price. We have never attempted to learn what a certain class of motorists would pay for a car and then to supply that car at a profit. Rather we have endeavored to build a car that would meet the average discriminating buyer's need for dependable, comfortable, economical transportation and to arrange prices in strict accordance with the most careful analysis of production costs.

"We are still maintaining the contracts we made for the delivery of raw material, which we know to be of the quality specified last fall. We have broken no contracts in order to take the chance of buying cheaper material at lower prices.

"In other words, there has been practically no reduction in the cost of manufacturing Buick cars. And no reduction can be made

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor
Penobscot Bldg.

Phones
Cherry 8640

We solicit your inquiries

Motor Stocks

Wm. A. Neer & Co.

Members Detroit Stock Exchange

CHERRY 6788

The Photo-craft

1262 GRISWOLD ST.

GROUND FLOOR NEXT TO FRIEDBERG'S

Commercial Photographs, Portrait

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

Digitized by Google

WINTON SIX



Uncommon

On city streets and country roads Winton Six cars are not so many as to be common and not so few as to be lonesome. Built exclusively for those who demand and recognize a superiority that is thoro and convincing, the Winton Six is one of those highly desirable cars that make life more enjoyable. May we show you? Simply telephone.

THE GEO. H. ZUVER CO.
4465 Cass Ave.
Telephone Glendale 4095

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

without the danger of jeopardizing the quality of manufacture, and, therefore, the quality of serviceability."

R. R. O'Hearn, director of sales, Crow-Elkhart Motor Corporation, Elkhart, ind.—"On September 24, 1920, we reduced the prices of all our models $200 and guaranteed these prices indefinitely. We are unable to speak for the manufacturers who maintained their former prices and guaranteed them against decline until May, June or July. In all probability those manufacturers will have to make a reduction at the expiration of their guarantee in order successfully to meet competition.

"As far as the material situation is concerned, we do not believe that this actually has much effect upon automobile price reductions. For the most part automobile manufacturers have simply been obliged to take a loss on cars sold at reduced prices and those familiar with conditions will honestly tell you that there has been no great reduction in the cost of materials.

"In the interest of good business it would seem very inconsistent for any publisher to advocate future price reductions in any commodity, when a united effort is being made to stimulate buying generally. We agree with you that a price reduction is not warranted. Any manufacturer who does so must take his losses the same as we have and it would seem to us that the automobile editor of any publication who releases this sort of "propaganda" certainly does not have the best interests of the automobile industry and good business at heart."

Taking the Salt Water Out of the Seamen's Act

(*Continued from Page 6*)

more than nines hours, in the fireroom as well as on deck.

Section 13 was changed to provide that certificated lifeboat men could be used in lieu of able seamen.

This change would make it possible for lake shipmasters to have members of their crews certificated as experienced and competent life boat men and eliminate the necessity of hiring additional men merely to wait for an emergency requiring ship abandonment, because they could not be used in ship management. Certificated lifeboat men need only to be physically qualified, able to understand orders and competent to handle either lifeboats or rafts. The port inspectors would be able to pass upon these men, of whom there are any number along the lakes who are not able seamen, but are as much at home in and on boats as they are upon land.

The amendment for Section 14, in effect, would lengthen the lake season by increasing the dates from May 1 to October 15. If it were not for the law, lake boats would be running as early as May 1 and as late as October 15, especially for the benefit of hay fever patients who visit certain lake localities late in the summer; for summer colonists who prefer to remain at their summer homes or resorts longer in the season, and for shippers of fruits and other food products who need the boats most after harvests.

It would qualify certificated life boat men for boats and rafts and make unnecessary the equipment of boats with 100 per cent lifeboat and raft facilities where these boats do not run more than ten miles offshore and where the depth of water would not be great enough to cover all the decks of the boats subject to the amendment. It would allow the vessels to carry boats or rafts for fifty per cent of the passenger and crew list and allow two-fifths of this equipment to be lifeboats and three-fifths rafts. Another clause provides that a licensed officer may be assigned to lifeboat or raft

(*Continued on Page 34*)

Digitized by Google

DOEHLER

DIE-CASTING CO.

WORLD'S LARGEST PRODUCERS

OF

DIE-CASTINGS

TIN, LEAD, ZINC, ALUMINUM - ALLOYS, OO-DI BRASS.

EASTERN PLANT	CENTRAL PLANT	WESTERN PLANT
BROOKLYN N.Y.	TOLEDO O.	CHICAGO ILL.
COURT, 9TH & HUNTINGTON STS.	SMEAD & PROSPECT AVES.	COTTAGE GROVE AVE & 97TH ST

Machinery and Power Equipment

Our Aim is to Render Service

COMPLETE EQUIPMENT

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Plants, Wood - working Plants, Repair Shops, Heat Treating Iron and Metal Foundries.

At this time we have on hand for immediate delivery the following desirable machine tools:

1 only No. 0-4″ bar Betts Horizontal Boring Mill—used.
1 only 5″ x 16 Barrett Horizontal Cylinder Boring Mill—used.
1 only 60″ Bickford Vertical Boring Mill—used.
Springfield Special Axle Tube Boring and Reaming Lathes.
Springfield Special Deep Hole Horizontal Boring Lathes.

We recommend for your kind consideration Lambert Horizontal S. P. D. Precision Boring Mills with the perfect control. Rogers Vertical Boring Mill. Bickford Vertical Boring Mills.
May we send you a catalog?

Better get a detailed copy of our latest stock list.

We buy, trade, sell or exchange only High Grade Equipment.
We have the proper facilities to serve you right—therefore trade with us and save money.

Riverside Machinery Depot

251 ST. AUBIN AVE. *Phone Edgewood* 1581-82-83-84

Digitized by Google

(Continued from Page 32)

instead of an able seaman or a certificated life boat man.

After October 15 and until May 1 boats operating more than three miles off shore are required to carry a full complement of lifeboats and rafts for all passengers and crew, according to another provision of the proposed amendment to Section 14.

The plan of appealing to the state legislatures of the lake country for moral assistance through the adoption of resolutions protesting against the three sections of the law was offered by State Representative Milton It. Palmer, Detroit, who spoke at the last session of the conference on Saturday. Those legislatures now in session will be asked to adopt the resolutions drafted by a committee consisting of Capt. F. W. Fletcher, L. G. Macomber, H. E. Huntington, W. H. Croshy, H. C. Gardner, W. G. Norvell and J. E. Davidson. This committee also submitted the amendments.

In the absence of John A. Russell, president of the Board of Commerce, who is Ill, R. A. McLean, chairman of the Inland Waterways Committee, presided at the conference, and Tom L. Munger was secretary.

The resolution as adopted follows:

"Be it resolved by the House of Representatives of the State of Michigan, the Senate concurring, as follows:

"The existing laws of the United States governing the operation of vessels and the employment of seamen and others thereon, are in many respects unreasonable and constitute a great hardship upon many of the citizens of our state in the and laws put vessels plying the Great Lakes and their connecting waiters under the same control as vessels plying the high seas.

"These laws so far as they apply to vessels plying the Great Lakes and their connecting waters are too drastic and have caused discontinuance of ships and lines in many places. The most hurtful provisions of the law as they exist are:

"(a) They give officers of vessels too little authority over their men in face of danger.

"(b) Vessels plying upon short runs and along-shore runs are unnecessarily required to operate under the three-watch system.

"(c) The operating season is artificially shortened and should be lengthened to include at least from May 1 to October 15.

"(d) Unnecessary men are required upon many vessels adding to the expense of operation with the consequent advances in freight and passenger rates.

"(e) Even in emergency qualified officers of vessels may not take the place of able seamen. "We call upon Congress to reform the laws as applying to the operation of vessels upon the Great Lakes and their connecting waters so as to relieve the public from the effects of these and other hardships. This should be done immediately so as to bring relief during the present season."

Coal Mining Industry Suffering Severe Slump

Production of coal throughout the country continues to decrease. Every week in March showed a recession from the preceding week, and when compared with the corresponding weeks in 1920, the difference is as much as one third in some cases. Production of bituminous in March was as follows: Week of March 26, 6,412,000 tons; March 19, 6,506,000 tons; March 12, 6,800,000 tons; March 5, 7,278,000 tons. A year ago in March the average weekly output was more than 10,000,000 tons. However, notwithstanding the steady decrease, tabulations of operations for the coal year to the end of the week of March 26, show quite a large increase over 1920, the total being 517,-701,000 tons, as compared with 479,542,000.

Conditions are the same with anthracite. During the week of March 26 the production totaled 1,564,000 tons; the week of March 19 showed an output of 1,687,000 tons; for the week of March 12, 1,926,000 tons, and for March 5, 1,922,000 tons.

Carloads shipped from the mines show corresponding weekly decreases. Bituminous shipments totaled 118,880 carloads during the last week of March, or 1,200 less than the previous week, 7,500 less than the week of March 12 and 14,000 carloads less than the first week of last month. Anthracite shipments totaled 29,902 carloads, or 7,000 less than the record for the first week of March.

COON-DEVISSER MOVES

The Coon-DeVisser Company, Detroit, has moved into its new headquarters at 1772 West Lafayette boulevard. As during the last eleven years, the company will continue to handle a complete line of mechanical equipment, including Taylor stokers, Ball engines, Ashton valves, Buffalo fans and pumps, Carrier air washers, cooling towers, Hoppes heaters and meters, Illinois vacuum systems and steam specialties, Kewanee heating boilers, Copes regulators, Patterson-Kelley closed heaters, Richardson-Phenix fitters, lubricators and Mc Kut valves, Tycos recording thermometers, Uehling recorders, Vulcan soot cleaners, Ellison draft gauges and General Electric flow meters. In addition, the company maintains a supply department which carries in stock a large supply of standard goods.

A Taylor stoker service station, which will supply parts for Michigan has been organized. The officers of the company are: Thurlow E. Coon, president; J. H. DeVisser, vice-president, and treasurer; H. P. Wilder, vice-president and manager of engine, pump and heater department; H. H. Hughson, vice-president and manager of heating and ventilating department; A. W. Conklin, vice-president and manager of fuel saving apparatus department; F. H. Field, secretary and assistant treasurer and manager of supply department. The company now has twenty persons in its organization.

DETROIT LIFE INSURANCE SHOWING

The record of the Detroit Life Insurance Company apparently indicates no diminution in the demand of the people of Michigan for life insurance. This company wrote $7,053,000 of paid-for business last year. The record of written business for the first quarter of the present year is $2,457,470. Compared with the first quarter of 1920, this shows an increase of $230,000. Net paid-for business in the first quarter of the present year was $1,-480,139; for the March month, $742,133.

The record for the month of March was $1,-025,000. The company, while it is operating exclusively in Michigan, is producing such remarkable results in new business as to attract interest and attention in international life insurance circles. Total business in force April 1 was $22,741,303.

MONROE MERGER MAY 5

The plans of consolidation of the Boehme & Rauch Company and the Monroe Binder Board Company, both of Monroe, have been approved by the stockholders of these concerns, and the actual transfer of stock to the new corporation will effected May 5, at which time directors and officers will be elected. The consolidated interests will represent about 500 tons of paper board production daily all of which will be manufactured into folding paper boxes, fibre and corrugated shipping containers and other specialities; the new company being the largest of its kind in the United States.

Bill to Fix Interurban Rates Passed By Legislature

A bill giving the Michigan Public Utilities Commission power to fix rates on interurban lines, these rates to be based upon the valuation of the property and lines, where no franchises take precedence, has been passed by the House. It was introduced by Representative Andrew Glaspie, and the vote was 79 to 11. Until there has been an appraisal and audit of the property and books of companies affected, the bill allows the commission to fix temporary rates based upon earnings per mile.

The main purpose of the bill was to rewrite the Smith law passed in 1919, which permitted interurban lines to charge rates as prescribed by the law regardless of existing franchises. The State Supreme Court upheld the law and the Detroit United Railway was permitted to fix its rates notwithstanding the terms of certain franchises. The hill provided for single track as the basis for rates. Representative John Stevens, Detroit, offered an amendment to incinde double track, bnt it was lost. Representative William Hnan, Grand Rapids, attempted to kill the bill on the grounds that the people in his section were more interested in adequate service than lower fares.

The rates of fare to be in force until the valuations have been decided follow:

A flat rate of one cent for all distances of five miles or less, and for all distances in excess of five miles, the following, based on gross passenger and freight earnings of the lines in 1920: lines earning $16,000 a mile or more, one and one-half cent per mile, lines earnings $12,-000, two cents per mile, those making $8,000, two and one-half cents per mile, and all under $8,000, three cents per mile.

ENGINEERS CHOOSING DELEGATES

Seven delegates representing the Michigan Engineering Society will be appointed at a meeting in Lansing today to attend the American Association of Engineers' annual convention at Buffalo, May 10-12. The meeting will be held at the office of the Lansing city engineer, Otto C. Eckert, at 1:30 p. m. Those from Detroit who will attend are Patrick W. Keating, consulting engineer; Everitt M. Bangham, divisional engineer for the Pere Marquette Railway, and Clarence W. Hubbel, Detroit city engineer. The state chapter has several thousand members.

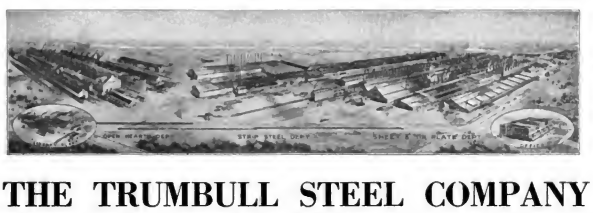


1903-4 MAJESTIC BLDG. DETROIT, MICH.

PACKARD BORROWS $10,000,000

The Packard Motor Car Company, Detroit, has sold an issue of $10,000,000 of 8 per cent 10-year debentures to a New York banking syndicate consisting of the Guaranty Company, National City Company and Montgomery & Company.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

New Corporations

FOR WEEK ENDED APRIL 8, 1921

Allenel Hotel & Sanitarium, Mt. Clemens ..... $ 100,000
Nunica State Bank, Nunica 20,000
National Share Co., Detroit 1,000
Munger Power & Light Co., Munger ... 8,000
Grand River Brookline Co., Detroit 750,000
Trudell Fisheries Co., Tawas City 30,000
Attwood Brass Works, 742 Front Ave. N. W., Grand Rapids 100,000
Mud Creek Thresher Co., Bay Port 5,000
Grand Ledge Lumber Co., Grand Ledge
Frischkorn Construction Co. (F.) (Del.), Wilmington, Del., Detroit 26,000
Howland Battery Co., Detroit 25,000
Hecla Iron Works (F.) (N. Y.), Brooklyn, N. Y., Detroit 700,000
Morse Chain Co. (F.) (N. Y.), Ithaca, N. Y., Detroit 1,500,000
Ravenna-Conklin Electric Light & Power Co., Ravenna 120,000
Flint North End Grocers' Ass'n, 3217 St. Johns St., Flint 6,000
Detroit Auto Pueller Co., Detroit 20,000
Sperlich & Uhlig Co., Detroit 300,000
Caverley Iron Works, 597 Beaufait St., Detroit 25,000
Robt. Stephenson Land Co. (F.) (Wis.), Milwaukee, Wis., Menominee 400
Rexford Harvey Trading Corp. (F.) (Del.), Wilmington, Del., Detroit 1,000,000
American Contracting Co. (F.) (Del.), Milwaukee, Wis., Ludington 500,000
Island Lake Improvement Co., 1721 Dime Bank Bldg., Detroit 50,000
Harding, White Brothers & Ripley, Inc., Muskegon Heights 10,000
Ludington Milling Co., Ludington 10,000
Central Billiard Parlor, Muskegon 30,000
Diebold Safe & Lock Co. (F.) (Ohio), Canton, O., Detroit 600,000
Consolidated Land & Investment Co. (F.) (Wis.), Marinette, Wis., Menominee 10,000
W. L. Reid Hardware Co., Detroit 25,000
Detroit Thread Co., Inc., 482 Canton Ave., Detroit 10,000
Truphe Tire Co., 17260 Globe Ave., Detroit 75,000

CHANGES OF NAME

Tennyson Home Builders, Inc. (name changed to Commercial Bond and Mortgage Co.), Detroit ..... $ 50,000
Heystek & Canfield Co. (name changed to Henry J. Heystek Co.), Grand Rapids 50,000
First National Co. (name changed to First National Co. of Detroit), Detroit 1,000,000
Prohibition Drug Co. (name changed to Peoples Drug Co.), Detroit 25,000

INCREASES

Rockwood Silica Co., Rockwood, from $250,000 to 375,000
F. Bissell Co. (F.), Toledo, O., Detroit, from $250,000 to 325,000
Art Metal Construction Co. (F.) (Mass.), Jamestown, N. Y., Detroit, from $1,457,120 to 6,000,000
Chinese Tea Garden, Detroit, from $6,000 to 50,000
David J. Joseph Co. (F.) (O.), Cincinnati, O., Detroit, from $500,000 to 750,000
Evart Mfg. Co., Evart, from $50,000 to.. 75,000
American Construction & Realty Co., Detroit, from $10,000 to 40,000
Michigan Canned Food Co., Detroit, from $200,000 to 1,000,000
Wolverine Glass Co., Saginaw, from $125,000 to 250,000
Frank M. Paul Co., Detroit, from $75,000 to 300,000
Lincoln Electric Co. (F.), Cleveland, O., Detroit, from $200,000 to $9,000 shs. com. n. p. v. and 73% shs. pref. st. p. v. $100.
Atlas Sales Corporation (name changed to Dempster Tool Corporation), Detroit, from $30,000 to 500,000
A. H. Perfect & Co. (F.) (Ind.), Fort Wayne, Ind., Burgis, from $200,000 to 500,000

DECREASES

William M. Finck & Co., Detroit, from $1,800,000 to 360,000

NOTICES OF CHANGES OF ATTITUDE

Pettibone-Wilson, Howell 15,000
Trout Chemical Co., Cadillac 250,000
Oxford Varnish & Paint Co., Detroit .. 25,000
D. L. Seymour & Co., Detroit 5,000
Peninsular Lumber Co., Benton Harbor 30,000
Woodward Tire and Repair Co., Detroit 75,000
V. & T. Pie Co., Detroit 5,000

NOTICES OF DISSOLUTION

Ludington Milling Co., Ludington..... 10,000
Dunbar Stone Co., River Rouge..... 1,000

NOTICES OF WITHDRAWAL

Farquhar Furnace Co. (F.), Wilmington, Del., Detroit 200,000
Fred F. Field Service Co. (F.) (O.), Cleveland, O., Detroit 10,000
Dalton Spice Co., Ltd. (F.) (Ont.), Toronto, Ont., Detroit 600,000
Rathbone Sard & Co. (F.), Albany, N. Y., Detroit 1,200,000
Thompson Estate Co. (F.) (Ohio), Troy, O., Saginaw 50,000

CREDIT MEN'S CONVENTION

The twenty-sixth annual convention of the National Association of Credit Men will be held in San Francisco, June 14 to 17, under the auspices of the credit men of northern California, who are organized with about 1,000 members. Attendance will be between 1,500 and 2,000, according to advance hotel reservations, according to F. S. Jeffries, secretary-manager of the San Francisco association. Among requests received are 150 from New York, forty from Chicago, fifty from Cleveland, twenty each from Detroit and Pittsburgh, and twenty from New Orleans. Entertainment plans include a trip on San Francisco bay and an ascent of Mt. Tamalpais.

SENATOR TOWNSEND'S BILL

Senator Townsend, Michigan, sponsoring a bill designed to keep the market price of Liberty bonds at par by providing an automatic increased or lowered interest rate every six months.

PENINSULAR CASTINGS BANKRUPTCY

The bankruptcy case of the Peninsular Steel Castings Company, pending since November, 1914, will be closed at a meeting of the creditors with the Security Trust Company, trustee, April 18. Estimates are that 50 cents on the dollar will be paid on claims.

Digitized by Google

Stampings and Plumbers Supplies

PROMPT SHIPMENTS
ACCURACY B RELIABILITY

The Bettcher Stamping & Mfg. Co.
CLEVELAND, OHIO

Detroit Office:
The H. B. Kendal Company
1404-5 Real Estate Exchange Building

WHEN IT'S ABOUT BUSINESS

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

PUBLISHES IT FIRST

Five Dollars a Year Issued Weekly

Changing Over to Electricity

(*Continued from Page 9*)

inated. The furnaces are self-pouring, which removes another labor item. The company uses revolving mold tables on which the bar or billet molds are set, and into these the metal can be poured with no labor except that which controls the operations of the furnace and the turning of the mold tables.

The company is satisfied that the furnace will produce a higher grade of metal than has been possible with the crucible process. The tight sealing of the furnace and its rocking motion, which constantly mixes the metal and washes the furnace lining, reduces oxidization to a minimum, through which arises the claim of less than 1 per cent metal loss. The elimination of smoke and fumes is a factor not to be overlooked.

The construction of this new mill permits of progressive operations, producing greater efficiency. Bars and billets leaving the casting shop move into the first bay of the manufacturing building, where every operation is electrically controlled. In the three bays of this building are three of the five-ton Shaw electric cranes, one to each bay, which do the handling rapidly and easily. Bar stock coming into the first bay is trimmed at the chopper and cleaned at the slitter. Both of these machines are driven by small motors. Subsequent operations are a succession of rollings and straightening processes with electrically-driven machinery.

The motors used in this building range from 700 horsepower down to 150 horsepower and less. Four of the rolling units in the center bay have two rolls to a unit. Two of these units are driven by 20 horsepower motors, one by a 250-horsepower and another by a 300-horsepower motor. The 22-30 breakdown roller, the first operation through which the bars pass after leaving the chopper and slitter, is driven by a 700-horsepower motor, and breaks the bars down from 1¼ inches to 5-16 of an inch. Other roller units in this building have 400 and 500-horsepower motors. Metal bars passed progressively through these rollers can be rolled down to .001 inch. In this building also are four double oil-burning annealing furnaces. The central power plant is rated at 5,000 kilowatt hours.

Bars and billets from the casting ship pass through the outside bay, return back through the middle bay and continue through the outer bay, at the end of which the completed product is packed and carted away from the loading docks, either by motor truck or train. The construction of this rolling mill required also the construction of a concrete dock, 250 feet long and 50 feet wide, considered by the company as the best dock in Detroit. It may have some utility value in the future, but its construction was necessary mainly because the new mill is built upon piling.

Reducing the Working Force

In the brass sheet and strip mill alone the working force necessary under former conditions has been reduced 25 per cent. At normal production the number of men necessary in this mill will not exceed 300. The increased power and speed of the machines will permit of a greater production with correspondingly lower loss in material.

Prior to the construction of the brass sheet and strip mill the tube mill was the newest of the buildings. In this mill are located the various machines that convert solid brass billets into tubing of various lengths and diameters in one operation. Motors of varying horsepower have been applied to all the machines from the piercers to the scalpers and straightenners. The piercer is driven by a 150-horsepower motor. A three-ton electric crane does the most of the handling.

There remains but the rod and copper mills to be electrified. Installations are in progress now, and when completed the entire plant of the Detroit Copper & Brass Rolling Mills will be on a par with any similar production unit in the country so far as modern facilities are concerned. Although present business conditions might not justify any such expenditure of money, that the company is spending thousands of dollars at this time is evidence of its confidence in the future industrial welfare of the country and its realization that success in the field will depend largely upon strict economy accomplished by the use of the most modern machinery and power facilities.

MERCIER SUES DETROIT ON CONTRACT

John A. Mercier, who had the contract to make excavations for the Charlevoix and Buchanan lines of the municipal railway in Detroit, has sued the city for breach of contract, claiming heavy losses when the city took the contract away from him in order to save $200,000 by doing the work itself. Mr. Mercier's injunction to prevent the city from doing the work was denied in Circuit Court.

RAIL BROTHERHOOD GETS ARBITRATOR

Judge Patrick J. O'Brien, Houghton, sitting in Wayne County Circuit Court, Detroit, has been appointed arbitrator in the fight between the officials of the United Brotherhood of Maintenance of Way Employes and Railway Shop Laborers and two ousted directors, Alex under M. Everett, Sebastopol, Cal. and John Hull, Rock Island, Ill. They were turned out on charges of misconduct. Judge O'Brien will act as arbitrator until the annual meeting of the grand lodge in October, 1922.

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

IN STOCK IN LANSING

Immediate Delivery

Kalman Deformed Square and Round Reinforcing Bars.

Self Sentering, Ribplex, Diamond Mesh and Herringbone Metal Lath.

Cold Rolled Furring Channels.

Bayley-Springfield Ventilated Steel Sash.

* * * * *

Our Engineering Service Department will detail your concrete work, cut and bend bars, make complete shop drawings of the reinforcing steel, and advise generally with your Architect or Construction Superintendent. We specialize on materials for non-inflammable construction such as WeiSteel Toilet Room Partitions, Duplex or Ideal Steel Column Caps and Bases, Steel Joist Hangers, Pressed Steel Joists for light load construction, Sidewalk Vault Lights, Wiremesh Metal Corner Bead, Concrete Road Reinforcing, Metal Picture Mould and Base, Face Brick, Hollow Tile, Brixment, Steel Cores for Concrete Floor Construction, etc.

THE BRIGGS COMPANY

Flint Lansing Grand Rapids Detroit

American Broaching Machines & Tools



MADE IN TWO TYPES, EITHER OPERATED BY SCREW OR RACK

American Broach & Machine Co.

F. J. LAPOINTE, Pres.

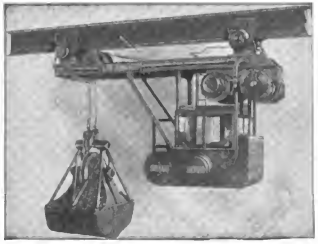
Ann Arbor, Michigan

DETROIT, OFFICE:

305 Scherer Bldg. Phone Cadillac 5381

Digitized by Google

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163 CAD. 6164

New Rauch & Lang Plant Unit Is In Production

The first unit of the new plant of Rauch & Lang, Inc., Chicopee Falls, Mass., makers of the Raulang electric passenger cars, has been completed. Production is being increased steadily and the concern expects to make and sell 400 vehicles during the remainder of this year and is preparing already for doubling the output in 1922.

Plant unit No. 1 is a one-story brick, sawtooth type structure, 300 by 320 feet in dimensions, and with nearly 100,000 square feet of floor space. The plant equipment is like the factory itself—of the most modern type.

Although the present company was incorporated only a little more than a year ago—in January, 1920, with a capital stock of $5,000,000—the business is more than three-quarters of a century old, being the outgrowth of or the successor to the Rauch & Lang Carriage Company's business. It was more than 20 years ago that Mr. Lang began making electrics.

The officials of the firm are: Paul A. Frank, president; Harry H. Doering, vice-president in charge of sales and advertising; Nathaniel Platt, vice-president in charge of exports and of the New York branch; N. W. Stanley, general manager; E. I. Ruskchief, engineer; P. D. Le Veness, director of purchases and service. Mr. Frank was successively with C. P. Kimball Company and the Woods Motor Vehicle Company, Chicago; Anderson Electric Car Company, Detroit, and the Magnetic Motors Corporation, Chicago. Mr. Doering has been with the Gramm-Bernstein Motor Truck Company and Ohio Electric Car Company. Mr. Platt has been connected with the selling of electric vehicles for the last 15 years, mostly in New York. Mr. Stanley has been identified with the Owen Magnetic Motor Car Company, Biddle Motor Car Company, General Electric Company and other well known firms. Mr. Rusk was formerly chief engineer with the Flat Motor Car Company, American Locomotive Company and Owen Magnetic Motor Car Company.

RALSTON-NOLAN BILL FIGHT

With the opening of Washington headquarters the Committee of Manufacturers and Merchants on Taxation will begin its campaign for the Ralston-Nolan land tax bill, which would put a tax of 1 per cent on all land valued at more than $10,000. It is claimed this measure will relieve 25 per cent of the taxation on business enterprises and raise a billion dollars in revenue.

DETROIT ENGINEERS GET AWARD

L. P. and J. A. Smith, Detroit contractors, have been awarded $119,000 for extra work in dredging the Detroit River by the United States Supreme Court, affirming the decision of the United States Court of Claims.

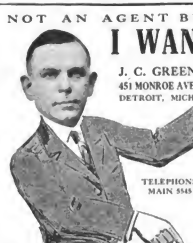
FLOORING MILLS FOR U. P.

Through the purchase of 172,000 acres of timber land in the Upper Peninsula by Godfrey Von Platon, Von Platon Fox Lumber Company, flooring mills will eventually be established at Iron Mountain and contiguous points for the manufacture of lumber products. Cut-over lands will be sold for agricultural purposes at moderate prices, the company announces.

INJUSTICE TO NEWTON TOOL WORKS

The Newton Machine Tool Works, Inc., Philadelphia, advises this publication that its name should have been included on the list of slotter manufacturers, published in the issue of April 2, inconjunction with the article headed: "Planers, Shapers and Slotters." The eastern concern also make crank planing machines.

NOT AN AGENT BUT A MANUFACTURER
I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.
TELEPHONE MAIN 5545

MAY I SERVE YOU?

CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES
Production Machine Work
PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS

SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $500,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

GENERAL LIBRARY
APR 23 1921

APR 25 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

PATENT OFFICE LIBRARY
WASHINGTON, D. C.



Fifteen Cents a Copy

Five Dollars a Year

Rail Rates and Commodity Prices
Yankee Business in Wooden Shoes
Michigan's Electrical Equipment Industry
The U. S. Army and Good Roads

[Financial Section Starts on Page 28]

DETROIT, APRIL 23, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 17*

LONG
COOLING SYSTEMS

The Recognized Standard for Tractors, Trucks and Motor Cars

Submit Your Radiation Problems to Us



Every Long Cooling System is scientifically adapted to the engine which it serves, thereby assuring maximum Cooling efficiency. Illustration is a design recently created for the Brockway Motor Truck Company, Cortland, New York.

WHETHER used on Motor Cars, Trucks or Tractors, Long Cooling Systems assure continuous service uninterrupted by any radiation trouble.

19 Years Experience

devoted to the engineering, manufacturing and perfecting of the most efficient Cooling System of automotive radiation has developed an organization and facilities that permit the highest quality of work, immense quantity production, and results to meet the requirements of the largest and most exacting manufacturers.

The success of the Long Cooling Systems is attested by their widespread adoption in the automotive industry.

LONG MANUFACTURING CO., DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Rail Rates and Commodity Prices

Some Figures Showing Relationship Between the Two; Views Expressed by Chairman E. E. Clark, of the I. C. C.

By JULIUS PARMELEE
Director, Bureau of Railway Economics, New York

HAS the cost of transportation to the users of the railways increased in greater ratio than other production costs, has it remained stationary, or relatively has it declined?

The inquiry is pertinent at any time, and especially so when, as at present, the whole fabric of railway expenses and charges is being closely scrutinized; the question of wage levels is now before the Railroad Labor Board, and analysis of the effect of increased railway rates is constantly carried on by the Interstate Commerce Commission.

The reasons why there is so much interest in railway rates at present, and in their effect on and relation to production costs and general prices, are two:

First, economic conditions are in process of post-war liquidation, and the effect of every factor on all other factors becomes of relatively greater importance than usual.

Secondly, the increased rates instituted by the Interstate Commerce Commission in August, 1920, became effective almost the same time that prices commenced to decline, a decline that has been maintained virtually without interruption to the present moment.

Prices were at their peak in the months of May and June, 1920, and the present decline started in July.

What Determines Rates?

Before taking up the question of the relative position of railway rates, it may be noted in passing that what determines the level of freight and passenger rates is not primarily their relation to other economic factors (although the relation cannot wholly be ignored) but the financial needs of the railways.

Of necessity, if the United States is to have an adequate and efficient transportation system, the public must pay for their transportation service such rates as will meet the cost of the service plus a reasonable return on the investment. Only so can the service be continued efficiently and satisfactorily. If under these conditions transportation rates should at any time become relatively a greater proportion of the cost of production, then the economic structure must be adjusted to such greater proportion, for without adequate rates the transportation system would break down, and with its break-down all economic processes would go to ruin.

As a matter of fact, transportation rates did not assume a relatively greater weight among the cost factors in production until recently. Till November, 1920, rates occupied a relatively lower position than before the war, and for the greater part of the time a very much lower position.

In showing the facts underlying this statement, the calendar year 1916 will be taken as the base year, and later data will be related to the averages for that year. The year 1919 is selected as the base year because that was the last complete year prior to the entry of the United States into the war.

The average receipts per ton mile in 1916 were the lowest ever recorded. This being so, the increase in any subsequent year will be greater than if the comparison was made against any other year; that is, selection of 1916 weights the scale against the railway rates, and makes it by so much the harder to prove either that rates have gone up at a relatively lower rate than prices, or that they have increased at a greater rate, but only slightly greater.

The lower the points from which a given increase is measured the greater the increase will be, and the higher the percentage of the increase, because computed on a lower base as divisor.

Comparison is here made of the increase in freight rates (stated in terms of average receipts, or prices, per ton mile) from 1916 to the latest data for which statistics are available, and the increase in the average wholesale price (indicating the values of freight cargoes) of 327 commodities, as determined by the Bureau of Labor Statistics of the United States Department of Labor. These are official statistics, the large number of commodities included makes it sure that the basis of measurement is broad and representative, and the several commodities are averaged together in proportion to their relative importance.

Beginning with the year 1916, the changes in average receipts per ton mile and in the index number (or relative average price) of all commodities have been as follows:

Year or month	Average receipts per ton mile—cents	Index number of wholesale prices
1916	.707	124
1917	.715	176
1918	.849	196
1919	.972	232
1920	1.052	243
September, 1920	1.151	242
October, 1920	1.226	225
November, 1920	1.263	207
December, 1920	1.209	189
January, 1921	1.192	177

Reducing this table to a relative basis by taking the respective averages for 1916 as 100 and computing the other figures as percentages of the 1916 base, the results are as follows:

Year or month	Average receipts per ton-mile—relative	Index number of wholesale prices—relative
1916	100	100
1917	101	142
1918	120	158
1919	138	171
1920	149	196
September, 1920	163	195
October, 1920	173	181
November, 1920	179	167
December, 1920	171	152
January, 1921	169	143

From this table it appears that between 1916 and 1920 wholesale prices increased from 100 to 196, or 96 per cent, whereas freight rates increased from 100 to 149, or 49 per cent.

Inasmuch as the latter half of the year 1920 was a period of increased rates and declining prices, the table includes a comparison of the monthly results from September (the first complete month under the increased rates) to January, 1921 (the latest month for which returns are available). In September the index number of prices was 195 and of rates 163. In October the two relatives were 181 and 173, respectively. Prices (for freight cargo values) were still relatively higher than rates.

The situation changed with the sharp decline in prices in November and December, whereas railway rates remained fairly stationary. In November the relatives were 167 for prices and 179 for rates, in December they were 152 and 171, and in January 143 and 169.

Back of 1916

To present a fairer comparison of the trend in rates and prices, one should go back of the year 1916, which was a year of rising prices. In fact, the index number of prices rose from 101 in 1915 to 124 in 1916, whereas rates actually declined from 100 in 1915 to 99 in 1916. That is, the railways in 1916 had already experienced a heavy rise in operating costs, with no increase in their rates.

Putting the comparisons on to this more



Darling in the Chicago Evening Post.
What D'You Say, Let's Go Over in the Old Pasture and Shoot Blackbirds?

Digitized by Google

extensive base involves going back to 1913, the base year utilized by the Bureau of Labor Statistics for its price data. The results are as follows, the year 1913 being taken as the base throughout:

Year or month	Average receipts per ton mile. Actual cts.	Relative	Index number of wholesale prices
1913	.719	100	100
1914	.722	100	100
1915	.722	100	101
1916	.707	99	124
1917	.715	100	176
1918	.849	118	196
1919	.973	135	212
1920	1.052	146	243
September, 1920	1.151	160	242
October, 1920	1.224	171	225
November, 1920	1.263	177	207
December, 1920	1.269	164	189
January, 1921	1.193	166	177

This comparison shows that as late as January, 1921, prices even after the considerable decline since the summer of 1920 were 11 points higher than rates, the index numbers being 177 and 166, respectively.

It should also be observed that up to the close of 1920 rates lagged far behind prices.

In 1916 rates were at 99 and prices at 124; in 1917 the spread was between 100 and 176, prices being up three-quarters, with no change in rates; in 1918 the spread was 118 and 196; in 1919, 135 and 212, and in 1920, 146 and 243. In 1920, therefore, prices had outrun rates by almost 100 points; that is, by 100 per cent of the 1913 base prices.

The turn came in September, 1920, when rates started up to 160, then to 171, then to 177, and finally remained around 168, whereas prices declined from 242 in September to 225 in October, then to 207, 189 and 177.

It must be recalled in this connection, however, that railway rates in the years 1913 to 1917 were the lowest on record, and that the railways were even then feeling the pinch of inadequate revenue to meet their expenses and fixed charges.

One point in this connection deserves comment, and that is the effect of increased rates on prices and on business. It was freely predicted in August, 1920, that increased freight rates would still further increase prices and would shut off traffic. Both predictions proved incorrect. As already pointed out, prices have been declining ever since the increased rates went into effect, so that the effect of the higher rates has not been in the direction of boosting prices. Respecting the effect on traffic, the months of September and October, following the rate increase, showed no ill effects from the increased rates. On the contrary, September traffic was good, while October traffic was with one exception the greatest ever handled by the railways in a single month.

Since then traffic has declined heavily, but the underlying reason has been not the increased rates but the general business depression.

Prices Due to Economic Conditions, Clark Asserts

In a recent address before the Railway Business Association, Chairman Edgar E. Clark, of the Interstate Commission, said:

"The difficulties which, as an effect of the war, have been encountered here with regard to operating expenses and necessarily large increases in rates and fares have similarly been experienced in other countries.

"Information, so far as it is obtainable, indicates that the increases have not been greater here than elsewhere, and that our railroads emerged from the war period in better physical condition than those of most other countries. The difficulties are not peculiar to our land and are not the result of local conditions or of details of management or operation. They result from the operation of world-wide economic forces which can not, under the conditions that have obtained, be controlled.

"The relief must come gradually as a result of readjustment of those economic forces. It will be accelerated or retarded accordingly as we all meet or shirk our duty to lend a willing helping hand.

"When we consider the circumstances out of which present conditions grew is it not sensible and reasonable to recognize the necessity for gradual readjustment of the economic forces and affairs of the world as the foundation for gradual improvement in the situation we are discussing? Some rates are too high to permit the free movement of traffic. Some rates are unreasonably low. Careful study of such situations has been and is going on, and readjustments have been and are being made accordingly.

"Doubtless there have grown up operating expenses, the aggregate of which is substantial, which can not reasonably be defended. They should be eliminated. Every effort must be made to insure all possible, attainable, reasonable economies. The owners of the properties may be obliged for a time to accept less return upon their investment than would otherwise be expected.

"If reason can prevail and a united, genuine effort can be put forth and maintained, it is morally certain that the situation will improve and that we will progress toward that condition of affairs which the Congress had in view, which the law contemplates and which we all hope to see. Slightly paraphrasing an expression I read recently—'It is doubly encumbent upon us in the stand which we take to avoid the appearance of selfish shirking.'

"We all know how large a part popular impressions have in forming public opinion and how long it takes for the slowly developing proof of facts to rectify such impressions when once they have taken hold. We must build upon the foundation of experience and sound business judgment that is free from 'selfish shirking,' and not upon the unstable ground of theories and opinions that in large part ignore the true facts.

"Some critics assert that the law makes of the railroad business a preferred business and confers upon the owners special favors. Others assert that it recognizes a preferred class of labor.

(*Continued on Page 38*)

It Is Reported W. E. Flanders Will Join Durant

W. C. DURANT is picking an "all-star cast" for Durant Motors, Inc. At the time his resignation as president of the General Motors Corporation was announced, some time ago, it also was announced that three or four of the higher executives of that organization were casting their lot with him in his new enterprise. Last week came announcement of the fact that Richard H. Collins, president and general manager of the Cadillac Motor Car Company, would join Mr. Durant in an executive capacity of great responsibility.

Now comes a report from a source that cannot be ignored that Walter E. Flanders, one of the foremost figures in the automotive industry for several years, will associate himself with Mr. Durant in Durant Motors. The report has not been verified either by the Durant interests or by Mr. Flanders. The latter, who has been wintering in Florida, was due in Detroit the first of this week, but up to Tuesday had not reached the city. Consequently no opportunity to ask his comment on the report was afforded. However, as was said above, the story that he is about to join Durant Motors comes from quarters considered most reliable.

Mr. Flanders retired early in 1919 as chairman of the board and general manager of the Maxwell Motor Company, Inc., in the upbuilding of which he had been the chief factor. At that time it was said he probably would locate permanently in Chicago, where he had interests. He has maintained an office in the Book building, Detroit, as head of the Flanders Realty Company. He also is understood to have offices in Chicago.

Although he has been connected with several other automobile companies, it is what Flanders did at the Maxwell which will go down in automotive history as his big work so far. For it is conceded by those who know that it was principally due to Mr. Flanders' genius that the Maxwell Motor Company became one of the five or six largest automobile producers in the country.

The present Maxwell company, or the company in existence up to the recent reorganization, was the outcome of the amalgamation of the Metzger Motor Car Company and the United States Motor Company, which had been itself a combination of the old Columbia, Stoddard-Dayton, Brush, Alden-Sampson and Maxwell-Briscoe companies. It was in 1913 that the new Maxwell Motor Company was organized and Walter Flanders was asked to become president, which position he retained until the fall of 1917, when he was elected chairman of the board of directors and general manager. W. Ledyard Mitchell, of Cincinnati, was chosen president. During his presidency Mr. Flanders changed the policy of the company to that of building only a single model instead of a large variety, as had been the custom of so many other concerns, and which custom was the cause of so many concerns' failing. Thus only one model of Maxwell was made, but with several styles of body. The new idea made a decided hit, so much so that the production of Maxwell cars increased from year to year and the company joined the ranks of those which were making more than 50,000 vehicles annually.

Prior to joining the Maxwell organization Mr. Flanders was with the Ford Motor Company as production manager for about two



WALTER E. FLANDERS

(*Continued on Page 42*)

Digitized by Google

Yankee Business in Wooden Shoes

Trade Possibilities in Holland and Her Colonies; Significance of the Enlarged Fairs at Utrecht

ONE REASON why foreign countries, particularly Germany, will give the United States a run for its money in world trade is the exacting attention given to every minute detail of commerce in every country, civilized or otherwise, on earth. It is not always the business opportunities of the moment that command attention, but the character of developments or changes of custom which indicate future demand for goods that are important. For instance, when the cannibals poll a majority vote against cooking and eating missionaries and their enemies, if they have not done so yet, the cannibal maidens will no longer do up their hair with human bones; consequently the hairpin industry should be interested.

Marked changes in customs and the development of new occupations are going on constantly in many countries where the United States will sell goods in the years to come. One cannot visualize Holland without her windmills; yet these wind-driven, whirligig affairs are out of style, if not entirely out of use. No more are being built. They never were efficient, but until Germany produced a motor sufficiently powerful to do the work at less initial cost and maintenance charge, Holland held fast to her windmills. Manufacturers in the United States endeavored to sell windmills out of business by designing a wind motor, but the terrific gales in the Netherlands blew the wind motors to kingdom come, and thus Germany seized an opportunity. The type of Dutch windmill so often seen as a background for little Hans Brinkers in wooden shoes cost about $10,000, and developed only 11 1-5 horsepower. One mill can drain 1,335 acres when the lift is four feet and two inches. However, old Boreas hangs around the Dutch Venice only about 1,440 hours, thus rendering it difficult to hold the desired water level. Inasmuch as the Dutch were most directly interested in keeping dry it would seem that they should have been able to develop their own motors, but apparently not, for Germany built the Hercules motors and the Netherlands have been using lots of them. Centrifugal pumps replaced scoop wheels. Thus Holland's needs became Germany's advantage and a foreign trade relationship was built upon economic and social necessities.

The Fair at Utrecht

Other changes are taking place in Holland which are more important from a foreign trade standpoint than the transition from windmills to motors. One is the proposed draining of the Zuyder Zee with a view to increasing the area of the country, providing more elbow room for the population and more productive power. Dutch engineers are planning to erect a dam across the Zuyder Zee, which will be 18½ statute miles long, cost approximately $10,000,000 and require nine years to build. This dam will reclaim four "polders," or coulées, having an aggregate area of 494,000 acres. The soil thus drained will be fertile, most probably used for agricultural purposes, which indicates a future demand for farm implements.

Another change which will come home directly to American manufacturers and exporters is the development of the Utrecht fair into the International Industries Fair, the most effective way of informing the world that the Netherlands and its colonies are in the market for foreign goods. The Utrecht fair was started in 1917 on two sites and with temporary wooden buildings. It was mainly for Dutch manufacturers, although exhibits were sent from other countries. This event has developed so rapidly and served such a useful purpose that the promoters have decided to lay out eight sites and build permanent stone structures. The first one has been put up. It was financed by Dutch manufacturers who contributed $1,200 per capita, in return for which they received one sample room each. The Dutch government aids in the support of the fair with an annual loan of $400,000.

The Dutch are methodical people. Once they realize their needs, they make constructive efforts to supply them. The country needs foreign goods, American goods, and is prepared to make the necessary arrangements to get them. Following this purpose the exporters and manufacturers of other countries will be given an opportunity to have a part in the development of this fair. Other buildings to be constructed will be for foreign exhibitors, who can have the same privileges as the Dutch manufacturers by contributing toward the expenses of the buildings, and in return have ample rooms reserved for them. The first building has 340 sample rooms and 1,000 square feet of table space. Subsequent buildings will be as large, or larger. The 1921 fair will be held September 6 to 16.

Dutch Trade Possibilities

The Netherlands, unlike so many other European countries, is not poverty-stricken. In fact it is said by some authorities that there is more satisfaction to be gained in the Dutch trade situation than with any other country. Dutch thrift is axiomatic. The battle of the people to keep the sea at a respectful distance has made them a nation thinking in engineering terms, even though limited largely to hydraulics. This fact alone presupposes a market for metals, machinery and tools as well as food products.

Holland has been regarded as the clearing house for northern European commerce because her imports go ont to Belgium, northern France, Germany, Denmark, Austria, Czechoslovakia, Switzerland and Scandinavia. Trade with Holland means not only commerce with these countries but the Dutch East and West Indies. In 1920 one-fifth of Holland's imports were from the United States, amounting in money to $265,000,000. Included were hog products, cotton, grain and breadstuffs, coal, petroleum and its products, and mineral oils, tobacco, copper and metals, milk products, sugar, tires, automobiles, leather and naval stores.

Exports to the United States were valued at $95,000,000. The population of Holland was given as 6,700,000 when the last census was taken. The area is 12,680 square miles. The per capita debt is $159.

Amsterdam and Rotterdam are the principal ports, through which the clearings for 1913 were: Amsterdam, 3,170,936 tons; Rotterdam, 12,785,661 tons. Normally the Dutch guilder is 40 cents, but its value has decreased as has that of currency in other European countries. The rate of exchange as reported from New York recently has followed this range: November 1, 1920, .3037; December 6, 1920, .3045; January 1, 1921, .3125; January 24, .3312; January 31, .34; February 14, .3385; February 14, .3425; February 21, .3405; March 29, .3450.

Latest reports from Holland show no depression or unemployment in the shipbuilding and engine industry, although German competition is being felt in ship repair and iron construction lines. Large government orders have been placed with the Dutch plants, which helps the home industries. German competition in foundry, electro-chemical and engine industrial lines has been so keen that an embargo has been considered, but such a move would be against Holland's free trade policy.

(*Continued on Page 40*)

Signs Away Right To Ply His Trade; Agreement Holds

UNDER the terms of an opinion handed down by Judge M. L. Dunham in superior court at Grand Rapids, a few days ago, Mike Wawryka can't wash windows in Grand Rapids, operating as the Grand Rapids Window Cleaning Company; that is, so long as an injunction signed by the court holds good.

Of course, under the old English common law, Mike couldn't have signed away his right to wash windows in Grand Rapids, but as history progressed and the English courts did things to the common law and later the American courts did a few more things to it, matters reached such a point that a workman could sign away his right to exercise his trade.

In the case at issue, Benjamin M. Friedman, operating as the Grand Rapids Window Cleaning Company, sued Wawryka to enjoin the latter from operating for a certain period of time covered in an agreement by Wawryka, at the time he sold his window cleaning business to a second party, Friedman having purchased the business from the second party. There was a contention as to whether such agreement could be transferred by the second party.

In his opinion, Judge Dunham goes back to the English common law which provided that an agreement which placed any restrictions upon a man's right to exercise his trade was void, as against public policy, and traced the changes in this attitude through later rulings of the English courts, then through rulings of the American courts to date.

As a result he issued the injunction which holds until the final hearing in the case or until the further order of the court.

Digitized by Google

What Michigan Manufactures In the Way of Electrical Equipment

Something About the State's Standing in This Industry With a Glimpse Into Some of the Important Plants

By F. W. HERSEY

WHEN Ben Franklin tapped the electrical energy of the atmosphere more than 150 years ago and told men that therein lay a great force for the use of futnre generations, he not only revealed a new power which at the time caused more fright than rejoicing, but he paved the way for an industry the possibilities of which seem limitless today. Since Franklin's day, the key and kite, which constituted his principal laboratory equipment, have become transformed into hundreds of thousands of miles of wire, tons of machinery and thousands of devices, all having but two major purposes—the production and application of electrical energy for commerce, industry, transportation, art and science.

So greatly, and yet so gradually, has electrical energy crept into the lives of men that the individual mind fails in any attempt to visualize its many services and ramifications; nor can it through the keenest of imaginative power conceive the world without electricity. In the United States alone, since Franklin's time, sufficient motors to produce 19,760,000 horsepower have been installed, which power, uncontrolled, could create such destruction as to cripple the world. The application of electrical power to industry by classes is recorded for 1920 by the Electrical World as follows:

Iron and steel, 5,920,000 horsepower; textile mills, 2,230,000; miscellaneous industries, 1,-$40,000; stone, clay and glass, 1,500,000; paper, 1,500,000; food, 1,440,000; chemical industries, 1,320,000; lumber, 1,010,000; railroad repair shops, 837,000; vehicle plants, 740,000; mines, 712,000, beverages, 356,000; leather, 336,000.

The first application of electrical energy in the crudest form called for apparatus, and the constantly increasing methods of application and uses are requiring new developments in great variety of equipment. Around this power great corporations have been created and massive plants built. The peculiar needs the power has called for one class of industrial product; the application of the power requires another. Men have delved deeper into the mines and cut more coal because of the demands of electricity, while in the delving and the cutting, electrical power is rapidly replacing hand labor and steam. The United States, the youngest of the great nations, has achieved its leadership of the world largely because of electricity. It has accomplished more in a few hundred years than other nations have in thousands of years.

Michigan Ranks Sixth

In the application of electricity to industry Michigan ranks sixth among the states, the relative positions being as follows: Pennsylvania, California, New York, Illinois, Massachusetts and Michigan. And Michigan has just started when compared with California and Pennsylvania. In California the per capita value of electrical equipment is $30; east of the Rocky Mountains it is only $7.70, which shows the electrical development to come.

It is estimated that there are 63,600 electric motors used in Michigan and the connected load horsepower is 647,000. Some idea of the advance the state is making is indicated by the increase in motor equipment and horsepower load since 1915, which these figures explain:

Number of motors in 1915, 26,400; 1916, 33,800; 1917, 43,300; 1918, 50,300; 1919, 53,300; 1920, 63,600.

Connected horsepower load: in 1915, 288,000; 1916, 331,000; 1917, 422,500; 1918, 502,500; 1919, 562,000; 1920, 647,000.

The increasing use of electrical power means that the development of uses and devices for its application has been steady, and the necessity of organizing corporations and building plants in which to manufacture these devices and essential equipment has been and will continue to be great.

Michigan cannot claim leadership in the electrical industry as it can in automotive, pharmaceutical and other manufacturing lines, but the state has at least 50 plants in nineteen cities, the investment in this industry is roughly estimated at $10,000,000, and the value of the annual product at from $25,000,000 to $30,000,000. The product includes motors, wire, furnaces, safety switches, switchboards, transformers, tools, batteries, starting devices for automobiles, lamps, washing machines, flat irons, household utensils, lighting and power equipment and accessories. The list would cover a great many typed pages. It must be remembered that whatever the electrical industry is in Michigan, it is entitled to credit in view of the existence of such huge organizations as the Westinghouse, General Electric and other corporations.

Many of the companies manufacturing electrical goods owe their existence to the possession of certain patents, the character of which places these companies in a class by themselves, and through them a product is offered the public, which must come from Michigan. There are, for instance, the Howell Electric Motors Company, Howell, which builds a polyphase alternating current motor with an adjustable bearing; the Detroit Electric Furnace Company, Detroit, manufacturing a peculiar and exclusive type of rocking furnace for brass, copper and iron melting; the Square D Company, Detroit, making a certain type of safety switch box; the American Electrical Heater Company, Detroit, said to be the oldest concern in the country, if not in the world, making electrical devices to take the drudgery out of housework, and so on.

One of the great advantages of electrical power is the ease of its transmission over great distances. Applied to industry, the "juice" leaves the central station, travels almost with the speed of light to the transformer, and thence to the motors within the plant. Therefore its application in the industrial plant begins at the motor or motors used in driving the various machines. The best inventive brains and millions of dollars have been spent in perfecting various types of direct and alternating current electric motors.

The "Red Band" Motor

One type of motor, which is a Michigan product marketed in many foreign countries as well as in the United States, is the Howell "Red Band" polyphase alternating current motor manufactured in Howell by the Howell Electric Motors Company, organized in 1915 by H. N. Spencer, president; C. F. Norton, vice-president, and W. M. Spencer, secretary and treasurer. This business was built upon a patented adjustable bearing. The company, capitalized at $30,000, occupied a small building, 40 by 100 feet, and in 1915, the first year of production, did a business of $13,238.28. In 1920 the company occupied a plant consisting of three buildings with an aggregate floor space of 50,000 square feet, manufactured and sold 6,300 motors, the business totaling in money, $956,735.43, of which $170,000 was the revenue from export business. Twenty per cent of the product was sold in Michigan.

To manufacture these motors the company had to buy materials such as sheet steel, copper wire, malleable and gray iron castings, zinc, tin, insulating materials, steel shafting, pulleys, brass, lathes, drill presses, shapers, millers, punch presses and a multitude of other equipment and materials, the cost of which ran to half a million dollars. Most of this material was purchased in Michigan. This is the only company manufacturing a motor with an adjustable bearing, the main purpose of which is to protect a plant against curtailed production or shutdowns due to the motor breakdowns resulting from worn bearings.

When a motor is stopped because the one-piece bearing is worn down sufficiently to remove all clearance, it is necessary to keep the motor out of commission until an electrician can replace the worn bearing. The re-



A Corner in the Winding Department, Howell Electric Motors Company, Howell

Digitized by Google



Final Assembly and Inspection Departments, Square D Company, Detroit

placement may require only a few hours; then again it may take days. In the interim the motor is useless, and, unless the machinery it moved can be hooked up to another motor, it is out of use also. The Howell motor with the two-piece bearing eliminates this trouble. When one-half the bearing is worn down it is necessary only for the repairman to open a slot in the side of the motor frame, insert a screw driver and turn the movable bearing 180 degrees, which gives a new bearing surface and restores the clearance. Such an operation requires but a few moments and production is not interferred with until such a time as operations are stopped for some other reason, at which time a new bearing can be set.

The operations necessary in the manufacture of this motor show the advancement made in mechanics through modern machinery. From sheet steel the rotor and stator discs are stamped out in one operation on a machine which also cuts the key slots and punches the rivet holes. Another machine stamps out the rotor slots. These rotor and stator laminations are then run through rubber rollers which apply insulating varnish to both surfaces. Rotor and stator, from this point, take different routes. The stators are stacked on drums between end frames and set in a hydraulic press under 100 tons pressure, after which they are riveted.

In the meantime the end frames, which are castings, have had locating shoulders turned on them for the bearing housings and then put into expanding arbors to get true centers for the bearings. Holes have been drilled in the frames and the frame feet milled for adjustment to the motor bases. This prepares the stators for winding.

Conserving Time

Shafting stock comes in long, cold-rolled steel rods, which are cut to the proper length by a power saw and machined in a low swing lathe with multiple cutting tools, after which the shafts are finish-ground on a grinding machine. Key-ways are cut on another machine.

The end bells are castings which are machined first. Then a shoulder corresponding to the shoulder on the stator frames is cut; the bearing ends are bored out and holes drilled in the frames. Stators and shafts are ready then for the assembly room. This manufacturing process so far has brought them to a side door which opens into the assembly room, eliminating loss of time in moving them from one department to another.

The rotor laminations are stacked on dummy shafts and set under pressure. Copper bars which fit into the rotor slots are cut and shaped in a stamping press. One end is slotted and the other end is pointed. Rotor laminations and copper bars are sent to the brass foundry, where the bars are set in the slots with the pointed ends protruding to facilitate casting brass rings on each end. After this operation the rotors are machined. The dummy shafts are removed and the regular shafts pressed into place under power. End bells and rotors are then moved to the assembly room.

It is necessary to insulate the stators, which is accomplished by setting in the slots oiled muslin strips fitted into strips of press board, which prevents the wires from short-circuiting on the steel frames and stator laminations. In the assembly room the wiring is wound from spools into coils on a special machine and pressed into the proper shape for the stator slots on another machine. This wire is first insulated by a double winding of cotton thread, each strand being wound from a different direction so that the wire is completely covered and the chance of parting the threads and baring the wire is reduced to a minimum. As the wiring is fitted to the stator slots, it is again wound with oiled muslin and linen tape. After the wire ends have been picked up and connected the completed stators are dipped in insulating enamel and baked in an oven twelve hours at 450 degrees Fahrenheit.

When the rotors and stators have been assembled the end bells are fastened on, the red hand is painted and the motors boxed or crated for shipment. These motors are manufactured in sizes from one to 100 horsepower. They have been shipped to such places as Borneo, Philippine Islands, India, South America and to many European countries.

During the war the Howell plant was on a 100 per cent war production basis. Since the war, in common with other plants in every line of industry, the company's business has decreased. However, the increasing use of motors for agricultural purposes has kept the plant in operation all winter with about 50 per cent of the normal force. Orders have increased within the last two months and C. F. Norton, sales manager, believes business is coming back strong. The present capitalization is $500,000. H. N. Spencer is now president of the company; R. B. McPherson is vice-president; W. M. Spencer, secretary-treasurer; Prof. B. F. Bailey, University of Michigan, chief engineer, and Mr. Norton, who left the company for a time, is sales manager.

Square D Products

Unless properly safeguarded, electricity is dangerous, especially in industrial plants where a great many persons are employed and the character of their work requires that they turn the power on or off frequently during working hours. This danger has encouraged the invention and manufacture of many safeguards from which has grown up a specialized business. One concern engaged in this line of activity is the Square D Company, Detroit, which makes a safety switch box as near fool-proof as any electrical device so far invented.

This company was organized in 1903 as the Detroit Fuse & Manufacturing Company. When the business was sold to the Chicago Fuse Company in 1916 the Square D Company was organized and capitalized at $80,000. It is estimated that this concern does an annual business of $1,250,000, and it manufactures and sells only safety switch boxes.

Another concern specializing in one branch of the electrical industry is the Mutual Electric & Machine Company, Detroit, manufacturing switch boards and control sets. This company was organized three years ago and capitalized at $100,000. Its annual production is valued at $300,000. Much of its product is sold in Michigan, but it has a large business outside the state. This is only one of numerous concerns manufacturing equipment of this character, although the Mutual company has a somewhat exclusive field in Michigan in the marketing of certain types of control systems.

In the manufacture of household appliances, such as toasters, percolators, irons, laboratory equipment and some small industrial articles, the American Electrical Heater Company, Detroit, turns out annually about $3,500,000 worth of product. This company was organized about twenty years ago and is capitalized at $100,000. It has modern manufacturing facilities where between 80 and 90 different electrical units are made. When this company was organized the introduction of electrical power into the home was nowhere nearly as general as at present. It has taken a great amount of money and development work to popularize the great variety of labor-saving devices for the home.

This naturally calls attention to the growing importance of vacuum cleaners, washing machines, mangles, dish washers, stoves and other household equipment, some of which is manufactured in this state. The Eureka Vacuum Cleaner Company is a Detroit concern. Washing machines are made by the Crystal Washing Machine Company, also a Detroit company.

Industrial Equipment

In the field of industrial equipment the Detroit Electric Furnace Company has an important place. This concern has perfected and is manufacturing electric furnaces for melting iron, copper and brass, and its product has contributed to the revolutionizing of metal melting and casting methods, which since ancient times, have been confined to the crucible

When the old-fashioned method of starting an automobile engine by brute strength and a crank became burdensome, it was electricity that solved the problem and made the motor car more of a pleasure and less of a course in physical culture. The Liberty Starter Company, Detroit, found an eager public ready to buy its product, and has prospered.

The Marble-Card Electric Company, Gladstone, manufactures direct connected motors, also generators and farm lighting systems. Wire for electrical purposes is manufactured by the Detroit Copper & Brass Rolling Mills, Detroit, and the American Enameled Magnet Wire Company, Muskegon. Among the battery manufacturers are the Atlas Storage Battery

Digitized by Google

Company, Greenville; Schug Electric Manufacturing Company, Detroit; Detroit Battery Company, Detroit; Ramsey Electric Company, Detroit; Sprague, Waldo Manufacturing Company, Detroit. The Litcher & Lite Corporation, Grand Rapids, makes glass and rubber jars for batteries.

In the ignition field there are such concerns as the Champion Ignition Company, Flint; Michigan Wheel Company, Grand Rapids, and the National Coil Company, Lansing. In the electric vehicle list are the Anderson Electric Car Company, Detroit; the Fuller Company, Detroit; Couple Gear Freight Wheel Company, Grand Rapids; Grinnell Electric Car Company, Detroit.

Other manufacturers of electrical supplies, appliances or equipment are: Champion Brass Works, Coldwater, electrical combination fixtures; Seidler-Miner Company, Detroit, water tight electric fixtures; Hanlon Manufacturing Company, Ludington, generators and appliances; Enbergs Electrical & Mechanical Works, St. Joseph, direct connected motors and equipment; A. B. C. Starter Company, Decan Blower Company, Detroit, electric blowers; Company, Menominee, telephone bells, Amerityoit, starters; Roeding Signal Light Company, Detroit, lamps; Tideman Electric Company, Menominee, electro-medical supplies; Schwarze Electric Company, Adrian, telephone and electric bells; Menominee Electric Manufacturing Ciarage Fan Company, Kalamazoo, electric fans and blowers; Renulife Electric Company, Detroit, high frequency voilet ray generators; Dake Engine Company, Grand Haven; Advance Electric Company, Flint; Lansing Electrical Engineering Company, Lansing.

Stoddard Telephone Construction Company, Monroe, telephone supplies; Ajax Electric Tool Company, Ludington, tools and appliances; Covel Manufacturing Company, Benton Harbor, electric specialties; Detroit Coil Company, electric coils; Moore Telephone Manufacturing Company, Cars, telephone specialties; Jarvis Engine & Machine Works, Lansing, electric equipment; Hastings Manufacturing Company, Hastings, electrical equipment; Kuhlman Electric Company, Bay City, electric appliances; Miller Light & Fixture Company, Detroit, fixtures; Hoskins Manufacturing Company, Detroit, prometers and electric equipment; Pelton & Crane Company, Detroit, electric furnaces; Michigan Brass & Electric Company, Lansing, electrical supplies; M. & S. Electric Company, Flint, supplies; Stoecker Motor and Armature Company, Detroit.

Michigan Rail-Utility Assessments $291,551,150

The total tentative assessed valuation of railroad, telephone and telegraph companies in Michigan for 1920 is reported by the state tax commission to be $291,551,150, as against $284,433,700 in 1919. The tax on this property, except the sleeping car companies, is used for the primary school fund, and the assessed may be heard on the assessments until May 10. The rate of taxation this year will be $26.40, while it was $24.60 in 1919. About 60 tank oil lines were brought into the state during the year, making one of the principal increases, while there was a decrease in refrigerator property.

The total assessments for the five different classes of property follow:

Railroad companies, $246,445,000 for 1919, and $250,215,000 for 1920.

Sleeping car companies, $700,000 for each of the two years.

Express companies, $1,415,000 for 1919, and $1,900,000 for 1920.

Car loaning companies, $2,649,000 for 1919, and $3,483,000 for 1920.

Telephone and telegraph companies, $33,224,650 for 1919, and $35,253,450 for 1920.

The Grand Trunk Railway Company gets the biggest individual boost, being increased from $32,015,000 to $35,515,000. All of the remaining railroad companies in the state remain at practically the same figure as for 1919. There is just the one express company, the American, noted in the totals above.

The Michigan State Telephone Company is increased from $21,500,000 to $23,000,000, and the American Telephone & Telegraph Company from $1,050,000 to $1,200,000. The Citizens Telephone Company, Grand Rapids, is increased from $2,750,000 to $2,900,000.

RUGGLES FETED AT ALMA

To F. W. Ruggles, the man who did much to make Alma the important industrial center it is today, honor was paid a few days ago when he was the guest of more than 100 business men at a banquet tendered him at the Wright House. A silver loving cup was presented to him. Mr. Ruggles was the founder of the Republic Motor Truck Company. He is now head of his own motor truck manufacturing concern, the Ruggles Motor Truck Company, Ltd., of London, Ont. It is reported that he will locate a plant at Saginaw.

CONSTRUCTION CO. WINS SUIT

A jury in Judge F. W. Brennan's division of the Genesee circuit court, at Flint, has awarded the Industrial Construction Company damages of $14,751 against the Champion Ignition Company. The action was brought to recover what the services of the construction company actually worth regardless of the original contract made between the parties for the construction of new buildings, and the repairs of other buildings. The construction company claimed the Champion Ignition Company put them off the job without cause after they had worked thirteen weeks.

RECORD GERMAN COPPER ORDER

The Lake Lind. n Copper Times says that the Michigan Smelting Company has received an order for export of 800 tons of Copper Range copper, to be shipped in two lots of 500 and 300 tons respectively, the whole requiring from sixteen to twenty cars. It is thought the bulk of the metal is going to Germany. This is the largest single copper order for export received at Lake Linden since before the war and is equal to about a month's production by Copper Range mines at present basis of output. Early in February, 280 tons of copper went forward to Germany, and more recently 175 tons were shipped.

BENTON HARBOR NOMINATIONS

The nominating committee of the Benton Harbor Chamber of Commerce has chosen the following members from whom a president and directors are to be elected: For president: W. F. Dowland, E. C. Flintrup and W. H. Hearn; directors, Dean Peters, P. J. Maner, J. N. Klock, Wilbur Cunningham, H. U. Rapp, F. S. Hopkins, W. O. Pratt, Clinton Closson, Will Godfrey, Tom Green, A. B. Higman, S. R. Banyon, William Witherall and Mervin Strouck.

Land Titles and Title Insurance

By JOHN N. STALKER
Vice-President, Union Trust Company, Detroit

THE BASIS of our national wealth and the most direct and tangible embodiment of our national effort is the land and the improvements on it—together referred to as real estate. Almost every good citizen owns or aspires to own a piece of real estate—perhaps for a home; perhaps for a farm, which is both a home and a source of livelihood; less often for other purposes. Such real estate may represent the savings of a lifetime, perhaps of several. It is almost always the reward of many years of effort, patience and self denial; it constitutes the physical embodiment and setting of the most vital of our institutions, the home. It behooves a nation, accordingly, with particular care and jealousy to safeguard real estate titles, or the ownership of land. This is the paramount purpose of our real estate law, and this purpose it has attained. Personal property is easy to protect, simple to transfer and its loss is seldom the overwhelming calamity that is apt to be the case with real estate. Modern business demands for such transfers the utmost speed and facility. As to real estate transfers, however, it has for centuries been considered, and rightly, that the controlling consideration must be safety. This is the consideration which should never, under any circumstances, be sacrificed. The individual is to be protected by the precautions which have been devised for his protection; he is less so as he understands them better.

Obviously the ownership of real estate can not be determined by occupancy; neither can the land itself be labeled. Transfers are made by formal papers called deeds, signed with some formality by the old owner and delivered to the new. Mortgages and other liens on, and interests in, land are similarly evidenced. Now, to use the simplest illustration, a man might conceivably deed the same piece of land to each of a dozen purchasers simultaneously and collect from each, or might place thereon a number of alleged first mortgages. The statutes provide, accordingly, for public registry offices where instruments affecting land may be recorded; and provide further that the public record of such instruments may be relied upon to show the state of the title. Hence a warranty deed from a man shown by the record to be the owner of a piece of land is a good deed, notwithstanding that he may have previously given another deed which is not recorded. The public records affecting titles also include the tax records, frequently the death records, the orders of courts in such matters as the descent of property to heirs, mortgage foreclosures and other cases in litigation.

Real estate titles being as they are, however—the processes sound and seasoned but necessarily intricate because the relationships of human life are intricate—the tracing of a title and the determination of its validity are not matters for the layman. The old expedient and one that for many years served well, was that of retaining an attorney to examine the public records and give an opinion on the title. In the years have passed, however, the difficulty of making such an examination, of a thorough and adequate character, has enormously increased and there has grown up a class of men who give their entire time to this work and are called abstracters. The abstracter, individual or corporate as the case may be, "abstracts" from the records and submits in summarized form the essential provisions of all instruments, court orders, tax information and the like appearing to him to affect a given

(*Continued on Page 34*)

Digitized by Google

The U. S. Army and Good Roads

Why Improved Highways Are of Prime Importance To Our Military Forces; How the Latter Are Helping

By MASON M. PATRICK
Colonel, Corps of Engineers, War Department

IN the first place, the roads over which an army must be supplied have been aptly likened to the arteries of the human system. Should the enemy succeed in cutting one or more of these arteries, the same result follows as when a man is thus injured; and to the army may likewise come death of defeat. In fact it may be safely said that the number, the character and the direction of the roads in any theater where an army is operating have more influence than other factors in determining its plan of campaign.

Napoleon's axiom that an army travels on its belly is still true, and the soldier cannot fight long upon an empty stomach. He must be fed and his rations must be transported to him wherever he may be. In any active campaign there is a point somewhere behind the lines beyond which it is utterly impossible to transport material by rail. From these railroads all of the many different kinds of material which the army must use can be taken to their destinations in no other way than in wheel vehicles over such roads as there may be in existence. Take for example our army in France, where we found that it required an average of about fifty pounds, made up of many items, per man per day to keep this force going. For the army of 2,000,000 men we had in France when the war ended this meant transporting daily for longer or shorter distances something like 100,000,000 pounds, or 50,000 tons—no small task as may be readily understood.

Again, the army is interested not alone in the number and in the character of the roads, but likewise in the directions given them when they are located. In France, for example, the highway system radiated from Paris like the spokes of a wheel. To movements in certain directions this system lent itself admirably, but where it was necessary to transport material somewhat at right angles to the main line of travel, we met with difficulties. Similarly, in this country, along our strategic frontiers, we must give thought to the directions in which the road systems are laid out. To speak plainly, if we should ever be embroiled with our neighbors on the north—although this is a contingency which we trust will never occur, but to which we must give thought, as more improbable things have happened—it is to our vital interest that the road systems in the border states should lend themselves to the movement and to the supply of troops. Similarly, along our southern border, where we face a more turbulent neighbor, it is of prime import that the road systems should enable us to move r.adily and rapidly, whether for the purpose of crossing the border or repelling a hostile effort originating in the land south of it.

The army is also interested in the matter of motor transport. As i have said before, there is always a point beyond which we must abandon carriage by rail and resort to other methods. It is not too much to say that more than any other one thing the motor vehicles made possible the waging of war on the gigantic scale which we witnessed during the titanic struggle between Germany and the forces opposed to her effort at world dominion. Practically all of the many things needed during such a war, including the men themselves and their weapons, had to be transported in motor cars. The total number of motor trucks with the American Army in France when the war ended was 32,987, and we could have used many more. If all the motor vehicles with the army had been placed end to end, as closely as possible, they would have stretched over a road space of a little more than 290 miles. It was not at all an uncommon sight to see divisions of 25,000 men moving along the roads in such trucks, and not infrequently the odd combination of French trucks driven by Chinamen loaded with American soldiers, as they were carried toward the front to take their places in line or were withdrawn after grueling days in order that they might obtain a little rest in some more quiet sector.

While the roads in this theater of war had most of them been in existence for many years, they were practically all waterbound macadam, with here and there some asphaltic surfacing, and they had been kept in repair during the lighter traffic of peace time only by the exercise of eternal vigilance and the prompt restoration of any spot which had been injured. Over these roads the heavier army traffic had to go, and it was imperative that near the front they should be kept in perfect order so that high speed might be maintained. Just as an illustration of the need for roads, when the Germans made their attack upon Verdun the only avenues of supply for the sector were one wagon road and one narrow gauge railway. This road was of the greatest use; in fact, the ability of the French to hold Verdun against the German attacks depended upon their ability to transport men, ammunition, provisions and the like over this road, and there were carried over it daily thousands of tons of ammunition, supplies and many men; in fact, so constant was this traffic that trucks going and coming passed a point on the road every twenty-five seconds.

It was necessary to keep this road in thorough order, and the French had about one man per yard working every hour of the day in order to maintain it in proper condition, and so important was it to their plans for the defense of this place that today the French call it "La Voie Sacre," or "the sacred road."

One thing particularly the main French roads was the thickness of the road metal. This had been developed from year to year and in places was two to nearly four feet thick. It gave an excellent foundation upon which to place the road surface, but when the surface was worn away, it left an exceedingly rough road which, having itself been torn to pieces by the passing trucks, then proceeded to revenge itself by shaking the trucks to pieces. It was borne in upon us then that there must be some co-operation between the builders of motor vehicles and the builders of highways, in order that each might be properly proportioned to the other. At first we were strongly inclined to the more noticeable about the

Factory School for Draughtsmen an Innovation



Despite the fact that draughting is one of the most vital parts in automobile body manufactura, there are scarcely any schools of body draughting in the United States. The need for men trained in this work has resulted recently in the establishment of a class at the C. R. Wilson Body Company's plant, Detroit. It is being taught by Walter H. Jones, experimental and research engineer, who stands facing the class in the picture.

Students are recruited from all parts and departments of the plant and offices, and the response from the innovation has resulted in a demand for a second class.

This is not the only educational feature of the Wilson company's work. Lectures are delivered on Wednesday afternoons on various subjects identified with the company's operations and methods. There have been talks on efficiency, taxation, production of steel sheets, grading, sealing and other operations on lumber, use of forms, tool room practice and many more topics. They are stimulating wids interest throughout the organization.

Digitized by Google

powerful, heavy trucks, each of which would carry a heavier load, and there is no doubt that if the roads are suited to such vehicles, they are much the more economical; but this condition was not fulfilled in France, and when we found how rapidly they tore the roads to pieces we were forced to turn toward lighter vehicles carrying lesser loads. But this, of course, means more of them, more men to drive them and more road space required. This is a matter which must be studied with care, and it is hoped that we shall be able to cooperate with highway and automotive engineers in such a manner that their efforts will result in the production of highways and vehicles, both of which will be adapted to the Army's needs.

If cost is not a governing factor, we may say that it would be possible to build a road strong enough to carry any traffic which might be taken over it. Likewise, if cost is disregarded, it would probably be possible to build motor vehicles heavy enough to destroy any road which might be constructed; but the cost of roads and vehicles is a most important factor, and somewhere between these two extremes there is a proper mean which we must find. It is a question whether roads should be built now strong enough to withstand the maximum traffic expected over them in the future or whether they should be so built that they may be strengthened economically as the density of traffic increases. The motor truck has come to take a place in our economic life. When we remember that a truck may easily cover a hundred miles in daylight hours, while the average twenty-four travel of freight cars is only twenty-six miles, it is evident that there is a field which motor transportation can occupy and one which it is important for us to develop. To much money has already been wasted in attempts to build roads for horses, which are now known to be incorrect, and the time has certainly come when this problem must be studied and when we must find a proper solution.

The immense quantity of supplies which had to be transported for our army has already been mentioned and we were, of course, concerned with the amount which could be moved by motor transport. It was figured that with each truck occupying a space of fifty yards, each loaded with two net tons, and the truck train traveling at the rate of twelve and one-half miles an hour, about 900 tons of freight would pass a given point in one hour. Making some allowances for accidents, it is estimated that on a good three-track, two-way road, operated all day and all night, about 10,000 tons of motor transport may be taken as a maximum capacity.

There is another matter which we deem of importance, and that is a thorough knowledge on the part of all of our own personnel of the rules of the road and their strict enforcement. When one has seen traffic obstructed, literally miles of trucks and other vehicles held up, due to some minor accident which might have been voided, and when one realizes the truth of the saying that a world has been won or lost in five minutes, that the fate of an army or of a battle may depend upon the promptness with which its supplies arrive, the need for such strict enforcement of traffic rules is borne in upon you in a way and to a degree which will never be forgotten. For example, prior to the attack on the Marne battlefield, we had had little practice in formulating and in insisting upon the proper observance of the rules of the road. The roads over which we had to advance had been battered by shell fire and it was necessary to put them in condition for use. While such work was in progress strict traffic regulations should have been established, but this was not the case, and at one point where work was in progress, "a three-ton truck followed by a string of ambulances dashed, full speed into the place of unfinished work and stuck. Traffic was blocked. Everything else—wagons, carts, kitchens, trucks, tanks, a one-horse sulky and one man with a baby buggy—poured into the road, filled it solidly from ditch to ditch, and the block was complete." It took many hours of valuable time for motor trucks to remove this mass from the road, to continue work upon it and to put it in condition for further use.

If, then, the men who come to us in the Army have had thorough training in such rules of the road, if in this broad land of ours it is possible for a measure of uniformity of such rules to be brought about—and this is certainly desirable—our subsequent training of these men will be made easier and the interruptions to traffic in time of emergency which might otherwise disorganize an entire plan of campaign may possibly be obviated.

It is for these reasons that the War Department does think a keen interest in the development and has appointed a representative in the Federal Highway Conference in order that that the Army may co-operate and may receive a large measure of co-operation in its efforts to fit itself for whatever be the task the coming years may hold.

Now just a word concerning what the Army itself is doing to further this movement. You have no doubt heard of the opportunities which are being given to men to learn while they are soldiers to train themselves in order that they may be better citizens when they return to civil life after their brief service with the colors, and it is in just such schools that we are trying to fit them for real, useful work in connection with the enormous problem of road building, of traffic control and of motor transportation. There are open to all these men numerous courses, for any of which they are encouraged to volunteer, and there have been engaged men as teachers who really know their jobs. It will be understood that we are taking a large number of young men who would never have any college or university training and many of whom lack even the advantages of high school training. While we have no ambition, desire or intention of turning them out as college graduates, we do believe that in their three years' term of service we can make them better men, better able to earn their living, and with a sense of respect for law and order, which is a wondrous asset when possessed by the citizens of any country, and the lack of which may prove a country's undoing.

In these army schools there are now enrolled 40,000 men, and they are taking courses according to their own likings, carefully guided of course, but still leaving to them a large

(Continued on Page 37)

Farm Equipment Manufacture in Michigan

THREE INDUSTRIES occupy a prominent place in the pioneer history of the older states of the Union. One is rum distilling, another is milling and the third is agricultural implement manufacture. This last may or may not have reached further than the simple workmanship of a village blacksmith, but if the latter gave any amount of time to the fashioning of plowshares, rakes, hoes, hand or horse and hand-power tools for the soil, he was listed as a maker of agricultural implements.

Undoubtedly the blacksmith shop was the birthplace of farm implements, and as the first collection of buildings large enough to be called a settlement always included at least one blacksmith shop, the manufacture of farm implements cannot honestly be said to be peculiar to any one state. Michigan, for years a leading agricultural commonwealth, had its host of blacksmith shops and its annual production of farm tools in common with the other pioneer states.

$6,000,000 *Invested*

To speak of the manufacture of agricultural implements today is to consider machinery in its most advanced form—gang-plows, tractors, harvesters, threshers, planters, shellers, ensilage cutters, binders and many other inventions, which have made it possible for this nation to feed itself and a large part of the world as well. Millions of dollars are invested in the manufacture of these machines and in the great quantity and variety of hand tools, and the annual production runs into more millions.

In Michigan, which is not reckoned as an agricultural implement manufacturing state in the sense that it is an automobile state, there is invested approximately $6,000,000 in that industry, distributed among twenty-nine listed manufacturers, and while this number is considerably larger than sixteen years ago, the cause lies not in the decline of the industry, but its concentration in fewer, but larger and more productive units. Unfortunately it is one of the industries for which no official record is kept, so that detailed information is difficult to obtain.

In 1900 there were listed by the Michigan Department of Labor fifty-nine manufacturers of farm implements. The investment was given as $8,832,344 and the value of production as $6,839,508 annually. Five years later the number of manufacturers had dropped to forty-two, but the investment had increased to $14,342,106 and the production to $8,719,719. Competition by the large companies created the necessity of many small concerns to meet effectively this competition caused the decrease in individual manufacturers or plants.

The product at this time consisted of threshers, plows, land rollers, cultivators, harrows, potato planters, corn planters, horse rakes, hay tedders, hay pressers, feed cutters, feed cookers, root cutters, bean seeders, bean harvesters, bean sorters, fertilizer spreaders, grain drills, post hole diggers, sprayers, corn shellers and other implements, in fact the state was in a fair way to provide itself with all the machinery and tools necessary to its particular kind of crop production. The plants were located in 33 cities.

To manufacture this product the companies or individuals purchased annually materials to the value of more than $3,500,000. The scale on which they manufactured is shown by a few figures in these lines. Cultivators, 25,683; harrows, 26,291; plows, 25,058; drills and planters, 106,173; threshers, 2,150; horse rakes, 378; harvesters, seeders and binders, 302.

As in every other industry, the big year for implement manufacturers brought many new concerns into being, some to exploit new inventions or improvements on old ones, and others to manufacture only parts or special equipment for machines and tools already existent. In the lean years many of these concerns fell by the wayside.

Some Michigan Concerns

The year 1920 is not a good one by which to judge the potentialities of any industry, nor it's standing in the general class of industries. But a few instances of manufacturing growth in this line will suffice to show that the manufacture of farm implements is a flourishing industry in this state despite the competitive and productive powers of several corporations operating upon a scale comparatively as great

(Continued on Page 38)

Digitized by Google

Detroit and Flint Lead U. S. in Re-Employment

In the March report of the United States Employment Service section of the Department of Labor, made public a few days ago, two Michigan cities, Flint and Detroit, top the list as to re-employment. All told, 65 cities throughout the country made reports, twenty-one showing an increase in number of employed, while forty-four showed a decrease. The cities which reported gains, with the percentage in each case, are the following: Detroit, 32.4; Flint, 12.2; Memphis, 10.5; San Francisco, 9.2; Toledo, 7.9; Paterson, N. J., 6.8; Portland, Ore., 6.8; New Bedford, Mass., 5.6; Atlanta, 5.3; Manchester, N. H., 5.2; Minneapolis, 4.8; Syracuse, N. Y., 4.6; Yonkers, N. Y., 3.7; Seattle, 2.9; Los Angeles, 2.5; Johnstown, Pa., 2.2; Kansas City, Mo., 1.1; Trenton, N. J., .8; Youngstown, Ohio, .6; St. Louis, .3; Lawrence, Mass., .1. Among the cities which showed a decrease are Denver, Colo.; Columbus, Ohio; Milwaukee; Buffalo; Chicago; Omaha; Cincinnati; New York; Louisville; New Orleans; Pittsburgh; Newark, N. J.; Worcester, Mass.; Baltimore and St. Paul.

The reports concerned 1,421 firms employing 501 men or more, and which on February 28 employed 1,612,611 persons. At the end of March 1,587,786 were on the payrolls. The decrease since January in employment at these plants were 40,384 men, or 2.5 per cent.

It was in the automotive industry that progress was most marked in March, the official report says, for in these industries the percentage of gains over February was 28.1 per cent. In the tobacco industry the gain was 8.5 per cent; leather and its finished products, 1.7 per cent; liquor and beverages, .4 per cent; lumber and its manufacture, .3 per cent.

Further falling-off were reported in these industries: Iron, steel and other products, 6.5 per cent; metals and metal products, 4.5 per cent; paper and printing, 2.8 per cent; food and kindred products, 2.7 per cent; stone, clay and glass products, 2.7 per cent; chemicals and allied products, 1.8 per cent; textiles, 1.7 per cent, and railroad repair shops, 1.7 per cent.

SAGINAW BOARD ELECTION

The annual meeting of the Board of Commerce of Saginaw resulted in the election of the following officers: George H. Hannam, president; Wallis Craig Smith, first vice-president; John Jeffers, second vice-president; directors, Harry P. Baker, John A. Cimmerer, Edwin C. Forrest, Guy S. Garber, Max P. Heavenrich, Julius W. Ippel, Charles T. Kerry, Harry E. Oppenheimer, John Popp and Edward Schust.

U. S. FOREIGN TRADE OFF

America's foreign trade in March was nearly three-quarters of a billion dollars less than in the same month last year, figures made public this week by the Department of Commerce show. Exports for the month were $384,000,000, compared with $820,000,000 in March, 1920, while imports were only $252,000,000, as compared with $524,000,000. This left a trade balance for the month of $132,000,000 as against $296,000,000 in March, 1920.

A RECORD CUSTOMS PAYMENT

Ernest Rose, United States deputy collector of customs at Grand Rapids, was paid $35,316 last week by the Consolidated Cigar Company, which withdrew all the tobacco which was held in its warehouse. It is stated that this was the largest single collection ever made in the city and the amount was equal to total average collections for a month.

STRAIGHT LINE METHODS

Balanced Business

No sales department, however well organized, can operate successfully with indifferent buying and producing facilities. Production on the other hand, however efficient, becomes overproduction, if not balanced by capable selling. Balance between departments must back-up co-operation if waste, unnecessary overhead, shut-downs, are to be avoided.

Balanced Business, which means Better Business, is almost wholly dependent on sound Accounting Methods. Timely and dependable Facts and Figures from every department are the balance wheels — the executive's surest guides. All intelligent progress, broader missions, co-ordinated strength, larger profits — depend upon them.

And that Facts and Figures may more quickly and clearly tell the executive their vital story—Graphic Charts, the moving pictures of your business.

ERNST & ERNST

AUDITS — SYSTEMS
TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK
PHILADELPHIA
BOSTON
PROVIDENCE
WASHINGTON

CHICAGO
MINNEAPOLIS
ST. PAUL
ST. LOUIS
KANSAS CITY

CLEVELAND
BUFFALO
PITTSBURGH

CINCINNATI
INDIANAPOLIS
TOLEDO
ATLANTA
RICHMOND

NEW ORLEANS
DALLAS
FORT WORTH
HOUSTON
DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

New Steel Wheel for Automobiles

Jefferson Forge Products Company, Detroit, Brings Out Innovation as Light as Wood

WHEELED transportation is no better than its wheels, and practically all land transportation moves on wheels. Because no satisfactory substitute has been discovered for wheels, the efforts of engineers for the last 200 years or more have been directed toward the improvement of wheels with a view to making them lighter, stronger, more resilient and as simple in construction as possible. They have been made in the form of wooden, steel, iron, bronze, copper and even gold discs. They have been made with wooden, iron, steel and wire spokes; with solid tires, pneumatic tires and metal tires. Coil and flat springs have been used in lieu of spokes to obtain resiliency.

Man's first attempt to make what we know now as a vehicle in a general sense resulted only in a sledge. The next development was



the log roller, then the wooden disc, and finally a wheel with crude spokes and twisted leather for tires. Then there was a period of 2,000 years during which little or no improvement was made in wheels. Fulton's steam train had wooden wheels. Only dreamers believed that transportation speed would so increase that wooden wheels could not be used.

The advent of the automobile brought sharply to the minds of engineers that wheels would have to be improved, and the experiments that have been carried on and the many designs of wheels tried ont testify to the importance of this subject. Steel wheels for railroad trains are common, but for motor vehicles they are uncommon. Steel wheels have been made for heavy duty motor trucks, but steel applied to wheels for passenger vehicles traveling on rubber tires of the pneumatic type has been much out of the ordinary.

The Jefferson Forge Products Company, Detroit, has just perfected a drop forged, one-piece steel wheel for passenger automobiles, which is claimed to be as light as an ordinary wooden wheel, while embodying all the advantages of steel toughness and resiliency. It is a ten-spoke wheel, conventional in design and attractive in appearance, and can be made for any type of passenger automobile. The wheel is of unit construction, combining hub, spokes, brake drum and felloe in one piece of forged steel. Thus all bolts, nnts and other loose parts are eliminated. The spokes are concaved with the hollow side facing inside, so that the wheel as it is fitted to the car has the appearance of the ordinary spoked wheel as we are accustomed to see it.

Both wire and wood have been considered the best wheel types from the standpoint of weight. The efforts of the designers of the Jefferson drop-forged steel wheel have been directed toward gaining the lightness of either wood or wire, with the qualities of forged steel, and the design, which, while being individual, would not depart too radically from what the public has come to accept as the conventional automobile wheel.

The designers claim they have produced a wheel which comes as near being indestructible as it is possible to make. Repeated tests have been made with various weights and types of cars to prove the lateral strength of these wheels in curb collisions and to ascertain if it is possible for a wheel of this character to get out of alignment through rough usage. The fact that a single forging is used of course eliminates the possibility of losing alignment under ordinary conditions. There being nothing to loosen, the natnral assumption would be that loss of alignment would be largely obviated under any condition, which is what the designers contend has been amply proved in this case. In case of severe strain affecting the alignment temporarily, the elasticity of the steel will restore it, it is asserted. The metal takes a high enamel finish so that the appearance of the wheels can hê made to conform to the body finish of the car.

The Jefferson Forge Products Company has been in business in Detroit fifteen years, manufacturing drop forgings such as crankshafts, transmission gears, axles and other automotive parts, and has all the facilities necessary for quantity production. The company officers are: Russell A. Alger, president; Frederick M. Alger, vice-president; Charles E. Wade, vice-president and general manager, and F. Archer Hinchman, secretary and treasurer.

"We have faith in the prosperity of Detroit," said Mr. Davis, "and we are here to stay. The gradual improvement in conditions is far more healthy than any "boom" could be. There is business to be had but it won't pick itself up; it must be picked up. This in my opinion is the best time for far-seeing organizations to attain or maintain leadership. Sound advertising is going to help."

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product Glass Plants Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

MILLER JOINS ENGLANDER CO.

Charles Miller, who for teh years has been in the body and top engineering department of the Chalmers Motor Company, has joined the Englander Company, 5940 Second boulevard, Detroit, as factory superintendent.

JOERNS OPENS DETROIT OFFICE

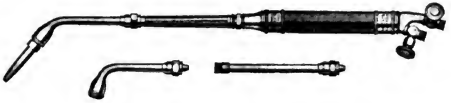
The Arnold Joerns Company, advertising agency, Chicago, opened its Detroit offices in the Krenge Building Monday. Robert B. Davis, vice-president of the company, has charge. "Bob" Davis is a former Detroit man. He was at one time associated with Critchfield & Company, Chicago and Detroit, and prior to that was with the Concrete Cement Age Publishing Company, Detroit.

GOGGIN JOINS ROBINSON CO.

Victor T. Goggin, lately New England sales manager for Fred T. Ley & Company, Inc., Springfield, Mass., has severed his connection with that concern to associate himself as contracting engineer with Dwight P. Robinson & Company, Inc., of New York, Chicago, Dallas, Youngstown, Los Angeles and Montreal.

Digitized by Google

"TORCHWELD"



Cutting and Welding Torches

Have been selected as standard equipment by many large Detroit plants, after tests that demonstrated that "Torchweld" Torches are *more economical, more dependable* and *perform more uniformly.*

No flash-backs—therefore safe. Operate on equal pressure. Consult with our Welding Engineer.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

Action of the Week in Michigan Legislature

By H. BOND BLISS

[Staff Correspondent, Michigan Manufacturer and Financial Record]

LANSING, April 18.—Matters which vitally concern the industrial corporations and public utilities of Michigan held the center of attention in the Legislature during the last week. The corporation tax bill finally passed the House, and with the Governor's signature, it provides the state with a new source of revenue amounting to at least $6,000,000 annually, and which is expected to meet the deficit this year. The bill was passed as originally introduced by Sen. Vandenboom, Marquette, and approved by the Senate, no amendments being accepted. It was given immediate effect.

The bill levies an annual tax or license on all corporations doing business in the state, both domestic and foreign, for the privilege of exercising the corporate powers granted by the state. This tax is three and a half mills on all paid-in capital and surplus, with a minimum tax of $50 by any corporation and a maximum of $10,000. The latter limit is fixed in order to keep within the constitutional decisions of the courts, which hold that when a license fee reaches too high a figure it becomes a tax and with the other property tax would make double taxation and therefore be unconstitutional. The minimum was fixed so as to raise the amount desired.

The vote on the bill was 82 to 12. Rep. Ramsey, Lansing, one of the twelve, explained that 63 per cent of the corporations of the state were forced to borrow money to pay their taxes, and a further burden not only endangered the industries but also the thousands of workmen. Rep. DeWitt, Ioseo, said it was a method of dodging the income tax, while Rep. Moore, St. Clair, who voted for it, admitted that the measure was "the most unfair and unjust thing ever proposed in the three sessions" of his legislative experience, but the state needed the money.

The Glasple interurban rate bill was passed by the House and sent to the Senate for action. The bill would place all power for fixing rates in the hands of the Michigan Public Utilities Commission, and during such time as they are not fixed, provides a regular schedule of rates, classified on a basis of the gross passenger and freight earnings of the companies. These rates range from one and a half to three cents a mile. The measure is not to interfere with existing or future franchises, with half fares for children between five and twelve years of age.

The Atwood bill to place a tax of one cent a gallon on all gasoline, distillate, benzine and other volatile and inflammable liquids used in automobiles, was reported out by the committee on roads and bridges of the House, with a recommendation that it pass. Under an amendment, one-half of the money would go to the state highway department and the other half to the general funds. The tax would be paid on the fifteenth of each month by importers, manufacturers and producers in this state.

Senator John W. Smith's bill to empower counties to own and maintain an office for the issuance of abstracts of title on lands was given final passage, with an amendment requiring a majority of 75 per cent in a referendum on the installing of such a system.

Another step in the reorganization plan of the state government was taken in the passage by the House of the bill creating the state department of public welfare, supplanting the boards of control of seventeen institutions and the state board of corrections and charities.

Utility bills continue to pour in. One of the latest is that of Rep. David A. Green, Pontiac. This bill provides that contracts betwen utilities and municipalities cannot be broken, and at the expiration of franchises if the two parties can not agree, they may appeal to the utilities commission. The latter would arrange for the appointment of an arbitration committee to investigate, fix the rates and report back to the Commission. If this report was not satisfactory another committee would be named, but in the meanwhile the rates would hold.

Senator B. G. Davis, Lawton, introduced a bill which would place jitney buses under the control of the utilities commission, requiring them to furnish bonds for protection in case of accidents and damages, and would also standardize rates.

The Senate passed Rep. George Lord's corporation codification bill with a few amendments. The Osborn utility bill has been somewhat modified by amendments to meet certain objections relative to franchises, control by the utilities commission, giving utilites the right to appeal to courts if they protest the

(*Continued on Page 37*)

Digitized by Google

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.


America's Headquarters for
Second Hand
Electrical
Machinery
Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

The Bellefontaine Bridge & Steel Co.
Engineers, Fabricators and Erectors
STEEL BUILDINGS AND BRIDGES
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6558.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Port St. E. DETROIT

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

RUGGLES FACTORY FOR SAGINAW

Reports from Saginaw are to the effect that the plant of the Saginaw Shipbuilding Company has been sold to Frank W. Ruggles, former head of the Republic Motor Truck Company, Alma, and will be converted into a factory for the manufacture of a motor truck. Associated with Mr. Ruggles will be Julius Kirby, former secretary of the Saginaw Board of Commerce. Announcement will be forthcoming soon as to the name and types of truck to be manufactured. Mr. Ruggles already has organized a Canadian corporation to make commercial vehicles.

The Saginaw Shipbuilding Company was developed during the war by local manufacturers and produced a considerable amount of tonnage. It is entirely modern in layout and considered excellent for large manufacturing.

APEX MOTORS REORGANIZED

The Apex Motor Corporation, of Indianapolis, which makes the Ace passenger cars, has been reorganized. O. W. Heinz has withdrawn as president and general manager and has been succeeded by Harry T. Hanover. At the meeting of the creditors a committee was elected, which, with the representatives of the financial companies interested in the Apex, agreed to give the company a year's extension on its outstanding accounts. This agreement covered 97 per cent of the creditors and the two finance companies. The latter contracted to finance the operations of the Apex for a period of twelve months, beginning March 1.

As a result of these arrangements, the Apex corporation announces that the present model will be continued, and to offset the decrease in the price of materials the company has decided to add various extras to the equipment, including spare wheels, frame tire holders trunk racks, Spanish leather upholstery and burnished radiators. The new Model "G" Ace will have the Gny rotary disc-valve engine. This new model is now rapidly nearing a production basis. A few cars have been shipped to dealers for demonstration and show purposes.

OLD TIMERS HONOR HAYNES

Directors of the Old Timers' Club, at their recent meeting in Flint under the presidency of Albert Champion, ruled that membership in the organization will be apportioned in three classes: the senior, or men of ten or more continuous years of service in the industry; the junior men, who have been with the industry from five to ten years, and the owner associate, this being the owner of a car who owned and drove cars in 1906 or prior to that.

One of the first steps taken by the directors in the way of special recognition of old-timers was to elect Elwood Haynes, president of the Haynes Automobile Company, Kokomo, Ind., as honorary member No. 1.

CLEVELAND TRACTOR SLOWS UP

The Cleveland Tractor Company plant, Cleveland, will be temporarily operated on part time. The company has been in full operation all winter. Officials say business is good and that according to dealers' reports the latter will have liquidated their stocks before the end of April.

GOODRICH SPECIAL MEETING

A special meeting of the stockholders of the B. F. Goodrich Rubber Company was to be held in New York this week. The purpose was to ratify a proposal to retire 11,880 shares of the company's preferred stock, which would reduce the capital from $105,412,000 to $107,224,000 and cut the preferred authorized to $47,224,000, as against $48,412,000, as at present. The number of common shares will not be changed.

FRANKLIN'S PROGRESS

The spirited demand for closed cars is the reason why the Franklin Automobile Company, Syracuse, N. Y., has decided to reopen its Richmond avenue body plant, which had been closed since December. About 100 men will be employed and the production schedule by June 1 will be at the rate of 75 bodies a month.

The Franklin company also announces that during the first quarter of 1921 a total of 2,546 cars was sold and shipped; that the entire April production of 940 cars was sold on April 9, and that there remained 420 car orders for April delivery to be filled.

The company reports that during the first quarter its inventories have been reduced more than $1,250,000. Early last fall the inventories totaled $11,000,000; reductions since then have cut the amount to practically $5,000,000. The company says that current accounts and notes payable have been reduced 40 per cent in the three months ended March 31.

GRANT'S APRIL SCHEDULE

The Grant Motor Car Corporation, Cleveland, is reported to have scheduled a production of 450 cars for April, which, it is said, was the total made and sold in March.

S. A. E. STANDARDS MEETING

Reports of the S. A. E. standards committee divisions covering their work for the first half of 1921 will be sent to the voting members of the society in pamphlet form prior to the standards committee meeting at West Baden Springs, Ind., May 24. Copies of the reports may be obtained free of charge from the Society of Automotive Engineers, 29 West Thirty-ninth street, New York city.

The reports consists of complete but concise statements of the practices and constructions recommended, together with such illustrations as are necessary.

The meeting of the standards committee at the West Baden Springs Hotel will be open to non-members of the society who wish to attend. Those especially qualified and who wish to discuss any of the reports will have opportunity to do so.

F. H. EGAN GOES TO HOUSTON

Announcement is made that Frank H. Egan, for eight years production manager for the Nordyke & Marmon Company, Indianapolis; for two years superintendent of manufacturing with the Pierce-Arrow Motor Car Company, and for two years superintendent for the Hudson Motor Car Company, has become associated with the Southern Motors Manufacturing Association, Ltd., of Houston, Tex., having charge of the manufacturing department. The Southern corporation makes the Ranger passenger cars, trucks and trailers.

CHANDLER'S POSITION

It is estimated that earnings of the Chandler Motor Car Company, Cleveland, for the first half of the year will be in excess of $2,000,000, or more than 70 per cent of the entire year's dividend requirements. The company's production is steadily and rapidly increasing. At present shipments are said to be running at the rate of nearly 1,000 a month, as compared with less than 300 during January.

Digitized by Google

GROWTH OF THE DEMAND

Secretary William R. Town, of the Michigan Mortgage Investment Corporation, Lansing, reports that the demand for automobiles in Michigan is steadily increasing, according to word received from representatives of the company throughout the state and also from dealers. The credit department record of the corporation shows that the business of automobile financing in March increased 50 per cent over the combined business of January and February, and the April business has already nearly reached the volume attained a year ago during this period.

SALISBURY WITH MAXWELL-CHALMERS

H. M. Salisbury, well known in the automotive industry, has been made export manager of Maxwell-Chalmers, Inc., succeeding H. W. J. Russell, who resigned because of ill-health. Mr. Salisbury has been with the General Motors Export Corporation, the F. B. Stearns Company and the John N. Willys Export Corporation at various times.

WILLYS-OVERLAND ADDS MEN

Four thousand men are now working six days a week in the Willys-Overland, Inc., plant, Toledo, according to an official announcement from the factory, and by May 1 the number will be increased to 6,000. The working schedule has been increased from four to six days a week.

WHITE COMPANY'S TRUCK OFFER

The recently organized Southeastern Express Company, which will operate lines from New Orleans to Washington, and from St. Louis and Cincinnati to Jacksonville, has ordered 100 two-ton trucks from the White Motor Company, Cleveland.

HOLMES-DETROIT ELECTS OFFICERS

The following officers have been elected by the Holmes-Detroit Automobile Company, state distributors of Holmes air-cooled cars: Max Gottesman, president; C. H. Gottesman, vice-president, and A. A. Gottesman, secretary-treasurer.

CUTTER ADDRESSES S. A. E.

John D. Cotter, vice-president and metallurgist of the Climax Molybdenum Company, New York, discussed "Molybdenum Steel" before the Detroit section of the Society of Automotive Engineers, at the Detroit Board of Commerce, Friday evening. This was the Section's last meeting until fall. Dinner preceded it.

WILL MAKE AIRPLANES

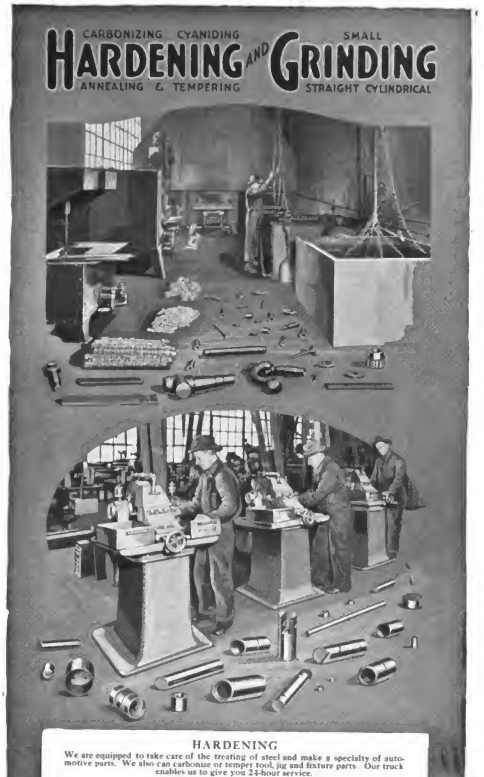
The Viking Motor Company has been organized in Detroit to manufacture airplanes driven by a 16-cylinder motor invented by R L. Baily, treasurer of the company. It is announced that a site has been leased at Gratiot avenue and the Ten-mile road, and that thereon, in addition to the factory, hangars will be built to serve an aviation service connecting Detroit with several cities within a radius of 400 miles. John W. Schwartz, formerly of Golden, Belknap & Schwartz, engine manufacturers, Detroit, is president of the company, and Fred W. Aldrich, vice-president and secretary.

COLUMBIA BUSINESS IMPROVING

Several orders for quantities of cars exceeding 100 to an order have been received by the Columbia Motors Company, Detroit.

GOES INTO MANUFACTURING

The Benton Harbor Novelty Manufacturing Company, Benton Harbor, has opened a manufacturing establishment, in addition to its retail shop. The company makes medicine cabinets, mirrors, picture and advertising frames, sewing baskets and mouldings.



HARDENING

We are equipped to take care of the treating of steel and make a specialty of automotive parts. We also can carbonize or temper tool, jig and fixture parts. Our truck enables us to give you 24-hour service.

GRINDING

Special screw machine equipment enables us to specialize in the manufacture of the following parts, all of which can be ground by the centerless method. We can grind to any accuracy required.

Piston Pins — *Valve Rocker Pins* — *Rocker Cluster Pins* — *Dowels Pins (Hardened Straight)* — *Oil Pump Pinion Shafts* — *Roller Bearing Rolls (Straight)* — *Differential Gear Pins* — *Headless Shackle Bolts* — *Universal Joint Pins* — *Small Gear Shafts*

Detroit Machine Tool Company
6545 St. Antoine St. Telephone Market 575

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.

Name .....
Business Address .....
Home Address .....
Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

COMMERCIAL HAULING

HOUSE BILL NO. 323 AGAIN

House bill No. 323, providing a tax of five per cent on the gross receipts from motor buses or trucks operated for hire in Michigan and placing the operators under the control of the public utilities commission, is once more among us.

The cartage interests of the state succeeded in having the bill recalled to the House committee on roads and bridges after it had been recommended for passage and placed on general orders. It was reported out by the committee on April 12, with another section added which would compel operators coming under its provisions to be bonded. But this time the committee made no recommendation regarding it and on motion of Rep. John Stevenson, Detroit, the measure was tabled. It is hoped that the session will be concluded without further necessity for opposing the measure.

While the committee made no recommendation as to the passage of the bill, it did recommend adoption of the amendment, which prevailed. The amendment, which goes in as Section 6, provides:

"Section 6. As a prerequisite to engaging in the business specified in section 1 hereof, each person, firm and corporation shall file with the Public Utilities Commission a bond, in such amount as said commission shall require, running to the people of the State of Michigan and conditioned that such person, firm or corporation will well and truly pay and discharge any liability resulting thereto because or on account of its operations as a common carrier on any public highway of this State. Any person who may have cause of action against such carrier arising out of such operations shall be entitled to bring suit on said bond. Each such bond shall be subject to approval by the Public Utilities Commission as to form and surety or sureties. Any person, firm or corporation from whom such bond is required hereby who carries on the business specified in section 1 without filing the same shall be deemed guilty of a violation hereof, and liable to the penalty prescribed in section 6."

GRAND RAPIDS TRUCKMEN BUILDING

L. P. Oltman, Grand Rapids contractor, has been awarded the contract to construct a two-story and basement brick and hollow tile building on Oakes street, near Ellsworth avenue, for the associated truck line operators. The building will have a 76-foot frontage on Oakes street with five large unloading doors to the south and loading doors to the east of the building on the alley side.

It will be so constructed as to utilize basement spaces for garage purposes, entrance being gained through a ramp from the street level. The basement has a clear span of twenty-five feet. The first floor will be used for storage purposes, offices being located on the second floor. The building will be heated by steam; toilet rooms will be located on each floor.

Excavation has been started, the permit issued on plans prepared by H. H. Weemhof, architect.

FINED FOR RECKLESS DRIVING

George Mathews and Leon Inman, owner and driver, respectively, were fined at Charlotte for driving a truck while they were under the influence of liquor. Inman was compelled to pay $60 and spend 20 days in jail. Mathews paid a $10 fine only.

SAGINAW OPERATORS ORGANIZE

Jitney bus operators would be driven off the streets of Saginaw if amendments proposed to an ordinance regulating their operation are put into effect. The amendments would compel the operators to avoid streets on which street cars are operating, except where bridges must be crossed, and would force operators to furnish bonds varying from $5,000 to $10,000.

The jitney men have organized to oppose this legislation and have formed the Saginaw Motor Bus Owners' Association. Officers are: President, Fred Pearson; vice-president, William Block; secretary, J. W. Pirsiel; treasurer, Charles Stoker. The jitney men declare that they organized for service while Saginaw was helpless under a car strike and that they are entitled to some consideration now.

Co-operation of the Saginaw Federation of Labor has been denied the jitney drivers, on the plea that they would be interfering with the street car men's union. The federation, through its president, Edward H. Waterstadt, declared that jitney service was unfair, since it operated for short hauls and could allow no transfer privileges.

HIGHWAY BILLS IN LEGISLATURE

There are twenty-four bills providing for trunk line highways in various parts of Michigan before the House committee on roads and bridges. As a large expenditure would be required if these were reported out, it is possible that none will see the light of day, although many of them are said to be meritorious. Three trunk line highways have been proposed in bills passed by the Senate, but these are also buried in the House committee. The latter believes that in view of the big program of the state highway department this year, these additional roads would only impair the efficiency of the entire plan.

The three bills passed by the Senate are for the Colgrove highway, which provides the building of the road must be started before a period of three years elapses; the Bryant bill, for a road from Monroe to the Ohio boundary, near Toledo, and the Davis bill, for a trunk line in Van Buren county.

DIXIE HIGHWAY RESTRICTION

Due to the condition of the Dixie Highway from Erie, Mich., to the Ohio state line, one course of stone was placed on the road last fall. The original plan to make a macadam road of the seven-mile stretch temporarily is to be followed through and as soon as the quarries are again in operation the placing of the second course of stone will be started. The Detroit Automobile Club has been informed by the officials of Monroe county that the order as to restriction on the weight of motor trucks, which order was issued last November, is again being strictly enforced. The surface of the road is able to bear only light traffic and all commercial vehicles are required to limit their loads on the Highway to one-half the capacity of the truck. The Detroit Automobile Club is now mapping out a detour.

TWO NEW LANSING GARAGES

Two more garage and service stations have been opened in Lansing. The Capital Auto Company, distributor of Dodge Brothers cars and trucks, has opened a larger and better service station in the rear of its sales and stock rooms. This station gives the company 14,000 square feet of space. Frank Graham has opened a garage, salesroom and repair shop at 313½ South Capitol avenue, with space sufficient to accommodate about 75 automobiles. Besides providing garage storage he will do a sales business in used cars and a general repair trade.

INVENTS TRUCK PERISCOPE

The organization of the Truck Periscope Company to manufacture periscopes for motor trucks is contemplated by George H. Penny, Monroe, manager of the Penny Auto Truck Company, operating a fleet of trucks between Detroit, Monroe, Toledo and Akron. The de-

Digitized by Google

vice is the invention of Mr. Penny and through the use of three lenses gives a view of traffic in the rear and on each side of the road.

NATIONAL CONVENTION ON NORONIC

Detroit will entertain the National Team & Motor Truck Owners' Association at the next annual convention, June 13-15. The meeting will be held on the steamer "Noronic," which will take the delegates and their ladies and guests on a three-day cruise, probably into Georgian Bay. The Detroit Transportation Association, which will act as host to the national convention, is now receiving reservations.

ROOSEVELT HIGHWAY SURVEY

A. W. Tracy, Duluth, official of the Roosevelt Highway Commission, will have completed a general survey of the eastern section of the 3,000-mile highway when he arrives in Manistique next week. The trip was made to see that all facilities for traffic over the highway were in shape for the opening of the season.

D. T. A. IN NEW QUARTERS

Members of the Detroit Transportation Association held their first meeting in their new quarters, Tuesday evening, April 18. Costs were discussed for various kinds of equipment and operation.

The quarters occupy the entire second floor of the building at Third avenue and Howard street, with approximately 15,000 square feet of space. The offices were modeled and altered by the association itself, and contain a large room for the board on which business is cleared, an office for Secretary F. L. Henk, a directors' room and smaller compartments for files, cloaks and a refreshment room. The offices are the largest in the United States devoted exclusively to cartage interests.

BUS SERVICE EXTENSION

Three bus services will be operated or expanded at once in rural sections of Michigan.

R. L. Burger, Belding, has started a motor bus line between Belding, Ionia and Portland and plans two round trips daily.

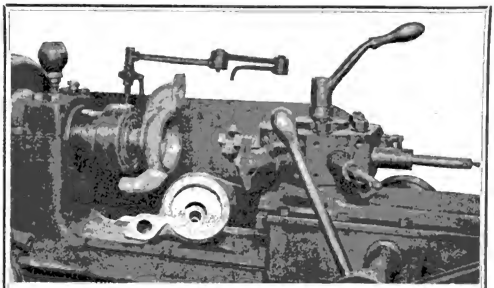
L. B. Shance & Son, Potterville, operating a line between Lansing and Charlotte, has purchased two Duplex trucks, which will go into service about May 1.

The Houghton County Bus Company will resume at once motor bus service for the summer season. It will operate between the Portage and Torch lake districts.

CLARK PAINTINGS ON TOUR

One of the features of this year's automobile shows was the set of twelve paintings, "The Spirit of Transportation." These canvasses, which were made by twelve foremost American artists under the auspices of the Clark Equipment Company, Buchanan, represent the artists' conception of the development of transportation.

The National Automobile Dealers' Association has now taken over these paintings and has arranged to exhibit them this year in the principal cities of the country, as a means of furthering the automotive industry and automotive transportation in particular. In each of the cities a joint meeting of the automobile dealers' association, the clearing house association and the chamber of commerce will be held and addresses made by business men, on subjects such as the following: "The Automobile and the Motor Truck—A New System of Transportation;" "Increase of Land Values Due to the Use of the Automobile and Motor Truck," etc. At present the paintings are being shown in Seattle, Wash. Ezra W. Clark, advertising manager of the Clark Equipment Company, is accompanying the paintings during the next two months, having donated his services for a lecture tour to the N. A. D. A.



The hub of this Cast Iron Water-Circulating Pump-Body has been turned and drilled on another No. 4 Turret Lathe. The tools on this No. 4 rough bore and true up for shaft, ream to size, counter-bore for clearance and finish bore and face large diameter—all in 5½ minutes. Most of these tools are standard.

Proper Tools for Turret Lathes

To do work well
a turret lathe must be equipped
with the proper tools.

Tools make or mar
a good turret lathe.
Re-tooling a turret lathe
often doubles its production.

In our catalog
we illustrate turret lathe tools
for all kinds of work,
bar or chucking,
and if you desire,
we help you select
the right tools for your work.

Send for our Small Tool Catalog.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:30 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Purchasing Agents' Association of Detroit, desires for members every purchasing agent or director who is capable and of high integrity.

Publicity Office 10 Garfield Building Glendale 3919

LEWIS G. GORTON

Stocks and Bonds

1413 Majestic Building, Detroit, Mich.

Member of Detroit Stock Exchange

LISTED AND UNLISTED SECURITIES

WILLYS-OVERLAND'S PROGRESS

The Toledo factories of Willys-Overland, Inc., were brought up to a full time schedule this week, according to announcement of Charles B. Wilson, vice-president, and will continue to be so operated. The working force now numbers 5,000, with 7,000 the goal by the end of this month.

NIGHT SHIFT ADDED

Word from Greenville is that owing to the rapidly increasing demand for the products of the Michigan Motor Garment Company, a night shift has been started in some of the departments. About 150 persons will be employed at the plant.

TRANSPORTATION NEWS

Rail :: :: Water

Alma—The report is current here that the Pere Marquette will put up a new station in the city some time this year. The present structure is declared to be old and inadequate.

Benton Harbor—The steamer City of Grand Rapids, of the Graham & Morton line, opened 1921 navigation between Benton Harbor, Holland and Chicago, April 17. Three trips a week will be made.

Grand Rapids—The following directors were elected at the annual meeting of the Grand Rapids & Indiana Railway Company, here, a few days ago: Clay H. Hollister, William R. Shelby and W. Miller Wardrop, all of Grand Rapids; Samuel Rea, Philadelphia, and J. W. Orr, Charles M. South and James J. Turner, of Pittsburgh.

Washington—In the case of the Peerless Portland Cement Company, Union City, Mich., vs. The Director General of Railroads, as agent, and the Michigan Central Railroad Company, the Interstate Commerce Commission has decided that the rate of $15 a ton for intrastate transportation of wet marl, in carloads, from Spring Arbor to Union City, Mich., during federal control, was unreasonable to the extent that it exceeded $7.50 per car. Reparation was awarded. The case, which was No. 11299 on the Commission's docket, was submitted on March 18 and decided March 21, 1921.

St. Joseph—St. Joseph will have a steamship line of its own again this season. The Theodore Roosevelt has been obtained under charter by the E. P. Farley Company, a corporation of Chicago and St. Joseph capital. Daily trips will be made by this big excursion steamer, which will leave Chicago at 9:30 a. m. and St. Joseph at 4:30 p. m. W. T. Mullen will be the local manager. Will H. Cochrun, former general manager of the Chicago-South Haven Steamship Company, will have charge of the Chicago docks. The local company chartered the Roosevelt when other cities, including South Haven, were bidding for it. The vessel is one of the fastest and finest excursion steamers on the lakes. Its gross tonnage is 1,955, with net tonnage of 1,330. The ship's length is 275.6 feet, and the beam 40 feet. The boat was built in 1906 in Toledo. Capt. J. H. Clark is commander.

Washington—That some reduction in railroad rates will be made soon is indicated by a statement from Secretary of the Treasury Mellon to the effect that new rates on certain commodities will be asked in a petition to the Interstate Commerce Commission, and very probably will be approved.

Washington—Rep. Sweet, Ohio, has announced that he will introduce a bill in Congress so amending the Transportation Act as to restore to the Interstate Commerce Commission its original authority to adjust rates, the effect of which would be to repeal that section of the act which provides that rates shall be sufficient to yield a return of at least 5½ per cent on the federal valuation of the properties.

Washington—The Interstate Commerce Commission has decided (Investigation and Suspension Docket No. 1232—Coal from Illinois to Michigan) that the proposed cancellation of joint rates on coal from mines on the Minneapolis & St. Louis Railroad in Illinois to destinations in Ohio and Michigan is not justified, and has ordered the suspension schedules cancelled. The case was submitted March 16 and decided March 31, 1921.

Springfield, Ohio—Announcement is made here by a representative of the Detroit, Toledo & Ironton Railroad, owned by Henry Ford and his son Edsel, that a fast passenger schedule will become effective May 1, when an hour will be cut off the run between Springfield and Ironton. For the present steam engines will be used. Later Ford's motor driven cars will be substituted for passenger traffic. It was stated that on the inspection trip recently Ford's motor driven car made the run from Springfield to Detroit in five hours.

Lansing—According to the reports of local railroad companies, both incoming and outgoing freight is increasing here, while better service is now being given, with more labor available. The Grand Trunk freight office agent reports a gain of 50 per cent over the two preceding months.

STRONG, CARLISLE & HAMMOND MOVE

On and after April 25 the Detroit branch of the Strong, Carlisle & Hammond Company, dealer in machine tools, will be in its new office and warehouse at 1300 Fort street west, where it will be situated to serve its customers in a better manner than it ever has been before. The company has for five years been located in the Dodge building, 410 Jefferson avenue, but owing to the fact that this building has been leased to the Grand Trunk Railway for office purposes, it was necessary for the Strong, Carlisle & Hammond Company to move to new quarters.

At the location at 1300 Fort street west the company will have 10,000 square feet of space all on one floor, well lighted, located centrally to all freight depots, and with its own freight elevator.

J. L. Whitehead, manager of the Detroit branch, is one of the best known men in the machinery business, in which he has been engaged a number of years.

FLINT C. OF C. ELECTION

Directors of the Flint Chamber of Commerce have elected Arthur G. Bishop as president for the ensuing year. Mr. Bishop is one of the best known members of the Chamber and is one of the charter members of the organization. Charles H. Bonbright, president of the Imperial Wheel Company and Flint Motor Axle Company, was chosen first vice-president, and Dr. Jesse H. Beckwith, who has been prominent in many local campaigns, was elected second vice-president. L. H. Bridgman, of the Union Trust and Savings Bank, was re-elected treasurer. Mr Bishop succeeds Floyd A. Allen.

CONSERVING MICHIGAN TIMBER

Present methods of forest taxation in Michigan vie with forest fires in depleting the state's available timber supply, according to the Michigan State Farm Bureau forestry department, located in Lansing. The department is conducting a campaign to conserve the timber supply by urging adequate fire protection for the forests and cut-over lands. In conjunction with the leading foresters of the state, the department has prepared a plan for giving fire protection to 3,000,000 acres of timber land and 7,000,000 idle acres, 60 per cent of which, it is declared, would reforest themselves if properly protected. The plan was drawn for the new state department of conservation. It provides for a chief forest fire warden with three district fire wardens and forty trained forest fire rangers, to devote their entire time to fire protection. They would also assist in forest propagation and perform other duties.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton
SALES REPRESENTATIVES: Atlanta Denver Portland
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700



HANSEN WHITNEY VERTICAL SHAPERS

ARE
A
NECESSITY
IN
AN
UP-TO-DATE
TOOL
ROOM

—

FAST
ACCURATE



LET US TELL YOU ABOUT THEM.

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT
CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

SIX feet of earth conceals the errors of many a physician. Several feet of masonry may hide the defective work of an electrical contractor.

No post-mortems need be held over the performances of this organization.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

MILLER-YORK

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.
Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Marysville—The Monarch Pattern Works, 1426 Russell street, Detroit, has bought a factory site 40 by 100 feet in Marysville. Building operations will be started as soon as business resumes its normal swing, according to H. J. Chandler, secretary-treasurer of the company.

Grand Rapids—During the week ended April 1, 74 permits were taken out. This is nine more than for the previous week, which was the record week so far this year. The permits represent an expenditure of $89,380. Fourteen of the permits were for new construction and the cost involved is $69,300. March permits totaled 255, which is 75 in excess of the number taken out a year ago. However, the cost of the buildings this year was $348,047, as compared with $600,850 last year. Permits issued during the first quarter of this year totaled 480 and involved an expenditure of $815,717, as compared with 301 permits for the corresponding period in 1920, when the expenditure was $1,346,846.

Detroit—Practically all the work awarded by architects during the week ended April 14, as reported by the Builders & Traders' Exchange, was in the nature of sub or additional contracts. For instance, the Lanquist-Ilisley Company let the remainder of contracts for the 15-story Stroh building, these being for fire escapes, marble, mail chutes, painting and glazing. Raseman & Freier let the contracts for roofing, painting, plumbing and heating, mason work and stone on the factory building being erected on Plum street for the Detroit Color Type Company. Schools and church buildings were other jobs mentioned. Concerning projects for new construction in the hands of architects, the Builders & Traders' Exchange makes the following announcement: "The month of April started off fairly well in the way of new construction. A number of good-sized projects were reported, as follows: A brick and steel branch bank building for the Peoples State Bank; a brick and frame factory building; a one-story and basement store building; a brick and steel school building, to be erected on the present Nordstrum site; the completion of the Marr school; completion of and addition to the brick power house for Harper Hospital; a one-story and basement, brick and steel branch bank building for the American State bank; a ten-room brick and steel school building, to be erected at Gratiot avenue and Grotto road, and a variety of smaller projects.

Detroit—One hundred three and four-room houses are to be constructed in Royal Oak township, at Nine-mile road and John R. street, east of Ferndale, by B. F. Stephenson, real estate dealer. There are now 1,000 inhabitants in this section and a school recently built has an enrollment of 200 pupils.

Kalamazoo—Owing to the refusal of the bricklayers to meet with the employers and attempt to settle the strike started two months ago, the contractors have declared for the open shop under the American plan, with wages reduced from $1.25 to $1 an hour. Work will be resumed and if local men do not supply the demand for labor, men will be brought into the city.

Lansing—According to the present early activities, all building records in Lansing will be passed this year. Already the number of building permits is exceeding those for the same period last year, and work has been started or soon will be on several large structures, in addition to many new homes. The total number of permits during March was 164, or forty-five more than during the same month last year. The total estimated expenditure for these is $240,501, including those for the erection of a detention hospital at a cost of $51,000 and a rest house at Potter park at a cost of $21,000. During two weeks in April permits were issued alone for the construction of 82 garages. The Reniger Construction Company reports a busy season ahead. It is rushing work on the Allan A. Post addition to the Edward W. Sparrow hospital and also the East Junior high school. Structural steel work has been begun on the Lawrence bakery. H. A. Reniger, secretary-treasurer of the company, believes a good share of the building this year will be of a commercial nature, including churches, schools, banks and industrial structures.

Detroit—The commissioner of public works will advertise next week for bids on the sale or lease to the municipality of a cement manufacturing plant capable of producing 400,000 barrels annually. Permission for the purchase was voted at the election April 4.

Detroit—The Wyandotte Portland Cement Company, Wyandotte, on rid vertised bids for 175,000 barrels of cement wanted by the city of Detroit, has made a bid of $2.22 a barrel and furthermore offered to refund $15,000 as a price adjustment on existing contracts if its bid is accepted. In addition, the company agrees to give the city the benefit of any future reductions. In February the city rejected bids which called for $2.41 a barrel.

RIVER FRONT

Unrestricted; Mile Circle.
Sacrifice for Cash.

Have good tenant who who will take long or short time lease. Rental will pay good return on money invested. the only land at this location which can be purchased.

LOUIS G. PALMER & CO.
568 Penobscot Bldg. Cadillac 317

Wanted, A Thorough Business Man with $10,000 to $20,000 and services, to take hold of a going business A very attractive offer. Box K. M., Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

Digitized by Google

State Cartage Association Is Proceeding Aggressively

[By Staff Correspondent]

LANSING, April 20.—No time is being lost in perfecting the organization of the new Michigan Highway Transportation Association and in directing attention to the necessity for immediate action to prevent the passage of adverse legislation by the Michigan legislature.

Secretary H. H. Hardy has arranged his office system so as to take care of inquiries and all other business of the Association. This week he mailed out about 200 letters to truck owners, pointing out the advantages of the Association. This was the opening gun in the campaign for membership, and it is expected that the new organization will be able to boast shortly of having enlisted all the leading truck owners of Michigan. Mr. Hardy reports that much interest is being shown and that he has received numerous inquiries.

That the formation of this association has come just in time to save this growing business from the attacks of legislators is also emphasized in the letters sent out by Mr. Hardy. In his communication he outlines four bills which have been introduced either in the House or Senate, and which would injure all truck and bus owners and operators. Senate Bill No. 279 and House Bill No. 323 provide for a tax on buses and trucks and all such motor vehicles operated upon the public highways for profit. This tax amounts to five per cent on the gross income, and is opposed by the Association as unfair and too heavy, a tax that may result in driving many out of business. A third bill is No. 341 in the House, which would limit trucks to a total gross weight of twelve tons, including truck and load, and all trucks to a load not to exceed the rating of the manufacturer. Thus with a three-ton truck no more than three tons could be carried. The only exception is two-ton trucks with pneumatic tires.

The Association secretary states that many manufacturers purposely underrate their trucks, and consequently such a bill would be a handicap to truck owners and operators. Still another bill that would affect trucks adversely is the House Bill No. 549 providing for a tax of one cent a gallon on gasoline and other volatile liquids for use in motor vehicles. This would bring a still greater tax upon the commercial motor vehicles.

Thus, it is pointed out, the truck owner is faced not only with double, but even treble and more taxation. It is such dangers that the Association must fight, besides joining in moves to improve highways and conditions generally.

MULLINS CONSIDERS DETROIT

It is reported that the Mullins Body Corporation, Salem, O., has taken an option on a factory building in Detroit and will remove at once to this city. The plant formerly occupied by the Cadillac Motor Car Company is mentioned in the deal, but confirmation is lacking. The reason for the withdrawal of the Mullins concern from Salem is said to be labor troubles, the company desiring to operate the plant on a nine-hour basis, which the workers refused to accept. A lockout followed and the factory was closed.

ASK GMC TO OPEN TRANSFER OFFICE

Representatives of the Detroit brokers are said to be endeavoring to obtain a transfer office in Detroit of the General Motors Corporation whereby stock purchased on the Detroit Stock Exchange may be transferred. At present stock is sent to New York for transfer and besides a delay of three or four days a payment of New York taxes is required. With a local office there would be no such delay of taxes and it is believed that such action would stimulate trading here.



Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, APRIL 23, 1921

Judge Gary on Labor Unionism

IF a clear, concise, dispassionate statement of the case against labor unionism has been lacking, it has been supplied during the last week in the report of Judge Elbert H. Gary, chairman of the board of the United States Steel Corporation, to the corporation's stockholders. With the skill of a surgeon who searches out and brings to light a diseased part in a remote recess of the human frame, Judge Gary has thrust aside each extraneous issue and lifted out to the public gaze the very heart of the matter, which is the needlessness of labor unions —the fact that whatever call there may have been for them in other years, that call long since has ceased to be heard, and that the unions, therefore, remain only as a curb on individual initiative, a weight about the neck of industry, increasing costs of production and therefore costs to the public.

Judge Gary, after asserting that the Steel Corporation has always paid its workmen as high, if not the highest compensation of any basic industry, and accorded them as generous, if not the most generous treatment (wages and treatment, he declares, which have been no more liberal than the men deserved), predicates his analysis of the present status of unionism by the assertion that, "as stated and repeated publicly, we do not combat, though we do not contract or deal with, labor unions as such." Thus he makes it clear that he does not appear in the role of a prosecutor, but as an analyst.

"I believe," he says, "they (the unions) may have been justified in the long past, for I think the workmen were not always treated justly; that because of their lack of experience or otherwise they were unable to protect themselves, and therefore needed assistance of outsiders to secure their rights."

"But," he continues, "whatever may have been the conditions of employment in the long past, and whatever the results of unionism, there is at present, in the opinion of the large majority of both employers and employes, no necessity for labor unions, and no benefit or advantage through them will accrue to anyone except the union labor leaders."

In support of the statement that the great majority of employes see no need for unions, Judge Gary cites the fact in the United States not more than ten to fifteen per cent of labor is, or was at its highest point during the war, actually included in membership of the unions, and he adds that "the workmen do not voluntarily join the unions, do not seek the opportunity, do not search for leaders to form and maintain organizations; but, on the contrary, self-appointed leaders, who expect to receive a pecuniary profit, have been and are constantly and persistently soliciting the workmen to become members. The leaders create and maintain the organizations at the expense of those who are actually workmen and join through intimidation, over-persuasion, false promises, misrepresentation or because of the use of other vicious or unworthy methods."

Moreover: "It is the common belief that the workmen, as a rule, know nothing and have little to say in the management of the affairs of the unions. Therefore it is plain that the public speaker or writer who assumes that the union labor leaders represent labor as a class is mistaken, first because a comparatively small percentage of labor is connected with the unions, and secondly, because a relatively small number of members of the unions actually participate in any action taken.

"If the workman referred to assents to the demand to join the union then what happens? He pays the dues required and the assessments made from time to time by the leaders. He works where and when the employer decides, provided only the union consents. He must live up to the rules, instructions and conditions of the leaders. The hours must not exceed the number consented to by the leaders and the output of the workman must not exceed the limit fixed by them. However skillful the workman may be or become, he cannot be promoted to a better job or position except for seniority in time of employment. He may labor for months or years in a low wage or salaried position, though entitled by skill to earn a much larger amount. He cannot advance on merit. He is an instrument, a tool, of the union. If for some trivial cause or even an immoral one, such as the discharge of a lawbreaking fellow employe, a strike is called, this particular workman must quit, even though his family is in need of the compensation he would receive if working.

"The workman, if he belongs to a labor union, becomes the industrial slave of the union. He has no power of initiative or opportunity to apply his natural and physical capacity.

"The natural and certain effects of labor unionism are expressed by two words—inefficiency and high costs. And be it remembered that in the end the general public, which is more interested in selling prices of all products, must pay for the extortionate, unnecessary and unreasonable costs of production. It is primarily, fundamentally and finally interested in the existence and conduct of labor unions."

There you have the employer's case, and the public's case, against labor unionism.

Abolish the Comptroller

THE PROPOSAL at Washington to transfer the duties of the Comptroller of the Currency to the Federal Reserve Board should be given careful consideration by the banking fraternity. In the old days bank examination consisted mainly of counting money and adding up lists of notes to determine whether the actual assets balanced with the books. It was much the same with bank liabilities, the operation consisting of taking trial balances of the ledgers. Beyond this, examiners were more concerned in collecting their fees and catching the next train.

But with the growth of banks, and owing to experience with excessive loans, came stricter laws regarding investments which called for more attention by the supervisory authorities. And since the time when national examiners were changed over from the fee basis of pay to the salary basis, the trend of their first attentions has been steadily toward examining the solvency and liquidity of national banks, notwithstanding that the auditing feature of their work has been broadened from time to time.

Furthermore, before the advent of the Federal Reserve Banks, the city bank carried loans for the country bank, and the central reserve banks carried loans in turn for the city bank, the question of condition of any borrowing bank being one of prime interest to the lending banks. But the agency which was in position to know the particulars was restrained from giving the lending bank the benefit of its information. With the changes due to the advent of the Federal Reserve Banks there has come a growing disposition on the part of member banks to borrow from the Reserve Banks. In fact during the last four years nearly all member banks have had occasion to borrow from this source. By law Reserve Banks have had authority to examine member banks but the real work has been performed by an almost independent agency, the Comptroller's department, and if it so happened that the

Digitized by Google

Comptroller did not choose to work in harmony with the Reserve Banks, the latter did not receive any more assistance than the law provides. Moreover, the big advantage of gaining first hand information has been largely lost due to the triple system of supervision.

Another advantage that comes to mind is the economy to the federal government by having one agency instead of two; but above all, if the Reserve Banks take over in toto the examining machinery of the Comptroller, they will be in better position to prevent unsafe and unwarranted extension of credit. The Reserve Banks, moreover, will be in a position to prevent pyramiding. The loophole now existing by reason of two kinds of incorporated banks and three supervising agencies will be narrowed down to a point where only non-member banks will fall without the direct scrutiny of the chief lending power and credit source of the country, the Federal Reserve Banks.

There is plenty of argument against concentrating too much power in the federal government. The plan of having state and national banks of independent charter authority for several good reasons should not be abolished, yet there are more good reasons why a central authority should be informed in detail about the credit transactions between the two. Any arrangement which will inure to the safety of lending banks and to the security of depositors should receive vigorous support. There does not seem to be anything in this proposal which materially alters the existing legal relations between all parties concerned, but it does mean simplification of the machinery of supervision; likewise efficiency and economy.

Punishment

THE NIGHT was pitch dark, and it was raining. A clumsy searchlight manipulated by a Dutch policeman cut a cross section in the slanting storm and revealed a bent, sobbing old man with a white beard and drooping mustache helping his daughter up the steps of a railway carriage at Doorn, Holland. Up in front, four or five men, one of them an undertaker, were putting a coffin aboard. The box was heavy and the bearers were having quite a struggle with it. Finally they got the end of it into the coach and pushed it in, arm length. It grated and squeaked as it slid in on the floor. A trainman pushed the door shut with some clatter. Two or three younger men followed the old man and the woman into the coach. The curtains were drawn. Silence for a few minutes, except for the pelting of the rain and the growls of a Dutch constable, holding back the morbid, who would have picked the train to pieces for souvenirs.

Presently the door of the coach opened and a young man descended, turned and half lifted the old man out. Two other men hurried over and hooked their arms through his. They helped him along, stumbling and moaning, to a closed automobile waiting at the edge of the station platform. The younger man stepped into the car and the machine was driven away through the rain and mud.

The old man was William Hohenzollern, once kaiser and king, master of a hundred millions of souls and monarch-to-be (so he thought) of world empire. It was he who drew a new map of the inhabited universe with his sword and called out his human cattle to be quartered to make the map good; who, to realize his ambition, gave sanction to the butchery of women and little children; who horrified the savages in his entourage by the tortures he countenanced and brought the blush of shame to Attila and his Huns; who called upon God to witness his magnificence.

This night, in the rain and the storm, he turned back to his exile while alien hands bore back to the Fatherland what was once his royal consort. He could not pay her the last fond measure of devotion because, being a criminal, the hand of man was set against him, and he must go back to his prison.

Willian Hohenzollern was beginning to pay the price.

Short Measure Stuff

CONCERNING "SYNOPSIS OF PREVIOUS CHAPTERS"

WHO writes the "Synopsis of Previous Chapters" for our serial stories? Whoever they are, they should receive some recognition. These masterpieces are too often read and forgotten in the search for plot continuity and action. Yet they are more mysterious than the most mystifying mystery; more graphic than the most hair-raising tale of adventure. They have only one drawback, and that is that they never give any inkling of what has happened in the tale or what is about to happen.

Here is what might be a typical specimen:

"Gloria returns from college to find her father about to be ruined. Oswald leaves his study just as she enters and is told that unless she waives her dower rights to his estate, and promises to marry the handsome stranger, her mother will divorce him. She pleads for mercy but the butler only sneers and hints darkly about the peril to her handsome lover. Finally, in despair, she goes to call on Bernice, who sobs out the story of the whole hideous affair. Returning home, she meets Bob, who takes her hand tenderly in his and asks permission to call on her parents that evening and ask for her hand in marriage."

CHAPTER XX

As the yacht neared the Ozarks Clementice came on deck.

"Good morning, captain," she chattered. "And where may we be now?"

The captain looked down at her quizzically. He had dangled her on his knee when she was but a little girl and he thought darkly of the dangers and sorrows which hung just over her head, or somewhere

* * *

Do you think we exaggerate? Then examine the next few in your favorite magazine and see.

* * *

A PEST

He is a dreary pest—
I speak of Oscar Jules—
Whenever he is in a game
He always quotes the rules.
—Detroit Free Press.

That ain't the worst thing Oscar does;
What I can't understand
Is why he thinks that he must hold
Post mortems on each hand.

* * *

Every time a physician has a hunch, a lot of guinea pigs are out of luck.

* * *

The man who keeps too man irons in the fire is apt to have more iron than fire eventually.

* * *

When President Harding speaks of sound development for America, the vocal instructors and elocutionists wonder if he means voice culture.

* * *

Says a want ad:

"Pressing Parlor business for sale. Cheap for quick action."

We suspect that the advertiser omitted the usual ending "Object matrimony."

—A. F.

No Time for the Metric System

A READER of the paper who is very much opposed to the compulsory adoption of the metric system of weights and measures in the United States—an end sought by a powerful group—calls attention to the fact that the propaganda in favor of the change is meeting with determined and widespread editorial opposition. He says he is glad to note the length and streugth of the battle line.

It may be remarked that, while the metric system undoubtedly has several features to commend it, this is hardly the time to move for its adoption. Business in this country has problems enough just now without having to encounter another involving the multiplicity of changes that would be necessary to a shift from the present system to that based upon the decimal point. Not only would there be endless confusion, but the expense involved would be staggering—enough in thousands of cases, no doubt, to throw manufacturing corporations into insolvency.

Some reforms, while desirable at certain times, are absolutely destructive in other periods. We are passing through one of the other periods at present.

Digitized by Google

FINANCIAL

A Proposal for Bettering Detroit's Finances—Deflation Process Shown by Bank Reports

By PHIL S. HANNA

THERE HAS BEEN much puff about improved conditions in Detroit. We read today that one plant adds 1,000 men. And we learn next day that the same plant laid off 900 the day previous. Criticism has seemed to center on the banker, and yet scarce are the proposals for bettering conditions.

The fact is that liquidation of loans by borrowers has not kept pace with the decrease in deposits and the banks as a result are carrying now practically the same amount of borrowed money obligations that they carried in December and are obliged to carry on a "defensive" campaign against new business rather than to conduct an "offensive" program wherein new loans could be extended to stimulate business.

We present below figures comparing conditions on December 2, 1920, with those April 7, 1921, which bear out the statement, and there is also shown what the condition might be if the betterment plan can be carried out:

	Deposits	Borrowed Obligations	Loans	Ratio of Borrowed Money to Loans
December 2, 1920	$412,000,000	$64,000,000	$401,200,000	15.9%
April 7, 1921	375,000,000	65,153,000	381,300,000	17.1%
	Dec. $37,000,000	Inc. $1,153,000	Dec. $19,900,000	Inc. 1.2%
	($375,000,000	$15,153,000	$347,300,000	*4.4%

*If $50,000,000 of bank loans were funded into securities and sold outside of Michigan.
*Normal.

The borrowing public can not expect Detroit banks to "loosen up" either until liquidation proceeds enough faster than fall in deposits to enable the banks to pay off a substantial portion of their borrowed money, or until deposits increase enough to permit of their cutting down obligations incurred to carry loans. There are two ways in which this may be done: Borrowers can go outside and get the money to pay off local banks or outside deposits can be brought in. The former has some undesirable features in that it encourages doing business away from home, but there are many cases wherein corporations should find it possible, some of their local bank loans by selling notes to investment bankers who will sell those notes (or bonds) to investors in parts of the country that have a surplus. The Federal Reserve Banks were never intended for carrying indirectly, through the medium of rediscounted paper, originating in commercial banks, loans which are apt to run for any considerable time. And it is the opinion of those in close touch with the local situation that if the aggregate of "capital loans" now being carried by the Detroit banks could be shifted to investors (who are not depositors in Detroit) the local banks could pay down their obligations to the Federal Reserve Bank, and the lightening of the credit load would bring about such a relation between deposits and loans that once more they could look to making new loans to business.

For an example, take the figures given above for April 7. Suppose $50,000,000 of loans were funded into bonds or term notes and some of our energetic investment bankers sold these securities outside of Michigan. Borrowed money obligations would fall to $15,153,000 and loans would fall to $331,300,000, which would give the banks a leeway of (375 less 331) $44,000,000 between deposits and loans and would reduce the proportion of borrowed money to loans from 17.1 per cent as it stood April 7 to 4.4 per cent, which would be a normal and healthy condition. And the chances are that the impetus which the lessening of the strain, and the new loans which could then be made, would give business a new lease on life. It would be a real step forward to see such an attempt made by some of the heavy borrowers.

* * *

Eight hundred and twenty member banks of the Federal Reserve System, April 8, 1921, show a reduction of $1,411,700,000, in total loans and investments as compared with October 8, 1920. The reduction of borrowed money obligations and deposits in the same institutions for the same period was $1,443,573,000. Cash and reserve fell from $1,761,150,000, October 8, to $1,568,485,000, April 8. The comparisons follow:

	Deposits	Borrowed Money Obligations	Loans and Inv.	Cash and Res.
October 8, 1920	$14,255,542,000	$2,242,562,000	$17,167,604,000	$1,761,150,000
April 8, 1921	13,131,345,000	1,630,576,000	15,756,904,000	1,568,485,000
	Dec. $824,197,000	Dec. $619,376,000	Dec. $1,411,700,000	Dec. $192,665,000
	619,376,000			
Decrease in liabilities	$1,443,573,000			
Liquidation of loans and investments	1,411,700,000			
	*$31,873,000			

*Amount by which liquidation of loans has fallen behind deposit loss.

The ratio of total borrowed money obligations to total loans and investments of 820 banks, whose figures are reported above, fell from 13.1 per cent on October 8, 1920, to 10.3 per cent on April 8, 1921.

* * *

The condition of the Federal Reserve Banks taken as a whole continues to improve, due to a $25,000,000 decrease in note circulation and continued gold additions, although a loss of $19,600,000 silver and an increase of $9,600,000 in deposits prevented more than a slight rise in reserve-deposit ratio, which advanced from 53.5 per cent to 53.7 per cent over the previous week.

An interesting feature of the reserve banks loans is brought out however by comparing total of member banks bills held now with the total held a year ago.

A year ago (April 16, 1920, to be exact) member banks had borrowed $1,430,888,000 on United States bond collateral and had rediscounted $980,303,000 of their own paper, making a total of $2,411,191,000. Today (April 15, 1921), the first item has dropped to $929,186,000 and the second item has increased to $1,175,368,000, making a total of $2,104,-544,000 now against $2,411,191,000 a year ago, a reduction of $306,637,000. This is a good measure of the extent which the member banks are paying up the reserve institutions.

* * *

The Chicago Reserve Bank made a handsome gain in reserve-liability ratio, increasing the same from 45.6 to 48.7, due largely to a gain of about $21,000,000 in reserves and a combined decrease of about $6,000,000, in note circulation and deposits. It is notable also that the earnings assets of the Chicago bank dropped off $26,000,000 in the week between April 8 and April 15. At this rate of liquidation of earning assets it will take only fifteen weeks to retire all the earning assets of the Chicago bank and instead of complaints about too much earnings there will be inquiry about better earnings.

* * *

Volume of business as shown by clearings and bank debits continues to show decreases. One hundred fifty-eight principal cities reporting show total debits for week ended April 13, 1921, of $7,197,489,000, as against $7,787,579,000 for the week ended April 6, 1921, and compared with $9,684,923,000 a year ago, April 14, 1920. Compared with a year ago the reduction is about 26 per cent. Index number of prices a year ago was 240 against 176 now, a similar percentage. The reader may draw his own conclusions.

GRAND RAPIDS FILTRATION PLANT

The Grand Rapids City Service Commission has floated $510,000 of bonds, of which $100,000 will be used to building a new filtration extension. One hundred fifty thousand dollars will go for water main extensions and $230,000 for street improvements.

NOBLE OIL REMOVED FROM LIST

The board of governors of the Detroit Stock Exchange has removed from the listed section the preferred stock of Noble Oil Company because, according to announcement, the company failed to notify the Exchange that payment of both common and preferred dividends due April 15 had been indefinitely deferred.

CITIES SERVICE EARNINGS, 1920

For the year 1920, earnings of Cities Service Company were $43.09 a share on the common stock, as against $39.09 for the year 1919

STANDARD PARTS FINANCE PLAN

Advices from Cleveland say that the Standard Parts Company is no longer operating at a loss and that business now amounts to about $1,000,000 a month. The new financing plan, formulated last week, contemplates a new company and a note and stock issue to take over the various subsidiary properties including the Perfection Spring company, Cleveland; Pontiac Spring company, Pontiac, Mich.; Standard Welding Company, Cleveland; Bock Bearing Company, Toledo; Eaton Axle Company, Cleveland, and the Canton Forge Company, Canton, Ohio.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Banker Land & Inv.	9¼	10
Burroughs Adding Machine	147	150
Columbia National Fire	15	17
Commerce Fin.	15	20
Detroit Mortgage, com.	2½	3
Detroit Mortgage, pfd.	5½	8
Detroit Copper & Brass	15	20
Detroit National Fire	25	26
Detroit Life	55	65
Eureka Croesus	80	82
Federal Bakeries Co.	27	30
Federal Discount Co.	7	8
Fisher Body	84	86
General Necessities Corp.	10½	13
Gladys-Belle Oil, com.	30	62
Gladys-Belle Oil, pfd.	45	46
Great Lakes Engineering, new	11	14
Great Lakes Engineering, old	55	65
Hoover Steel Ball	12	15
Hayes Wheel Co.	13½	14½
Interstate Fire	22	24
Invader Oil	120	135
Invader Oil (new)	70	70
Jackson Cushion Spring	7½	7½
Jewett, Bigelow & Brooks Units	9¾	10½
Jewett, Bigelow & Brooks, com.	6¾	7½
Kelsey Wheel	45	48
Little Wonder Stove	1¾	1¾
Monroe Binder Board	37	41
Detroit Motor Bus.	6	9
McCord Manufacturing, com.	10	10½
McCord Manufacturing, pfd.	40	50
Michigan Copper & Brass	16	17
Mich. Fire & Marine	75	80
Noble Oil, com.	25	33
Petoskey Portland Cement	12	13
Peninsular Fire Ins.	31	38
River Raisin Paper	10	12
Trippensee Mfg. Co.	3¾	7½
Union Mfgs. 100% com.	9½	10¾
Union Mfgs. 90% com.	7¾	8½

Motor Stocks	Bid	Asked
Briscoe Motors	18	21
Columbia Motors	4½	6
Chalmers		1½
Chevrolet	163	190
Cleveland	30	45
Curtis Aeroplane	3	5
Durant Motors	20	22
Elgin Motors	3¾	6¼
Haynes	150	175
Hupp	14	14½
LaFayette Motors	30	60
Liberty Motors	6½	7½
Liberty Motors, pfd.	40	80
Lee Tire	27	28
Maxwell Motor	5	5½
Mercer	4	6
Mitchell Motor	6	9
Motorbus	6	9
Nash	390	625
Pierce-Arrow Truck	26	33½
Republic Truck	17	18
Saxon Motors	4¾	5
Scripps Booth	25	33
Stearns	25	30
Stromberg Carburetor	35	66
Studebaker	72½	78
Willys-Overland	7½	8
Wilson Truck	6½	7½

Grand Rapids Stocks

American Public Utilities, Common	7 - 12
American Public Utilities, pfd.	18 - 21
Commonwealth P. R. & L., com.	9 - 11
Commonwealth P. R. & L. pfd.	89 - 91
Citizens Telephone Company	4¼ - 4½
United Light & Railways, com.	23½ - 25
United Light & Railways, pfd.	89 - 91
Cities Service, Bankers' Shares	37⅝ - 38¼
Cities Service, com.	235 - 240
Cities Service, pfd.	65¼ - 67
Cities Service, Debenture "B"	125 - 130
Cities Service, Debenture "C"	93 - 94
Cities Service, Debenture "D"	91 - 92

Quotes by Howe, Snow, Corrigan & Bertles, April 20.

LANGDON JOINS LAW FIRM

John H. Langdon, manager of the Detroit Clearing House Association, and an attorney of some six years' standing, has become associated with Jorgensen & Alexander, with offices at 724 Dime Bank building. The name of the new firm is Jorgensen, Alexander & Langdon. Mr. Langdon advises that his new connection does not mean giving up his post with the clearing house, which he has held for several years.

Business Meets New Conditions

American business has been clearing decks. Budgets have been revised. Every buying, selling and production unit has been overhauled and made ready for intensive service. Economy has been the test—economy of time and effort.

In any study of functions and readjusting of methods, the work done by your bank balance should not be overlooked. Has it been merely a checking account and a basis for commercial credit? Or has it brought to the aid of your organization other constructive services? Are you making use now of all the help it should provide?

Many business men who carry deposits with the Irving or with Irving correspondents have discovered broader service possibilities in their banking connections The Irving investigates markets as well as credits, expedites deliveries of merchandise as well as collections, supplements the information resources of its customers both in domestic and foreign fields. Every transaction it undertakes, either at home or over-seas, is handled with a clear understanding of business essentials as well as careful attention to banking requirements.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

1851-1921: SEVENTY YEARS A BUSINESS BANK

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. M. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

Digitized by Google

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg. Phones Cherry 8640

We solicit your inquiries

The
Public Accounting Department
of

THE MICHIGAN TRUST COMPANY

PREPARES Income and Excess Profits Tax and other Federal Tax Returns;

INSTALLS General and Cost Accounting Systems;

MAKES Audits and investigations for any purpose desired.

Pearl St. and Ottawa Ave., Grand Rapids, Michigan.

Direct Wires to New York Stock Exchange and New York Curb

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Special Report on any Security on Request

Phone Cherry 6305

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomsen & McKinnon
Members New York Stock Exchange

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

RESOURCES	Apr. 13, 1921	Apr. 6, 1921	Apr. 16, 1920
Gold and gold certificates	$ 327,637	$ 312,322	$ 189,229
Gold settlement fund—Federal Reserve Board	466,241	504,061	260,038
Gold with foreign agencies	.....	.....	112,781
Total gold held by banks	793,878	817,383	562,098
Gold with Federal Reserve agents	1,346,558	1,308,949	1,170,313
Gold redemption fund	146,443	139,874	123,883
Total gold reserves	2,286,879	2,264,010	1,955,294
Legal tender notes, silver, etc.	198,198	217,324	132,437
Total reserves	2,485,077	2,481,834	2,087,731
Bills discounted:			
Sec. by U. S. Government obligations	929,186	936,021	1,430,888
All other	1,178,368	1,218,731	980,303
Bills bought in open market	119,882	103,607	416,784
Total bills on hand	2,224,436	2,258,359	2,827,975
U. S. Government bonds	25,814	25,547	26,799
U. S. Victory notes	19	19	68
U. S. certificates of indebtedness—			
One-year certificates (Pittman Act)	245,875	247,375	259,375
All other	7,324	6,303	44,252
Total earning assets	2,503,768	2,537,603	3,158,570
Bank premises	21,514	21,002	12,123
5% fiedemption fund against F. R. bank notes	12,166	11,647	14,015
Uncollected items	618,107	544,255	956,565
All other resources	11,892	11,454	6,418
Total resources	5,652,524	5,607,795	6,235,422
LIABILITIES			
Capital paid in	101,374	101,226	91,272
Surplus	207,036	207,036	120,120
Deposits—			
Government deposits	31,117	46,053	30,595
Due to members—reserve account	1,685,503	1,661,925	1,898,810
Other deposits, including foreign government credits	38,323	35,325	103,666
Total deposits	1,754,943	1,743,316	2,032,071
F. R. notes in actual circulation	2,868,527	2,893,564	3,073,693
F. R. bank notes in circulation—net liability	163,187	167,152	156,501
Deferred availability items	507,734	445,108	677,282
All other liabilities	54,823	52,962	53,483
Total liabilities	5,652,524	5,607,795	6,235,422
Ratio of total reserves to deposit and F. R. note liabilities combined	53.7%	53.5%	*43.3%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	65.2%	64.7%	*43.0%

*Calculated on basis of net deposits and F. R. notes in circulation.

Banks and Bankers

WING'S HOLDINGS SOLD

The Grand Rapids Trust Company, executor of the estate of Charles Gordon Wing, founder and for nineteen years president of the Ludington State Bank, has sold the $25,000 par value of stock owned by Mr. Wing in Ludington business men, at $155 a share. The trust company also has sold the $5,000 of stock in the Bank of Fountain, owned by Mr. Wing, the purchaser being Howard J. Gregory, cashier of the bank. O. A. Starke, treasurer of the Star Watchcase Company, Ludington, who was one of the purchasers of the stock owned by Mr. Wing, in the Ludington State Bank, has been elected a director of the bank.

CAPITAL NATIONAL CHANGES

Coincident with the election of Frank E. Gorman as cashier of the Capital National Bank, Lansing, Albert A. Elsesser and Marshall A. Westfall were appointed assistant cashiers. The former is advanced from the credit department and the latter from the auditorship. Both have been with the bank more than six years. Robert Y. Speir, heretofore vice-president and cashier, becomes vice-president and manager, as told last week in these columns.

BRICKER GOES TO CASS CITY

Roy Bricker, who has been cashier of the State Bank of Harbor Beach since early in 1920, has been elected cashier of the Pinney State Bank, Cass City. The latter is a recent incorporation of the old Exchange Bank of E. H. Pinney & Son, which had operated as a private bank since 1886 and at last report had deposits around the three-quarter million mark. Bricker has had valuable banking experience and may be expected to give a good account of himself in the new connection.

The Cass City Bank, also a private institution, which has been in business in Cass City since 1882, has also incorporated under the title of Cass City State Bank.

Michigan Bond Items

Application has been made by the Pere Marquette Railroad Company with the Interstate Commerce Commission for permission to sell $3,231,000 first mortgage gold bonds, the money to be used for equipment purchases and improvements.

A resolution has been adopted by the Genesee county board of supervisors, at Flint, by which the county will borrow $3,400,000 for the construction of permanent roads and issue as security road bonds of $1,000 denomination. The bonds will be payable in the sum of $200,000 March 15, 1922, and $200,000 March 15, 1923.

The next twelve instalments will be paid on March 15, in the sum of $150,000 from 1923 to 1935. Six more instalments will be paid on March 15 from 1935 to 1941 in the sum of $200,000. They will draw interest at the rate

Digitized by Google

of five per cent per annum, payable semi-annually on March and September 15 each year until the bonds and interest are fully paid.

The first five will be withheld and retired from the annual tax payments and the other series will be sold to the highest bidder as fast as the progress of the work demands.

The $10,000,000 issue of Packard Motor Car Company bonds, marketed last week by a syndicate composed of the Guaranty Trust Company, National City Company and Montgomery & Company, New York, was oversubscribed in less than two hours. "The success of the issue may be taken as proof that public confidence in the automobile industry is unshaken," says a statement issued by Alvan Macauley, president of the Packard.

The Detroit, Toledo & Ironton Railroad Company has asked the Interstate Commerce Commission for authority to issue $182,000 of its first mortgage 50-year, 5 per cent gold bonds.

McPHERSON JOINS BANK OF DETROIT

A. A. McPherson, who recently became assistant cashier of the Bank of Detroit, has had a variety of business experience. He is a native Detroiter, born May 26, 1889. From 1914 to 1919 he was employed by the Old Detroit National Bank, doing all kinds of bank work, and for several years thereafter was office manager at Dodge Brothers. After returning from the Army in 1919 he joined the Oakland Motor Company as office manager, which position he resigned recently to join the Bank of Detroit as assistant cashier. It is understood that Mr. McPherson will concern himself with new business for the bank because of his large acquaintance in the city. It is interesting to learn that he was with Dodge Brothers when their first car was turned out, and handled their accounting affairs at that time.



A. A. McPHERSON

INSURANCE MERGER BLOCKED

An attempt of the Marquette National Fire Insurance Company to absorb the Columbian National Fire Insurance Company, Lansing, last week, resulted in a deadlock, following the issuance of a restraining order by Judge Collingwood to prevent the casting of 22,000 proxy votes in the hands of a committee, composed of T. A. Lawler, president, and J. E. Murphy, former secretary. The stockholders of the Lansing concern opposed the move. The court's order will prevent the amalgamation of the companies this year.

The annual statement of the Columbian company shows total assets of $1,981,305.41 as against $1,850,633.93 last year. Officers who will temporarily retain their posts are: Thomas A. Lawler, president and general manager; James J. Carey, vice-president; Joseph Gerson, chairman of executive board; William D. Lawrence, secretary-treasurer and auditor, and A. E. Hayes, assistant secretary.

KILLEN TO PAY IN FULL

The business of the Killen Kemical Kompany, Lansing, is rapidly improving under the receivership of Joseph Gerson. Mr. Gerson announces that all debts will be paid, and it is expected the firm will be on a paying basis within three months. More employes are being added and products are being shipped out daily. The affairs of the company are to be settled in the circuit court of Judge Leland Carr, June 27.

VALUE and ECONOMY

When this Company was organized in 1912 it was realized that in order to accomplish one of its principal purposes—to furnish economical insurance—it was essential that every element of unnecessary unproductive expense be eliminated.

Two such elements were immediately apparent—the profits required by the stockholders of a stock company, and the commission paid agents by such companies for the acquisition of business.

The first of these was automatically eliminated by the mutual character of the Company. Being owned and operated by its own members, what would be regarded as profits in a stock company became savings in the Michigan Mutual, belonging to the members and subject to distribution amongst themselves.

The second and more material element of unproductive expense was the commission paid to agents for their services in acquiring business.

Inasmuch as the law requires that all employers coming under the Compensation Act MUST have insurance, there was obviously no necessity for agents to point out the advantage of insuring. The only real service the agents were in a position to render was TO THEMSELVES and TO THEIR INSURANCE COMPANIES in securing business—NOT TO THE ONE INSURED.

Therefore it was determined to dispense with the services of commissioned agents, thereby effecting a saving of nearly 20 cents on every dollar of premium.

Naturally this placed our Company under a considerable handicap in its competition with those companies having a highly organized agency force, actuated by the motive of personal profit to secure business for their respective companies.

To overcome the influence wielded by such agents, through friendship, business connections and similar means, our Company was compelled to depend upon bare INSURANCE VALUE, ECONOMY and SERVICE.

How completely these three factors—value, economy and service—have been successful in overcoming competition, is conclusively proven by the records showing that today the Michigan Mutual writes more compensation insurance in Michigan than any other two companies combined.

Let us show how you, too, may put your compensation insurance on a THRIFT basis. Write now—TODAY. A postal will do.

Every policy non-assessable—every policy shares in savings

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — Michigan

Home Office-Cherry 2829 — Grand Rapids, Lansing and Saginaw — Hospital-Cadillac 2670

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE APRIL 19th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Indicated Dividend Cash	Stk.	When Payable	Last Dividend When Paid	Cash	Stock	Dividends Total This Year Cash	Stk.	Capitalization
American Chicle, pfd.			100			0%		Quarterly	Apr. 1, 1921	1½%		3%		$3,000,000
Am. Lt. & Trac. Co., com.	92	92½	100	114 - 99	204 - 85	4%		Quarterly	Feb. 1, 1921	1%	1½%	1%	1½%	$23,271,900
Do., pfd. XD			100			6%		Quarterly	Feb. 1, 1921	1½%		1½%		$14,236,200
Bower Roller Bearing Co.			10	17½ - 17	29¾ - 16				July 1, 1920	10%				$600,000
Channel Iron Co. of America, com.		2	10	1½ - 1½	3¾ - 1¾				Apr. 1, 1919	2%				$2,870,350
Do., pfd.	8½		100	3 - 2½	8½ - 2½				Apr. 1, 1919	3%				$3,217,350
Cities Service Co., com.			100		355 - 250½	*6%		Monthly	Apr. 1, 1921	1½	1¾%	2%	5%	$43,877,899
Do., pfd.			100		70 - 68	6%		Monthly	Apr. 1, 1921	1½		2%		$76,628,499
Coshuila Lead & Zinc Co.	5	1	10	6 - 12½	28 - 6				Nov. 15, 1917	20%				$300,000
Columbia Sugar	11½	12	10	14 - 10½	20¾ - 11½	12%		Quarterly	Apr. 1, 1921	3%		6%		$3,000,000
Commerce Motor Car Co.	8		10	7¾ - 6½	18½ - 6¾				July 1, 1920	3%				$500,000
Com. Fy. Ry. & Light Co., com.	9¾	10¾	100	10 - 9	38¾ - 9				Apr. 1, 1921	2%				$18,585,900
Do., pfd.	29	31	100	34 - 34	23 - 23	16%		Quarterly	Feb. 1, 1921	1½%		1½%		$17,833,000
Continental Motor Co., com.	6¾	0½	10	7¾ - 3¾	18½ - 3¾				Dec. 20, 1920	5c				$7,295,289
Do., pfd., XD	81	81	100		100⅜ - 93	7%		Quarterly	Apr. 15, 1921	1¾%		3½%		$2,151,700
Detroit Brass & Malleable Works	90	93	100	96 - 90	96 - 60	8%		Monthly	Apr. 1, 1921	2%		2%		
Detroit & Cleveland Navigation Co.		75	50	75¾ - 71	100 - 67	8%		Quarterly	Apr. 1, 1921	2%		4½%		$6,038,000
Detroit Creamery Co.	20		10	25¼ - 20½	38¾ - 20	8%		Quarterly	Apr. 1, 1921	2½%		4½%		$1,500,000
Detroit Edison Co., XD	95½	96	100	98 - 93¾	114 - 93½	8%		Quarterly	Apr. 15, 1921	2%		4%		$27,655,200
Detroit United			100			8%		Quarterly	Mar. 1, 1921	2%				$15,500,000
Edmunds & Jones, com.			None	14⅜ - 9½	34 - 9¾	$2.00		Quarterly	Apr. 1, 1921	50c		50c		$ 80,000 shs.
Do., pfd.			100		78 - 78	7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$843,355
Federal Truck			100	23 - 18	31 - 10¾				Jan. 1, 1921	1%		1%		$2,000,000
Ford Motor Co. of Canada	282	285	100	296 - 41?	460 - 210	Varies		As Decl'd	July 15, 1920	10%				$7,000,000
General Alum. & Br. Mfg. Co., com.			10	13⅜ - 10¾	28 - 11	Varies		As Decl'd	Oct. 1, 1920					$1,052,780
General Motors			10	10 - 12½	42 - 12¾	$1.00		Quarterly	Feb. 1, 1921	25c		25c		20,963,358 shs.
Godchaux Sugar, com.			None		99½ - 39½									$10,000,000
Do., pfd.			100			7%		Quarterly	Apr. 1, 1921	1¾%		1¾%		$3,500,000
Hanna Furnace, com.		27	100	26 - 26										$1,895,000
Do., pfd.			100			8%		Quarterly	Mar. 15, 1921	2%		2%		$750,000
Hall Lamp Co.	12½	13¾	10	15 - 13¼	22½ - 16	Varies		As Decl'd	Dec. 24, 1920	5%				$750,000
Hayes Mfg. Co., com.	2½	3¾	10	3¾ - 2¾	8¾ - 2¾	Varies		As Decl'd	Feb. 1, 1920	1¾%				$1,500,000
Holland-St. Louis Sugar Co.			10	10 - 7	24 - 7				Apr. 1, 1921	50c				$2,000,000
Iron Silver Mining Co.	30	60	$5 20		42 - 42				July 1, 1919	10c				$2,500,000
S. S. Kresge, com.	134	141	¢ 100	96¾ - 90¾	111 - 101	0%		Semi-Ann	Jan. 1, 1921			3%		$10,000,000
Do., pfd.	99		¢ 100			7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$2,000,000
Lindenau Steel, com.			None		24½ - 15¼	0%		Quarterly	Apr. 1, 1921	50c		50c		$1,066,000
Lincoln Motors, Class A	17¾	18¼	50	21¾ - 17¾	50¾ - 13¼				July 30, 1920	$1.25				$8,000,000
Mexican Crude Rubber Co.		8	10	6¾ - 6¾	13¾ - 6¾				Dec. 1, 1914	2%				$750,000
Michigan Drop Forge, com.			None		50 - 38¾	$3.00		Monthly	Apr. 1, 1921	25c		$1.00		$ 12,500 shs.
Do., pfd.			100		90 - 90	7%		Quarterly	Apr. 1, 1921	1¾%		3½%		$250,000
Michigan Stamping Co., com.	17	18½	10	18¾ - 17½	30½ - 9	0%		Monthly	Apr. 25, 1921	1½%		3¾%		$1,200,000
Michigan Sugar Co., com.	7¾	8	10	9 - 6¾	13¾ - 7¾	4%		Quarterly	Mar. 1, 1921	1%		1%		$7,471,100
Do., pfd.	8	8¼	10	8¼ - 7¾	10 - 7¾	6%		Quarterly	Mar. 15, 1921	1½%				$3,723,500
Milne-Detroit Theater Co.	16	17	10	16¾ - 16	21 - 13¾	*16%		Quarterly	Jan. 10, 1921	1½				$350,000
Motor Products			None	43 - 37¼	60¾ - 43				Jan. 2, 1920	61.25		61.25		$ 100,000 shs.
Motor Wheel	9¾		10	11¾ - 8¼	13½ - 8¼	*8%		Quarterly	Mar. 21, 1921	2%				$4,500,840
Murray Mfg.			10		33 - 33				Dec. 1, 1920	1%		3%		$733,450
National Grocer Co.	0¾		100	9¾ - 7	156 - 156	*8%		Quarterly	Jan. 2, 1921	2%		2%		$2,000,000
Do., pfd.			100		100 - 100	6%		Semi-Ann	Jan. 2, 1921	3%		3%		$1,500,000
Packard Motor Co., com.	10¼	10½	10	13 - 9¾	28¾ - 9¾				Oct. 31, 1920	2½%				$11,885,100
Do., pfd.	71	72	100	79 - 66½	90 - 50½	7%		Quarterly	Apr. 15, 1921	1¾%		1½%		$ 3,223,500
Paige-Detroit Motor Car Co.	20	22¾	10	23¾ - 12	42½ - 12			Monthly	Dec. 10, 1920	1½				$2,000,000
Parke, Davis & Co.	82	88	100	87½ - 87½	117½ - 87½	*10%		Quarterly	Apr. 1, 1921	2½		5%		$11,541,948
Pemberhly Injector, pfd.			100			8%		Quarterly	Apr. 1, 1921	2%		4%		$500,000
Reo Motor Co.	21	21¾	10	23 - 17¾	29½ - 16¾	10%		Quarterly	Apr. 1, 1921	2½%		4%		$2,937,250
Scotten-Dillon Co.			10	31 - 18	55 - 29	8%		Quarterly	Apr. 15, 1921	2%	50%	4%	50%	$1,500,000
Timken Axle, com.	28½	30	10	34¾ - 30¾	*63½ - 29	12%		Bi-Month	Jan. 15, 1921	2%		3%		$3,000,000
Do., pfd.			100		93¾ - 84	7%			Mar. 1, 1921	1¾%		1¾%		$5,000,000
Trus-Con. Steel Co., com., XD		19½	10	23½ - 15	39½ - 20¼	10%		Quarterly	Apr. 15, 1921	4%		4%		$1,450,230
Do., pfd.		10	10	9¾ - 9½	9¾ - 9¾	7%		Quarterly	Mar. 1, 1921	1¾%		1¾%		$1,632,250
U. S. Radiator, com.			100		311 - 20									$4,000,000
Do., pfd.	80	88	100		95¾ - 80	7%			Jan. 15, 1921	1¾%		7%		$1,800,000
Waring Hat Co., com.			None											
Do., pfd.			100			8%		Quarterly	Apr. 1, 1921	2%		4%		
Western Knitting Mills	13		None	11 - 8¾	30¾ - 8¾				Nov. 25, 1920	50c				$ 140,000 shs.
White Star Line		35	10		50¾ - 35				Aug. 23, 1920	2½%				$750,000
Wolverine Portland Cement Co.	2½	3¼	10	3 - 3	5¾ - 2½				Dec. 18, 1917	1%				$1,000,000

*Old $60-$70: new 63¾-27. 67% in 1911, 7% in 1920, only dividends since organized. *Extra dividend. †Scrip. ‡ Book value, $959,409, Ed. & J. ‖ Book value, $3,219,327, Godchaux. Book value, $2,277,609 00. Western Knitting Mills ‡ Book value $5,084,450. Motor Products. ¶Old ††Taken from other exchanges

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	Apr. 19, 1921
Canada				.8853
London		4.8656	3.4275	3.8500
Switzerland		.1830	.1528	.1602
Paris		.1930	.0659	.0760
Belgium		.1930	.0825	.0748
Holland		.40196	.3182	.3875
Italy		.1930	.0246	.0868
Greece		.1920	.0732	.0735
Spain		.1520	.1328	.1393
Vienna		.00263	.0023	.0038
Berlin		.23731	.01345	.0158
Denmark		.16798	.1595	.1940
Norway		.2682	.1595	.1860
Sweden		.2680	.2645	.2790

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	Apr. 19, 1921	Jan. 5, 1921	D ec. 27, 1920	July 1, 1920	Jan. 3, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	89.90	93.50	90.00	91.06	99.26	99.76	99.86	98.64
U. S. Liberty 1st 4s	87.40	85.50	85.82	85.60	92.00	94.80	92.00	94.12
U. S. Liberty 2nd 4s	87.48	86.20	84.16	85.00	91.58	93.84	93.04	94.16
U. S. Liberty 1st 4½s	87.42	86.85	85.20	85.18	93.46	95.14	94.66	....
U. S. Liberty 2nd 4½s	87.42	86.20	84.34	85.00	93.20	94.06	95.76	....
U. S. Liberty 3rd 4½s	90.60	90.04	87.20	88.12	91.88	94.10	94.44	....
U. S. Liberty 4th 4½s	87.54	86.46	84.96	85.56	93.76	100.10	....	....
Victory Bonds, 4¾s	97.50	96.48	94.96	95.56	94.00	95.08	95.22	98.12

Digitized by Google

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,662,994	$121,493,304
January 12	90,178,647	120,567,009
January 19	101,885,982	131,341,087
January 28	79,016,507	97,843,656
February 2	87,996,926	91,773,656
February 9	74,609,462	101,949,906
February 16	70,081,838	101,298,770
February 23	67,711,031	93,533,757
March 2	58,325,599	137,098,854
March 9	76,762,349	114,465,689
March 15	96,886,483	133,175,052
March 23	80,156,495	148,937,656
March 29	59,091,871	116,463,956
April 5	78,125,973	104,605,623
April 13	81,621,567	126,381,267
April 20	98,777,528	161,636,146
Month of		
January	389,430,236	467,281,870
February	302,842,688	435,388,988
March	377,975,840	570,426,229
April		540,878,969
May		484,288,852
June		566,702,267
July		482,824,161
August		523,368,080
September		561,585,340
October		515,425,750
November		465,933,440
December		452,361,245
Yearly totals, 1920		$6,102,323,903
Yearly totals, 1919		$4,904,396,183

Saginaw Stocks

BANK STOCKS	Bid	Asked
Columbia Sugar	11¾	12¾
Commonwealth Power	18	18½
Lufkin Rule, pfd.	101	104½
Michigan Sugar, com.	7⅝	7¾
Michigan Sugar, pfd.	8	8¾
National Grocer, com.	7¼	7¾
National Grocer, pfd.	81	84
Saginaw Shipbuilding Co.	8	10
Symons Bros.	11¼	12
Valley Home Tel. Co., pfd.		45
Second National	285	315
American State Bank	200	225
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings		

Quotes by Phipps, Williams & Beeson, April 20.

PONTIAC TO HAVE $15,000,000 BANK

Plans looking to the consolidation of the Pontiac Commercial and Savings Bank and the Oakland County Savings Bank have been announced. The former has assets of $11,000,000 and the later more than $4,000,000. It was stated in Pontiac Tuesday that Cramer Smith, vice president of the Pontiac Commercial and Savings Bank, will head the consolidation, and that Fred L. Perry, now president of the Oakland County, will become a vice-president of the new bank. Plans also call for closing up the present "Oakland County" office and the East Side office of the "Commercial" and concentrating the business hereafter in a new building soon to be erected. When this change is effected, which is expected about July 1, Pontiac will have three banks, instead of four. All of the present officers of both banks will be retained according to the announcement.

GOODYEAR CONTROL UNCERTAIN

It was unofficially announced in Chicago, April 20, that control and management of the Goodyear Tire & Rubber Company will pass from P. A. Seiberling, now president and general manager, to an investment bankers' committee as the result of refinancing plans definitely decided on. The new control will continue throughout the life of an issue of $30,000,000 first mortgage, 20-year, 8 per cent bonds, which will shortly be offered for subscription.

NOTE—Bank quotes omitted because changes are insignificant.

Weekly A. I. B. News

Examinations were held Thursday of this week at Central High School in Political Economy and Money and Banking. About 150 participated and the employes in each bank who took the best paper gets a free trip to the Minneapolis convention.

According to new by-laws recently adopted by the Detroit chapter, president and vice-president after 1923 must be graduates of the A. I. B. and hold the graduation certificate.

The nominating committee appointed by President Robert B. Locke to present a slate for consideration at the annual meeting May 21 has handed in the following names:

President—Frank Thomas, First and Old Detroit National.

Vice-Pres.—A. J. Charp, Peninsular State.

Vice-Pres.—Cecil S. Hunt, Detroit Savings.

Vice-Pres.—F. D. Lorimer, Dime Savings.

Secretary—Samuel Pipe, Bank of Detroit.

Board of Governors to serve one year:

Julius Rubiner, First state.

Geo. L. Bott, Merchants National.

William P. Niven, American State.

Charles Behrns, Continental.

George Y. Reed, Highland Park State.

A. W. Crowe, Detroit Trust.

Kenneth Paton, Detroit Savings.

Herman Hillebrand, Dime Savings.

Board of Governors to serve two years:

Grant D. Esterling, First and Old Detroit National.

Lee D. Heaphy, Peoples State.

Robert Lanier, Peninsular.

Clifford H. Hyett, Dime Savings.

A. C. Voss, National Bank of Commerce.

George J. Jarvis, Federal Reserve.

W. C. Hartwig, Union Trust.

By-laws provide that other candidates may be voted upon provided 15 members representing five banks petition the board of governors.

The annual meeting May 21 to be held at the Hotel Statler will be a gala event for the local chapter. In addition to the business meeting and dance there will be, according to President Locke, a number of "stunts" and other special entertainment features.

Current Investment Offerings

HALSEY, STUART & CO., DETROIT

	Rate	Maturity	Price	Yield
Republic of Chile	8.00	2-1-41	99.00	8.10
Winchester Repeating Arms 1st mtge. bonds	7.50	4-1-41	97.50	7.75
Tenmer Corn & Fruit Products 1st mtge.	8.00	10-1-22-30	....	8.25
Middle West Util. Co. sec. notes	6.00	12-1-40	96.25	8.50
Gulf Oil S. F. deb. bonds	7.00	2-1-38	97.50	7.30
Empire Dist. Elec. Co. 1st lien and G. M.	6.00	11-1-49	100.00	8.00

HOLLEGER, MOSSER & WILLAMAN, DETROIT

Abbeville Co., S. D., road	6.00	1922-48	....	6.00
Hazlehurst, Miss., school	6.00	1922-48	....	8.25
Plainwell, Mich., Gun Plains School Dist. No. 7	6.00	1928-38	....	6.85
Three Rivers, Mich., School Dist. No. 1	5.50	1926	....	5.75
Ypsilanti Co., Tex., rd.	5.50	1934-51	....	6.00

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6.00	1924-36	....	7.00
Bemb-Hodgson Co.	6.00	1926-27	....	8.00
Adolph Meyers	6.00	1924	....	8.00
Wm. E. Johnson	5.00	1921-25	....	8.00

COMMERCIAL SAVINGS APPROVED

John Morton, formerly credit manager of the Dime Savings Bank, Detroit, who has been one of the moving spirits in the organization of the Commercial State Savings Bank, Detroit, advises that authority has been given at Lansing for the organization of the bank. An option has been obtained for July on the present quarters of the Detroit Savings Bank, according to Mr. Morton, and the bank will open shortly thereafter. Capital will be $1,000,000.

Detroit Listed Bonds

Name	Apr. 19, 1921	Bid	Ask	Sale
Cons. Pow. Co.—5s, 1932	....	80	82	81
Detroit & Flint—5s, 1923	....	93½	98	
Det. J. & W. R. R.—5s	....	86	78	
D., M. & T. Short Line—5s, 1933	75	81	..	
Det. & Northw'n—4½s, 1921	98	98	93	
Detroit & Pontiac Ry.—5s, 1922	85	89	86	
Detroit & Pontiac—4½s, 1936	....	84	..	
Det. & Toledo Ry.—5s, 1950	55	75	..	
Detroit Railway—6s, 1924	....	88	..	
Det. Tow. & A. A.—6s, 1931	....	100	..	
D. Y. & A. A. Jackson—5s, 1925	79	85	..	
Det. United Ry.—4½s, 1933	....	69	83	
Detroit Edison Co.—6s, 1949	....	88½	..	
D. Ed. Co.—1st & ref. 5s, 1940	78¾	81	79¾	
East Mich. Edison—6s, 1933	....	81	..	
Detroit Edison Deb. 7s, 1928	95¾	..	..	
Detroit Edison deb. 7s, 1933	96	97½	96	
Detroit Edison deb. 7s, 1930	85½	87	86	
Detroit Edison deb. 5s, 1931	103½	103½	103½	
D. C. Gas Co., G. M.—5s, 1918-23	30	34	90	
D. C. Gas Co., P. L.—5s, 1923	91	95	..	
Detroit & Sub. Gas Co.—5s, 1924	91	94	..	
Mich. State Tel. Co.—5s, 1924	87	..	..	
Tol., Fremt & Norw'k—5s, 1930	....	..	..	
Wyan. & Det. River—5s, 1913	....	..	..	
Ry.-Pred. Coal Corp.—5s, 1930	....	..	..	
Detroit Rock Salt 8s, 1923	....	88	..	

Sales Week Ended April 19.

Detroit Edison 8's, 1931, $,000 @ 101½.
Detroit Edison 8's, 1931, 500 @ 102.
Detroit Edison 8's, 1931, 500 @ 102⅝.
Detroit Edison 8's, 1931, 1,300 @ 102¾.
Detroit Edison 7's, 1930, 2,000 @ 86.

Cleveland Stocks

	Bid	Asked
American Multigraph	....	80
Dow Chemical	....	200
Firestone Tire & Rubber	85	87
Do. preferred	84	86
Fisher Ohio Body	17	18
Do. preferred	65	67
Goodyear Tire & Rubber	18	19
Do. preferred	38	37½
Grant Motor	2¾	2¾
Jordan Motor	....	135
Miller Rubber	75	76
Murray Ohio	....	5
National Acme	26	28
Paragon Refining	20	23
Peerless Motor	24	27
Prod. & Refin. Corp.	4⅛	4⅜
Do. preferred	7	7½
Portage Rubber	1½	2½
Do. preferred	32	34
Standard Parts	1	2
Do. preferred	3	4
Vulcan Rubber	30	32
White Motor	38½	40
Youngstown Sheet & Tube	55	85
Do. preferred	....	103

Quotes by Otis & Co., April 19.

A. D. CRIMMINS MOVES UP

Alvah D. Crimmins, cashier of the Charlevoix State Savings Bank since 1917, has been elected cashier of the Grand Rapids National City Bank, effective May 15. Crimmins is one of the ahiest younger bankers in Michigan and has a wide acquaintance in banking circles. His successor at Charlevoix has not been announced.

Coincident with the election of Mr. Crimmins as cashier, Bertram Vander Meulen, since 1914 employed as transit clerk, becomes assistant cashier.

THE BABY TYPEWRITER STAND
SAVES SPACE and TIME
$6.50 F.O.B. DETROIT
A strong, well-built Stand, five-ply oak, veneered top. Will last a lifetime. Easy to move about Suitable for small office and home use.
Write for free trial offer.
Auto Parts Mfg. Co.
1881 Trombly Ave.
Detroit, Mich.

Digitized by Google

THE results of today's action in selecting sound investments will be felt for many years to come—especially as the buying power of the dollar grows greater.

Your investments should be dependable to the utmost degree—yet logically suited to specific needs—and *properly priced.*

Hence, in addition to an attractive list of bonds selected from today's unusual opportunities, we offer *individual service*—so that you can make a better and more advantageous choice than would otherwise be possible.

If we thought it would serve you, we would be glad to give you a general list of securities representative of the best in today's market. But we urge that you gain the additional benefits obtainable through careful analysis and *individual service.*

You can enjoy this attention and help by correspondence, if necessary. Address to us any inquiry you have in mind concerning bond investments. It will receive the same careful answer as an inquiry made in a personal visit. We desire this opportunity to suggest profitable investments.

A. B. Leach & Co., Inc.

Investment Securities

Chicago
Philadelphia
St. Louis
Boston

New York
Milwaukee
Cincinnati

Baltimore
Cleveland
Minneapolis
Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Miscellaneous Finance

NEW LANSING CREDIT EXCHANGE

The organization of the Lansing Credit Exchange was perfected last week. It will be affiliated with the National Retail Credit Men's Association. Offices will be established with a permanent secretary, and rating service will be given at once.

The officers elected are: President, John Affeldt; vice-president, John Daley; treasurer, R. C. Lynn; secretary of executive committee, Norman B. Cove. Fifteen local industries are represented on the board of directors, as follows: Carl Parker, automobile dealers; Robert Y. Speir, banks; John Daley, building material men; James O'Connor, clothing; R. C. Lynn, electrical supplies; Bert Miller, furniture; John Affeldt, groceries and meats; Cleo F. Baker, hardware; C. O. Sprowl, women's ready-to-wear clothing; A. J. Hagar, lumber; Joseph Gleason, paints and decorating; Thomas Shields, plumbing; F. E. Baker, retail merchants; Clarence Skinner, shoes; Evans Boucher, wholesale groceries. The new association has purchased the Grocers & Meat Dealers' Credit Rating bureau, and negotiations are pending for the purchase of the Business Men's Credit Association. Weekly bulletins will be issued.

McCRORY MARCH SALES

The McCrory Stores Corporation reports sales for March of $1,206,402, compared with $1,127,477 in the same month last year, and for the year to date $3,059,990, against $2,835,470 in the corresponding period last year.

LANSING STOCK MOVEMENTS

Two local stocks which moved more freely in Lansing last week than for some time were Auto Body and Motor Wheel, with plenty of buying orders for both. Prices offered for Motor Wheel, however, are not drawing out the stock, and local investors are riding with it. The corporation is doing a good business in all lines and has not missed a dividend either on common or preferred. The Reo Motor Car stock did its usual business during the week, while there was some demand and buying of the new Durant Motors, General Motors and Willys-Overland.

GENERAL ELECTRIC BUSINESS

Bookings of the General Electric Company so far this year are reported to be about 60 per cent of plant capacity. The company is located at Schnectady, N. Y. Unfilled orders at the end of 1920 totalled about $111,000,000.

NEW PLANT GOES INTO PRODUCTION

Operations have started in the new plant of the Ewing Bolt & Screw Company, one of the late additions to Detroit's growing industries, located in the River Rouge district. The company's products, screws, bolts and rivets, President Ewing reports, are of a staple nature, and used in large volume in practically every industry. He also states that orders now on the books will keep the factory busy for 60 days, and the outlook encouraging for additional and continued business. As the capacity increases, shipments will go to all parts of the country, and thus another enterprise finds Detroit an advantageous location.

LANSING TRADING HOURS

As Lansing did not adopt Eastern time, the local stock markets will open at 8 a. m. instead of 9, as has been the custom, beginning April 25. This change has been made necessary to conform with the opening of the New York markets at 10 o'clock.

Digitized by Google

COMPANIES AND DEALERS APPROVED

The following companies and dealers were approved by the Michigan Securities at its March meetings:

Companies—Breitmeyer Nursery Co., Rockwood; Consumers Ice Co., Grand Rapids; Durant Hotel Co., Flint; Durant Motors, Inc., New York; Economy Rebuilding Corp., Chicago; Foster-Fowler Co., Lansing; C. P. Goodwill Corp., Lapeer; Morisito Process Co., Detroit; Morris Travis Drug Co., Detroit; Northwestern Finance Corp., Detroit; Mayes Bros. Tool Mfg. Co., Fort Austin; Sebewaing Co-Operative Association, Bach, Mich.; Stroll Realty Co., (bonds), Toledo; Tide Water Oil Co. (bonds), Bayonne, N. J.; Texas Oil Products Co., Detroit; Williams, Davis, Brooks & Hinchman Sons, Detroit; Briscoe Devices Corp., Pontiac; Commercial Finance Corp., Grand Rapids; Flint Commonwealth Corp., Flint; Azad Printing & Publishing Co., Detroit; Vulcan-Louisville Smelting Co. (bonds), Chicago; Aluminum Goods Mfg. Co. (notes), Manitowoc, Wis.; Bigelow Corp. Productus Co., Detroit; Sloss-Sheffield Steel & Iron Co. (notes), Jersey City; Wolverine Auto Painting & Trimming Co., Detroit; Bush & Lane Piano Co., Holland; Armour & Co. (notes), Chicago; Detroit Holding Co. (bonds), Detroit; American Public Service Co. (notes), Wilmington, Del.; Bankers Mortgage & Loan Co., Detroit; Professional Indemnity Corp., Grand Rapids; Cyclone Motors Corp., Cheboygan; Petoskey Transportation Co., Petoskey; Alliance Brick Co., Detroit; First Detroit Commercial Corp., Detroit; Auto Collapsible Rim Co., Detroit; Northern Co., Wilmington, Del.; Multi Products Co., Detroit; Citizens Theatre Co. of Royal Oak, Royal Oak; Holland Furnace Co., Holland; Lord Drydock Corp. (bonds), New York; Thomas Hall Lumber Co. (bonds), Charleston, W. Va.; Rockwell Warehouse (bonds), Chicago; Wolverine Insurance Co., Lansing; Vassar Foundry Co., Vassar; Lake Odessa Canning Co., Lake Odessa; Wilcox-Armstrong Co., Detroit; National Portland Cement Co., Delaware and Detroit; T. C. Hodson & Son, Inc., Lansing; Polonia Publishing Co., Detroit; Roosevelt Memorial Hospital Corp., Detroit; Chicago, Racine & Milwaukee Line (bonds), Chicago; Citizens' Mortgage & Loan Co., Lansing; Blue Creamery Co. (bonds), Ironwood; Production Foundries Co. (notes), Ann Arbor; Detroit Sewing Machine Co., Detroit; Detroit Character Corp., Detroit; Sam Schmedman & Sam Rotenberg (bonds), Detroit; American Machine Products Co., Detroit; Telephone Clearing House of Michigan, Grand Rapids; Chicago Nipple Manufacturing Co., Chicago; Samuel Joppy (bonds), Detroit; Michigan Aero Service Corp., Lansing; Riverview Furniture Store, Grand Rapids; Coppe Export Association, Inc. (notes), New York; Auto Body Co., Lansing; Sinclair Consolidated Oil Corp. (notes), New York; Cuban-American Sugar Co. (bonds), New York; Moon Lake Ice Co., Grand Rapids; People Motor Corp., Detroit; Wagenvoord & Co., Lansing; Hurlen Investment Co. (bonds), Detroit; Rudy Furnace Co., Dowagiac; Peabody's, Limited (debentures), Walkerville, Ont.; Associated Thrift Corp., Detroit; Falcon Creamery Corp., Detroit; Flint Spring Water Ice Co., Flint; D'Arcy Spring Co., Kalamazoo; Northwestern Building Corp., Detroit.

Dealers—Interstate Securities Corp., Grand Rapids; Lansley, Hildner & Co., Ann Arbor; Clara Goldhurst & Co., New York; Equitable Securities Co., Grand Rapids; James B. Forbes & Co., Chicago; Herman C. Hansen, Flint; D. H. Creaser & Co., Detroit; Buck & Brown, Inc., Detroit; Standard Fiscal Agency, Grand Rapids; Lee D. MacGregor, Detroit; Joseph Wm. Common, Flint; Sam L. Lewis, Grand Rapids; Camp, Thorne & Co., Chicago, Ill.; Edgar David Fries, Detroit; General Finance Corp., Detroit; Hughes, Gordon, Rinaldi & Co., Detroit; Frank B. King, Battle Creek; Hackley National Bank, Muskegon; Shackelton-Graham Corp., Grand Rapids; Osmond C. Howe, Lansing, Mich.

The Jackson Store & Stamping Company, Jackson, was suspended.

The following were disapproved: Dikeman Parking Wheel Company, Detroit; International Cultivator Corporation, New York, N. Y., and Stafford Roller Bearing Car Truck Corporation, Carlstadt, N. J.

The Title, Guaranty & Casualty Company of America, Detroit, and Dattner Oil & Refining Company, Detroit, were reinstated.

WOOLWORTH SALES

During the first three months of 1921, sales of the F. W. Woolworth Company, New York, which operates 10-cent stores in a large number of cities, including Detroit, totaled $29,311,480, or $1,814,244 more than for the corresponding period in 1920. Out of the total, $11,830,973 is credited to March, the increase for the corresponding period in 1920. Out of the total, $11,830,973 is credited to March, the increase for the months being 9.02 per cent.

Foundation of Credit

Common knowledge regarding a firm's credit standing not only is beneficial to the firm but constitutes the foundation of the entire structure of credit.

The vast credit operations of the National Bank of Commerce in New York are safeguarded by virtue of a highly organized research of those conditions and facts which justify or limit credit.

The benefit of our extensive credit experience is shared with our friends.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits
Over Fifty-five Million Dollars

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Grattot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Michigan Banking Service

Our distinctly satisfactory service to banks and business houses having Michigan banking transactions results directly from the fact that we specifically develop our facilities for the purpose of SPECIALIZING in handling Michigan banking business.

New accounts, correspondence and consultations invited.

Capital and Surplus $3,750,000

Motor Stocks

Wm. A. Neer & Co.
Members Detroit Stock Exchange

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

Digitized by Google



CANADA AS A PRODUCER

We have prepared a pamphlet which contains valuable information on Canada's resourses and trade.

Those interested in the trade possibilities of this country, or seeking fields for profitable investment will find the brochure of special interest. It will be sent to you on request, without charge, by any of our branches.

THE CANADIAN BANK OF COMMERCE

Paid-up Capital, $15,000,000 *Reserve Fund $15,000,000*

Walkerville Branch—H. B. Parsons, Mgr. Windsor Branch—W. G. Lynch, Mgr.

FOR the first time in the financial history of Michigan a Bond House of the magnitude of this Corporation offers First Mortgage Bonds at a price to net 7%.

We feel that this is the best investment offering ever made in Michigan. You may now purchase a serial Gold Bond—a unit of a direct closed First Mortgage secured two to one by Detroit improved property—to produce 7%.

These bonds have been selling on a 6% basis.

Considering the collateral security, the tax exemption features, and the unqualified guaranty of this $7,000,000 Corporation—we feel justified in stating that at 7% these bonds are unexcelled.

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

SOO LINE HAS A DEFICIT

Gross earnings of the Minneapolis, St. Paul & Sault Ste. Marie Railroad Company during February amounted to $3,055,788, as compared with $3,481,254 in February 1920; $2,790,644 in 1919 and $2,936,901 in 1918. After deduction of taxes the net operating deficit was $638,326, as compared with a net income of $189,479 a year ago. For the first two months of 1921 the net operating deficit was $1,612,841, as against an income of $52,079 in 1920; $369,691 in 1919, and a deficit of $94,710 in 1918.

Land Titles and Title Insurance

(*Continued from Page 10*)

title. The attorney will now rarely attempt to make his own examination of the records but insists upon an abstract prepared by a responsible abstractor or abstract company. The purpose of the abstract, as it will be noted, is merely to present conveniently what the records disclose and to facilitate the forming of an opinion thereon. It follows that a perfect abstract is by no means an indication of a perfect title. The title may be absolutely bad; the perfection of the abstract consists merely in disclosing it as it is.

So a guaranteed abstract is merely an abstract which is guaranteed to show correctly the condition of a certain title, be it good, bad or doubtful. It is unfortunate that the nature of a guaranteed abstract is sometimes misunderstood, some people assuming that the possession of such an abstract assures a sound title. The making of an abstract, however, requires such painstaking attention to detail, such technical skill and such a comprehensive knowledge of real estate law that a very natural demand has arisen for a guaranteed abstract, as distinguished from one the accuracy and scope of which are not guaranteed. In other words, to determine the goodness or badness of a title, the first requisite is information the accuracy of which can be absolutely relied upon. To make an abstract of a sort is not particularly difficult, given a certain amount of experience and training. To make a perfect abstract, however, or to maintain such a standard in the making of it that the abstracter or abstract company can afford to guarantee it, is a different matter.

Advantages and Disadvantages

Instead of the attorney's opinion it may happen that an abstract company will itself give an opinion as to the title, such an opinion taking the form of a certificate that in its judgment the title is as indicated. These opinions when issued by abstract companies are commonly referred to as certificates of title. They have been but little used in Michigan, although commonly met with elsewhere.

The above are two of the plans designed to give a purchaser or other interested party assurance regarding a title. It might be well to comment briefly on the advantages and disadvantages of these and the other plans now in common use.

1. The Attorney's Opinion. As above stated, the attorney's opinion is commonly based upon an abstract though it may be based upon his own search. His opinion being an opinion merely and purporting to be nothing further, the attorney is, of course, not financially liable in case the opinion is erroneous, provided he has employed reasonable care and skill in its preparation. With many attorneys an opinion on a title is almost conclusive, with others, less able and experienced, mistakes will occasionally be made. Obviously, if based upon a faulty abstract, the opinion itself will necessarily be unreliable.

2. The Certificate of Title. This, in its ordinary form, is merely the formal opinion of a title company, and the same possibility of error and exemption from liability apply that have been noted above in the case of the attorney's opinion.

3. The Guaranteed Certificate of Title. This is an opinion given by a title company which differs from the ordinary certificate in that its correctness is guaranteed.

4. The Title Guaranty Policy (or policy of title insurance, as it is sometimes called). In the form commonly used, such a policy issued by a title company guarantees the record title to be as expressed in the policy with such

Digitized by Google

exceptions as may be noted. Provided the issuing company be responsible, this is without doubt the most complete assurance of a valid title that can be obtained. In the first place, the policy itself is predicated upon the opinion of an expert based upon as careful and skilful a search of the records as can be made. The issuing company then assumes complete financial responsibility for the correctness of its opinion, limited only by some maximum amount fixed by agreement when the policy is issued, and approximating the value of the property covered. The nature of title insurance is well expressed by the Court in the Pennsylvania case of Foehrenbach vs. German-American Title & Guaranty Company:

"The quality of a title is a matter of opinion as to which even men learned in the law of real estate may differ. A policy of title insurance means the opinion of the company which insures it as to the validity of the title backed by an agreement to make the opinion good in case it should be mistaken and loss should result in consequence to the insured."

As is indicated by the foregoing quotation, there is in real estate titles much room for divergence of views. This risk, as well as the risk resulting from error in the search, is assumed by the title company.

Another advantage possessed by the title guaranty policy is the promptness with which the policy can be issued. A title company can review its own records much more rapidly than it can furnish a complete and verified abstract. Keenly sensible though it may be of the desirability of quick service, a well managed company will not permit its work to be slighted even under the severest pressure—and few have any conception of what this pressure has been the last few years in such a community, for instance, as Detroit. With the title guaranty policy the necessary standard of accuracy can be maintained and more rapid service given.

To summarize, then, it appears that there is much room for the element of quality in an abstract, and, like the little girl in Mother Goose, "when it is bad it is horrid." We find that even with a good abstract the land owner is not protected without a competent opinion on what is disclosed therein. It further appears that for absolute protection a title guaranty policy is the ideal resource and that it admirably fulfills its purpose. A more general understanding of and familiarity with this convenient and inexpensive form of insurance would, it is believed, be much to the advantage of the public.

STANDARD OIL DIVIDENDS

During the first quarter of 1921 the Standard Oil Company paid out $29,021,070 in dividends, as compared with $26,935,000 for the corresponding period in 1920. This total is for the various Standard companies and subsidiaries. Standard Oil of Nebraska has just declared its third stock dividend since the dissolution of the old company in 1912. The latest dividend amounts to 200 per cent. In 1913 a stock dividend of 25 per cent was declared, and in 1912 a stock dividend of 33 1-3 per cent. The original capital of the company was $600,000 which has been increased until it now is $5,000,000. The profits for 1920 totaled $1,062,693 after taxes and charges, equal to $106.20 a share, says the Wall Street Journal.

CANADIAN PACIFIC RAILWAY

Gross income of the Canadian Pacific Railway for the year ended December 31, 1920, was $216,641,249, as compared with $176,929,060 in 1919; $157,537,698 in 1918 and $152,389,335 in 1917. Net after deduction of expenses and taxes was $33,153,044; $32,923,036; $24,502,388 and $46,546,018 respectively for the four years. After deducting fixed charges, adding special income, deducting preferred and common stock dividends the net surplus at the end of 1920 was $3,616,806, as compared with $2,093,593 in 1919; $2,532,372 in 1918 and $15,334,215 in 1917.

(No. 6 of a series of examples)

Is a Corporation Liable If It Permits a Person Holding Stock as Trustee to Transfer the Stock Contrary to the Terms of the Trust?

Yes. Where a transfer to another person, as Trustee, is made by the executors of a decedent, the corporation is thereby notified of the existence of the will and required to inform itself of the terms of the will and of the trust and is liable if it permits the transfer under circumstances inconsistent with the trust.

Stock is often trusteed under wills or trust agreements and many technical points should be guarded in any transfer of the stock. The matter is one which the corporation itself is rarely equipped to handle.

This Company is experienced in such matters and our officers will be glad to explain this service in detail.

Security Trust Company

Fort and Griswold St. Detroit

Capital and Surplus, $1,000,000.00



WAKE UP!!
IT'S TIME TO BUILD
"Build for the right with - UNITED supplies"
UNITED FUEL & SUPPLY CO.
BUILDING SUPPLIES & COAL

Digitized by Google

DOING BUSINESS IN MICHIGAN

Example 5. The Phillips Company, a Wisconsin corporation, without first qualifying as a foreign corporation in Michigan, entered into a contract with the Springfield Realty Company to install a system of automatic fire sprinklers in a building located in Detroit. On failure to receive payment the Phillips Company filed a mechanic's lien on the property. Subsequently the realty company went into bankruptcy and the property was sold under an order of court free and clear of the lien. The Phillips Company appealed from the referee's decision that it was not entitled to enforce its lien, but the United States District Court upholds the referee's desicion, giving full effect to the Michigan statute which provides: "No foreign corporation subject to the provisions of this act shall be capable of making a valid contract in this state until it shall have fully complied with the requirements of this act, and at the time holds an unrevoked certificate to the effect from the Secretary of State." In re Springfield Realty Co., 257 Fed. 785 Corp. Journal No. 92.

Example 6. There is a distinction between qualifying in order to do business and qualifying under the so-called Blue Sky law in order to obtain permission to sell stock. In the case of Edward vs. Ioor, 256 Mich. 617, the court made the following statement: "Compliance with the Corporation Act permits a foreign corporation to 'carry on its business,' the business for which it is organized in the state: compliance with the Commission Act permits it to sell its stock and other securities. One is not in any way dependent upon the other. One foreign corporation may desire to carry on its business in the state but may not desire to sell stock; another may desire to sell stock but may not desire to carry on its business in the state. If a foreign corporation desires to carry on its business and also sell its stock in the state it is obvious that it must comply with both acts. It is equally obvious that if it desires to do but one of these things, it is required to comply only with the provisions of the appropriate act." 173 NW 620 Corp. Journal No. 92.

It is interesting in this connection to note that there is still another supervision and provision other than the so-called Blue Sky Commission in Michigan. The former was created by the banking laws to pass on certain securities which banks desire to carry as "savings department investments," and is created by Section 97, paragrapher section 8032 of the banking laws. It reads as follows: "There shall be a board of commissioners for the purpose of passing on the securities mentioned in paragraphs (e), (f) or (g) of section twenty-seven of this act, consisting of the commissioner of the banking department, attorney general and state treasurer—which shall be known as the securities commission. It shall be the duty of this commission, whenever an issue of bonds, which shall come within the requirements of paragraphs (e) and (f) of section twenty-seven of this act shall be presented to them, to examine into the financial conditions of the corporation issuing such bonds, and ascertain whether such issue is excessive as compared with the value of the property of such corporation, and if they shall find that such issue of bonds is not excessive and that they comply with the other requirements of said paragraph, they shall so certify in a book to be kept in the state banking department for that purpose, and thereupon said banks may invest in such bonds."

We have active markets
in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

Who's Who In Michigan Finance

Frank E. Gorman, State Treasurer, and Cashier, Capital National Bank, Lansing.

IT IS GETTING to be a habit in Lansing to draft the state treasurers into the official families of the Lansing banks. And it is the more complimentary to them because there is a law prohibiting the treasurer from de-



FRANK E. GORMAN

positing funds in any bank with which he is connected. The latest state treasurer to be so honored is Frank E. Gorman, who has become cashier of the Capital National Bank, Lansing. Not many years ago John W. Haarer, who was state treasurer, became cashier of the City National Bank, Lansing.

Frank E Gorman has had a variety of experience, which promised well for his success as a banker. Born at Forrester, Sanilac county, he attended the local schools and eventually became a school teacher. He also worked in the general offices of the Edward Smith Estate, which practically owned the town of Forrester and which conducted a general store, dock, mill, lumber yard and produce handling business. About 15 years ago he went to Lansing and became bookkeeper in the state treasurer's office; then cashier. He was afterward appointed deputy state treasurer and finally elected state treasurer, which position he now holds in addition to being cashier of the Capital National Bank.

Gorman has many friends throughout Michigan and the new connection looks like a most desirable one for both parties to the transaction.

RAY CONSOLIDATED STATEMENT

The Ray Consolidated Copper Company made a net profit of $911,675 for 1920, as compared with $1,666,270 in 1919; $4,653,456 in 1918 and $9,701,170 in 1917. After providing for dividends, there was a net deficit of $665,504 on December 31, as compared with a deficit of $1,488,088 the year before; a deficit of $472,377 in 1918 and a surplus of $3,077,018 in 1917. The balance sheet shows that the total profit and loss surplus for 1920, was $14,264,228, as against $14,929,732 in 1919; $16,417,820 in 1918 and $18,890,196 in 1917. The company's assets were given as $32,680,483, as against $33,927,300 in 1919; $36,244,406 in 1918 and $35,969,701 in 1917.

CHINO COPPER COMPANY

Chino Copper Company ended 1920 with net profits of $1,319,541 before dividends, as compared with $1,301,797 in 1919; $3,908,222 in 1918 and $9,512,854 in 1917. After deduction of dividends the surplus for the year was $340,813, as compared with a deficit of $1,308,143 in 1919; $6,688 in 1918 and a surplus of $900,052 in 1917. Total profit and loss surplus at the end of the year was $13,889,908. In 1919 it was $13,549,095; in 1918, $14,857,238 and in 1917, $14,863,926. Assets at the end of the year totaled $25,095,957, as compared with $25,642,264 in 1919; $25,563,209 in 1918 and $24,342,401 in 1917.

D. U. R. EARNINGS—TWO YEARS

Gross earnings from operation	1920	1919
Passenger	$27,794,192	$23,766,561
Express	1,708,766	1,514,238
Mail	14,812	12,959
Special car	59,322	47,311
Total	29,864,227	24,883,077
Operating expenses	15,025,164	13,792,528
Net earnings from operation	2,961,063	4,890,549
Other income	676,117	548,406
Gross less expenses of operation	4,627,181	5,438,915
Interest on funded and floating debt and taxes	2,002,660	2,869,250
Net income before depreciation and contingencies	1,624,575	2,569,665
Less:		
Depreciation reserve	200,000	650,000
Contingent liability reserve	50,000	150,000
Federal tax reserve	150,000	200,000
	400,000	1,000,000
Carried to surplus account	1,223,575	1,618,665
Less dividend	$1,200,000	
Discount	2,385	1,202,385
Excess over all requirements	$ 21,190	or at rate

of $0.21 per share earnings after taking out charges and before dividends. For 1919 the similar figure was $16.78.

President Brooks in his statement to stockholders says in part: "While gross revenues for 1920 were considerably in excess of the revenues for 1919, there was a decrease in net income for the year before providing for depreciation or contingencies, of $935,090.24, as a direct result of increased wage rates and material costs. On June 9, 1920, an increase in fares on the city lines resulted in an increase of two-thirds of a cent in the average fare. This increase failed to offset increase in operating expenses, as provided by the fact that during first six months of 1920 net earnings from operations were approximately $60,000 less than in the corresponding period of 1919, while in the last six months of 1920 the increase amounted to more than $869,000. Increased wages paid motormen and conductors in 1920 amounted to an increase in operating expenses of $2,442,529.18.

UNITED LIGHT & RAILWAYS

Comparative Consolidated Earnings statement for 12 months ended Jan. 31, 1921

	1921	1920	Increase or Decrease
Gross earnings, all sources	$12,634,490	$10,286,470	$1,738,119
Operating expenses, (including maintenance, general and income taxes)	8,756,225	7,347,097	1,411,127
Net earnings	3,778,264	2,940,372	327,991
Interest and preferred dividend charges, subsidiary companies	850,975	899,278	-19,300
Balance	2,706,188	2,040,294	346,391
Interest charges, United Light & Rys. Co.	974,392	904,345	70,146
Balance available for dividends	1,421,794	1,145,049	276,741
Prior preferred stock dividends, The United Light & Rys. Co. (Delaware)	6,321		6,324
Balance	1,415,469	1,145,049	270,420
Pre-lien dividends preferred stock	602,364	601,917	+1,953
Surplus earnings	$ 817,205	$ 540,122	$ 272,023

A. T. & T. EARNINGS

For the three months ended March 31 net earnings of the American Telephone & Telegraph Company, after interest charges, were $13,092,796, equivalent to $2.95 a share on $443,519,000 of outstanding capital stock. The net was about $50,000 in excess of the 1920 earnings for the corresponding period.

Digitized by Google

The United States Army And Highway Improvement

(*Continued from Page 12*)

measure of choice in subjects as varied as music, stenography, dramatic art, blacksmithing, automotive trades, etc. Among these courses we hope to incorporate some which will fit many of these men to take minor positions with state, county or other organizations which are engaged in developing their highway systems. We hope to have given these men practical couses which will familiarize them with the materials employed, which will fit them to be foremen or to operate any of the machines which are employed in highway building. Others will be given instruction in the management of motor transport, particularly with a view to fitting them to become what for want of a better term we may call fleet managers, men who will be capable of conducting numbers of motor trucks running between different points and transporting goods. To my mind this is one of the problems we now have to face and for which we must find a solution. Nearly two years ago, in writing to a young man asking advice as to the course of study he should follow to fit himself for his life work, I suggested this idea. It seemed to me then, and I think it is more apparent now, that in the future vast quantities of materials will be carried on our highways in these vehicles, and in order that this may be done most efficiently and most economically, it is essential not only that there should be men who know how to conduct them individually, but others who know how to combine them into large or small fleets and to manage such combinations in a way which will prevent delays, which will hasten the journey and which will do this without danger to other users of the road.

The Army's highway transport problem, then, is to be assured that the roads over which it must operate are suitable, that they are sufficient in number, that they are properly located and that the motor vehicles which we can procure will likewise be suited for army use. That this problem is solved aright is of importance not alone to the Army, but to the entire country, and we wish to assure all those who are as concerned as we with the prosperity and with the welfare of our country that the Army will aid in this movement by giving all of the encouragement and help it can afford and by furnishing all of the information it has acquired concerning roads and motor transport.

An address at the recent Highway Educational Conference at the University of Michigan, Ann Arbor.

The Week's Developments In Michigan Legislature

(*Continued from Page 15*)

commission orders, and fixing maximum fares for interurbans at three cents a mile. Warm fights over this and other utilities' bills have been staged in both houses.

The bill of Rep. Edwin B. Ramsey, Lansing, which reapportions the percentage of bond issues which cities of 100,000 population or under may issue for different public utilities, passed the House. It keeps the limit at ten per cent but makes it possible to issue at least eight per cent of this for municipal water works and three per cent for electricity, instead of only two for any utility.

The Senate gave its approval to Gov. Groesbeck's measure creating a department of public safety.

The Legislature is scheduled to end April 29, but Gov. Groesbeck will call the body in special session May 20 to act on the soldiers' bonus proposition.

THE OLDEST HOUSE IN MICHIGAN

BONDS—THE SAFEST FORM OF INVESTMENT FOR YOUR SAVINGS—

For twenty-seven years we have been furnishing our customers with government, municipal and high grade corporation bonds. We are prepared to furnish a selected list of securities which are attractive at this time.

H. W. NOBLE & COMPANY

Bond Department

318 Dime Bank Building Detroit, Michigan

"Talk It Over With the Bank"

In these days your bank may render exceptional service—to our customers we offer counsel and advice based on knowledge and experience.

THE AMERICAN STATE BANK
DETROIT, MICHIGAN
Member Federal Reserve Bank

Main Office: 115 Griswold 20 Branches

Capital: One Million Dollars

Smith, Hinchman and Grylls

Architects and Engineers

Detroit, Mich.

Digitized by Google

Rail Rates and Commodity Prices

(Continued from Page 6)

"Conceding that on the surface there is that complexion, and assuming for the purpose of discussion, but not admitting, that these preferences exist, I ask, if this be so, is it wrong? If this be so, why is it so? Congress recognized, as did all thoughtful men, that transportation is the life blood of commerce and industry and vital to the protection of our nation. It must be provided in adequate and reasonable efficient form.

"Continuous and dependable operation of our transportation machine is almost as important as is its existence. The law was formulated in the interest of the country and of the public. The capital invested in, and the men who operate, our transportation machine are employed in serving the public which must and should compensate both.

"If it clearly appears that in order to give the country the quantity, quality and character of service that it needs to which it is entitled, and for which it must pay, some preference, apparent or real, should be afforded to the capital and the men that are employed in that service, I submit that such preference is not undue so long as the public's right to reasonable and nondiscriminatory service and charges is protected. But if that capital and and those men are recognized as having a preferred status because of the public character of the service in which they are employed, those men and those owners of that capital must recognize an obligation to the public which also springs from the character of the service in which they are employed.

"It is no time for stubborn thinking, but it is a time to think of facts, which are said to be stubborn things. The whole country and all of our people, excepting those who are and have been shamelessly profiteering, are suffering the after affects of a titanic war. In some places the agriculturist and the horticulturist are leaving their crops to decay in the fields and on the trees because they can not sell them at prices that more than cover the costs of harvesting and transporting and marketing; and yet the housekeeper purchasing for the home table finds the cost of such commodities close to what it was during the active hostilities.

"In some quarters zealous efforts are made to have it appear that this situation is in large part or in the main due to high freight rates. The freight rates are high. I have yet to meet a well-informed man who does not feel that as a general thing they can be made no higher as a revenue measure.

"Careful inquiry into some distressing situations discloses that the utilization of products is prevented, not by freight rates, but by economic conditions and perhaps manipulated markets.

"In November, 1920, the average ton-mile revenue of the railroads of the United States was 75.7 per cent higher than in 1913. At the same time the wholesale prices of commodities that are transported in large quantities averaged 107 per cent higher than in 1913, and in May, 1920, they were 172 per cent over 1913. Reference has been made to operating costs of the railroads.

"Until the foundation has been laid for widening the margin between the revenue and the cost of earning it, it is difficult to find justification for an attempt at a general reduction in rates.

"I desire to make it clear that although I have referred to some of the troublesome problems, I am still an optimist and not pessimistic on the subject. We all must suffer in varying degrees under the conditions which obtain in the world and affect our country, but we should not lose sight of the fact that those conditions bear upon us with less severity than they do on most peoples; that we have recuperative powers which far exceed those of any other nation, and that with a co-operative spirit along right lines and recognition of the difficulties and the rights of others, and an earnest effort to bring about at the earliest date those conditions which we would like to have obtain, we will soon be looking upon the troubles of the present day as troubles of the past, and will find our country as well as ourselves in a better position, a better condition and a better frame of mind and with more lofty resolves for the future than we had before."

Farm Equipment Manufacture in Michigan

(Continued from Page 12)

as the United States Steel Corporation, the huge motor combines and similar enterprises.

The oldest concern on our list is the Nichols & Shepard Company, Battle Creek, builder of threshing machinery, wind stackers, feeders, steam traction engines and oil-gas tractors. This concern was established in 1848 as a co-partnership and was first incorporated in 1886 as Nichols, Shepard & Company, with these officers: John Nichols, president; David Shepard, vice-president, and Edwin C. Nichols, secretary and treasurer. It was reincorporated in 1887 and the charter has been renewed since that date.

From the start this company has confined its activities largely to the construction of threshing machinery and engines to drive it. The original plant was small, but has been rebuilt and enlarged from time to time. The present capitalization is $1,650,000 in common stock and $550,000 in preferred. Edwin C. Nichols is the president and general manager. The product is sold in small grain growing regions in the United States and Canada.

The Aspinwall Manufacturing Company, Jackson, capitalized at $1,500,000, claims to be the oldest and largest manufacturer of potato machinery. The product includes potato cutters, planters, four-row sprayers, sorters and elevator diggers. The company was incorporated in 1884, at Three Rivers, to manufacture and market the inventions of L. A. Aspinwall, vice-president of the company. The plant was moved to Jackson in 1894. The chief product in the early days was the Aspinwall automatic potato planter. The first year's production was 500 machines in a small shop. The present plant is four times the size of the original one and the annual production about 5,000 machines, which are sold all over the world.

F. C. Mason, George W. Treadwell and T. Bromley, Jr., organized the F. C. Mason Company, St. Johns, Mich., in 1898, to manufacture farm implement supplies, truck frames and radiator guards. The concern was incorporated in 1902 for $20,000 to do a jobbing business in a building having about 800 square feet of floor space. Coil springs and harrow teeth were sold first, but gradually other implement parts were added. The jobbing business developed into manufacturing and the company began to put out cultivator points, singletrees, doubletrees and three-horse bitches. Among its other products the concern is now making points for every known type of cultivator.

Recently the plant space was increased until the present area is 60,000 square feet. Recently the company took over the manufacturing and sales rights of the Angus McCallum improved road plane. The present capitalization of the company is $165,000. Seventy-five per cent of its product is sold in Michigan, the rest all over the country. While the decline in buying has affected the implement manufacturers, those making parts have profited somewhat by this decline, inasmuch as the farmers have repaired old machines rather than buy new ones. On the reorganization of the company in 1920 the following officers were elected: J. T. Milman, president; F. C. Mason, vice president; J. R. Weeks, secretary; W. A. Gay, treasurer.

In the plow manufacturing field the Moore Plow & Implement Company, Greenville, occupies an important position. This company was organized in 1901 to make Moore's patent plow, and the line was developed until production has increased from an annual output value of $65,000 to $225,000, and the manufacturing space from 11,000 to 50,000 square feet. The company bought up the interests of the Gale Manufacturing Company, Albion, and manufactures all the Gale line of machines. Included in the products are riding, walking, orchard, gang and Moore-Gale plows, 50 per cent of which are sold in Michigan and the rest elsewhere.

Donaldson Brothers, Mount Clemens, manufacturers of farm implements and bob sleighs, are a good example of the blacksmith shop development into large-scale manufacturing. William S. and Andrew T. Donaldson organized this business in 1859. They did a general blacksmith business and manufactured wagons and carriages. When the foundry was added in 1875 the partners began to make implements. In 1917 the firm was incorporated. A year later William T. Donaldson died. At present the corporation is capitalized at $100,000, occupies about 35,000 square feet of floor space and its annual product is valued at $200,000.

Plows, harrows, cultivators, scrapers, bean harvesters, agricultural furnaces, caldron kettles, corn shellers, feed cutters, land rollers, farm wagons and bob sleighs are manufactured. Implement and wagon sales are confined mostly to Michigan, but the sleighs are marketed in the Eastern states. During the summer of 1920 the company was running shorthanded because of the labor supply, but during the fall and all winter the plant has been operating on full time with its full force. Donaldson Brothers is one of the oldest, if not the oldest manufacturing establishment in Mount Clemens, widely known as the "Bath City," because of its mineral waters and sanitariums. The company's present officers are: Andrew T. Donaldson, president and manager; Arthur L. Donaldson, secretary and vice-president; Harry S. Donaldson, treasurer.

When the Potato Implement Company, Traverse City, was organized in 1890 to manufacture hand potato planters, corn planters, powder guns, sifters and sprayers, a room 12 by 14 feet was utilized to produce about $4,000 worth of product. The first tool made was a hand potato planter. Today the company is capitalized at $100,000, operates a plant with 60,000 square feet of floor space and turns over about $250,000 of business annually, most of which originates outside of Michigan. Corn and bean planters, dusters and seed sacks have been added to the line of products.

Originally the Kalamazoo Tank & Silo Company, Kalamazoo, manufacturer of elevated tanks, structures, wood and steel tanks, silos,

Digitized by Google

windmills and towers, ensilage cutters and other farm equipment, was the Williams Manufacturing Company, organized by H. Manvel and B. S. Williams in 1867. The name was changed in 1900. The product the first year was valued at $25,000 and the manufacturing space did not exceed 1,000 square feet. Subsequent development of the business has resulted in a plant with 200,000 square feet of floor space and annual business approximating $1,000,000. Only 20 per cent of the product is sold in Michigan. M. H. Coombs is president of the company.

Strictly speaking, the actual investment in farm implement manufacture in the state, if we did not include tractors, is approximately $3,000,000. Roughly, another $3,000,000 or more is invested in farm tractor production. Henry Ford & Son, Inc., Dearborn, is capitalized at more than a million dollars, as is the Port Huron Engine & Thresher Company. Other concerns listed as tractor builders are the Acason Farm Tractor Company, Detroit; Wayne Tractor Company, Inc., Eaton Machine Works, Jackson; Leonard Tractor Company, Detroit.

A review of the opinions of implement manufacturers throughout the state seems to point to great expectations for a renewal of business in the fall. Nothing much is expected this summer. This industry has been hit as hard as any other, but its recovery with a gradually growing increase in demand is only a question of months.

The writer admits that in this sketch of a few concerns he has scratched only the surface, necessarily because of the dearth of material available. The following list of companies listed as implement manufacturers shows the present manufacturing and buying power of this industry in Michigan. The figures after each name indicate the approximate capitalization which in most cases is more than the amount given:

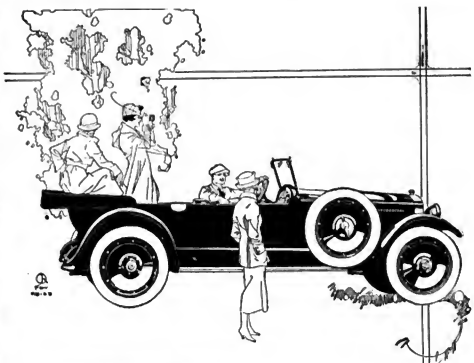
J. M. Montigel, Alma, $10,000; Ann Arbor Machine Company, Ann Arbor, feed presses, hay cutters, etc., $100,000; William Rapson & Sons, pea harvesters, Battle Creek, $5,000; Nichols & Shepard Company, Battle Creek, $1,000,000; Bay City Plow Company, Bay City, beet lifters, $100,000; George Fair & Sons, Blaine, implement foundry, $5,000; Sheffield Manufacturing Company, Barr Oak, cultivators and planters, $50,000; Campbell, Mason & Sons Company, Detroit, $300,000; Dowagiac Drill Company, Dowagiac, broadcast grain seeders, $100,000; Hiram R. Streeter, Grand Ledge, corn shellers, $2,500; Greenville Implement Company, Greenville, $50,000; Moore Plow & Implement Company, Greenville, $50,000; Patterson Manufacturing Co., Holly, seeders, harrowers, etc., $50,000; Seeder Manufacturing Company, Homer, cultivators and harvesters, $2,500.

G. W. Arnold's Sons, Ionia, wheelbarrows and grain seeders, $5,000; Aspinwall Manufacturing Company, Jackson, bean cultivators, plows, etc., $300,000; Frank Hutchison, Jackson, potato planters, diggers, etc., $25,000; Watts Manufacturing Company, Jackson, corn shellers, investment not known; Kalamazoo Tank & Silo Company, Kalamazoo, corn shellers, etc., $300,000; William McDonald's Sons, Lapeer, $2,500; Donaldson Brothers, Mount Clemens, $100,000; Bacon Manufacturing Company, Pontiac, hand drills, cultivators, etc., $10,000.

Park Plow Company, Richmond, walking plows, bean harvesters, bob sleds, etc., $10,000; J. L. Ortner, Richville, $50,000; A. T. Ferrell Company, Saginaw, fanning mills, etc., $500,000; F. C. Mason & Company, St. Johns, cultivators, etc., $50,000; Potato Implement Company, Traverse City, corn and potato planters, $25,000; O. E. Thompson & Sons, Ypsilanti, grass wheel barrow seeders, $25,000.

HULL MACHINE ADDS TO FORCE

The Hull Machine Works, Lansing, has installed a complete welding outfit and new employes are being added to care for the increasing production.



Surprising Power

Power—that's what you need for hills and speed, for bad roads, quick getaway and all-day going—power that does all its work without noticeable engine effort. And that's precisely what you get in the newest Winton Six. It's an amazing car. May we show you? Simply telephone.

GEORGE H. ZUVER COMPANY
Telephone Glendale 4605
4465 Cass Avenue

WINTON SIX

Russel Wheel & Foundry Co.
DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

Digitized by Google

Yankee Business in Wooden Shoes

(Continued from Page 7)

Dutch industry has agitated for a revision upward, but it is unlikely that the five per cent duty will be disturbed, although it is believed there will be some changes in policy.

Amsterdam's diamond-cutting industry has suffered some from the establishment of works in South Africa. Because of the high grade work done by Dutch cutters, there is a question as to how far the South African enterprises will affect this industry. Holland is going in strong for wireless equipment and is now building stations for wireless communication with the East and West Indies and America. Dutch inventors have perfected a waterproof, floating safe for the preservation of valuable papers in ocean transportation between Holland and her colonies. The merchant marine has now 500 ships and the herring fleet consists of 750 boats of all types.

Trading with the Netherlands, as said, includes the Dutch East and West Indies. The East Indies' population is 48,000,000, and in 1919 the value of foreign commerce was $867,000,000, of which $296,000,000 represents imports and $571,000,000 exports. The United States sold hardware, iron and steel sheets, tin plate, railroad material, pipe and fittings, galvanized sheets, wire, milk products, naval stores, automobiles, trucks, tires, house and office equipment. The imports from the United States were valued at $7,000,000 in 1918, but jumped to $45,500,000 in 1919, and for the first eleven months of 1920 were $51,500,000. During 1920 the exports to the United States from the East Indies were valued at $144,600,000. The vegetable oil industry both in the Netherlands and the Indies, although established only for years ago, has developed so rapidly that plants are being constructed for a future output of 400,000 tons of crude oil before the end of the present year. Of this amount 125,000 tons will be for home use and the remainder for export. This oil industry represents a consistent and increasing demand for machinery.

Labor saving devices are being given considerable attention owing to the increasing costs of labor, which affords considerable food for thought among the machinery manufacturers of this and other countries. So far tractors have not been successfully used in cultivating the rice and harvesting, for the reason that the clay of Java and other islands making up the Dutch Indies is so heavy and sticky. However, there is a great market for metal products, machinery and repair parts and tools. The Dutch East Indies had in February a favorable balance with the United States of about $8,500,000, against $33,300,000. The total population of the realm of the Netherlands is 54,850,000, or about half of that of the United States.

Reports for March indicate a resumption of business in the cotton and piece goods lines by May 1, and merchants are already ordering from the mills in preparation for the Poesa Month (July), which is the Mohammedan New Year. At this time of the year the natives spend about forty days in idleness and fasting. A large percentage of the year's cotton goods sales are made at this time, and it is not unusual for importers to have commitments as high as $10,000,000.

Dutch commercial interests are represented in this country by the New York Chamber of Commerce for the Netherlands and Netherlands East and West Indies, 44 Beaver street, New York. Dr. D. H. Andreae is the commercial attaché at the Royal Netherlands legation, Washington, and William G. Bryant, of Clark, Emmons, Bryant, Klein & Brown, Detroit, is trade advisor for the Netherlands in this district.

World Conditions and Michigan Business

IN THIS NEW AGE of world-wide industrial and commercial development which has grown up in the last sixty or seventy years, the utilization of mechanical invention, manufacturing processes, means of transportation of material and means of communication have made the whole world an industrial unit; and for me to lay any foundation whatever for a survey of business conditions at Ishpeming, Mich., I must speak in terms of Europe and Asia and Australia, Canada and Mexico, as well as Boston, Pa., San Antonio, Texas, and Cleveland, Ohio. For you to solve the problem as to purchasing a suit of clothes or deferring that purchase, and for your tailor to solve the problem of purchasing his worsted and his findings, for the dry goods merchant to decide upon his requirements for gingham and muslin, for the mining corporation to develop its plant for the coming year, ending, none of us are very much concerned about Marinette or Ishpeming or even Milwaukee or Chicago. What we must know is something of world economics.

I will not take the time even briefly to review the world causes which have brought about the present general stagnation in business, the unprecedented and unparalleled cessation in buying, but I wish to point to some of the developments of the world reaction that indicate the gravity of the situation. Even at the peak of high prices last year there never was a time, taking the world as a whole, that there was a real shortage in the material necessities of life, and just as soon as the world's ships were withdrawn from military service and made available for the transportation of merchandise, these great stores of commodities that had been held up for lack of ships began to pour into the United States of America because we are the richest market of all the nations in the world today. Millions of bales of cotton from India came here and millions of bales of our own cotton piled up in the warehouses of the South. The wool and mutton surplus of Australia came here, the vegetable oils of China and Japan, and the dressed beef

By R. B. GOODMAN

Chairman, Bureau of Economics, National Lumbermen's Association

An address delivered April 5 before the Ishpeming, Mich., Industrial Association. Mr. Goodman is president of the Goodman Lumber Company, Marinette, Wis.

of Argentine congested our ports, and almost overnight a seeming scarcity with famine prices changed into a surplus for which there is comparatively no demand. We have, I am told, nearly a year's supply of raw cotton; we have two years' supply of mutton; we have three years' supply of wool, and between two and three years' supply of hides. With this change in the visible supply of most of the necessities of life also came a restriction of credit or a deflation in price which the Chamber of Commerce of Kansas City has upon thorough investigation announced as a loss in nominal value of wealth in this country of more than $25,000,000,000, approximately equal to the entire cost of our participation in the world war.

Prices on Decline, But—

Perhaps the most concrete picture of the shift in prosperity is the change that has taken place during the last few years in the cost of living. The National Industrial Conference Board has developed a very thorough, complete and scientific bureau of statistics, and this bureau has revised the data on this subject in so scientific a manner that it is now accepted even by the Government as superior to the compilations of the Bureau of Labor. In the family budget it was found that, taking a wide field of survey, to the average family of the average wage-earner foodstuffs represented 43.1 per cent of the family budget; shelter, 17.7; clothing, 13.2; fuel and light, 5.8 per cent; miscellaneous items, such as medical attendance, amusement, travel, gasoline and an occasional Ford car, 20.2 per cent. By plotting the curve of these various groups of commodities based upon their retail prices and then weighting the average according to these percentages, it was found that, taking the average cost of living for July, 1914, as a base, in June, 1918, the cost of living had increased 52 per cent; March, 1919, 60 per cent; November, 1919, 82 per cent; July, 1920, 104 per cent, and that was the maximum. Then the wage-earner's dollar bought less than half of what it would have bought in July, 1914, and since July, 1920, the cost of the family budget has steadily declined, till in March of this year it has gone down from 104 per cent above the 1914 base to 70 per cent above that base. The Bureau which has compiled this data advances the further opinion that the cost of living is still bound for a further decline during the remainder of this year to about 50 per cent of the 1914 base, or about on the same basis as the medium of the year 1918; so that the wage-earner's dollar has increased in value since July, 1926, from less than 50 cents to nearly 66 cents, which is an increase of more than 20 per cent in the dollar's purchasing power in this period, and the indications are that the purchasing power of the wage-earner's dollar will continue to increase, which is only another way of saying that prices are still on the decline.

There would be no very great hardship or particular difficulty about this situation if the decline in prices were uniform and if the reduction in nominal wages were such as approximately to maintain the same actual wage for the wage-earners, but this is not the case. Some commodities have, by force of circumstances, been forced to take a disproportionate decline, while others have through equally unfortunate circumstances been enabled temporarily to delay the taking of their proportional reduction in price. This is unfortunate, for example, for the apple growers in the state of New York, where the retail market price of apples has declined and the cost of transportation and the cost of the package has not declined. I am told that the barrel and the freight to the market leaves nothing to the apple grower for his apple. This same situation in fabricating industries is what shuts down the factories and throws men out of em-

Digitized by Google

ployment; and let me say right here that that is the gravest feature of the present situation. I have no sympathy for the working men who complain of a reduction in wages, when those reduced wages will buy them practically as much today as a high wage would a year ago; but the hardship falls upon the wage-earner who wants to work and is unable to obtain steady employment. And the fault is not with his employer, who also wants steady employment and continuous operation. The fault is with the artificial restriction that our laws have placed upon industry which make it illegal for the manufacturers of lumber, or the manufacturers of iron and steel, or the manufacturers of automobiles or any other product to get together and agree amongst themselves to regulate their production in accordance with the demand. If this could be done fairly and honestly and without abuse, the public would not be the loser as a buyer and consumer and the public as a wage-earner would be benefited by more stable and more permanent employment.

You will doubtless be surprised, as I was surprised at seeing a digest of the 1914 census of manufacturers of the United States, which showed that this country is pre-eminently a country of small units of industry. There are only 2 per cent of the employers, either individuals, partnerships or corporations, in this country, that employ a thousand or more men. There are 98 per cent that employ less than a thousand, 91 per cent that employ less than one hundred men, 70 per cent employ less than 20 men. In every other country in the world these employers of labor and producers of goods may get together and agree amongst themselves how to regulate their production so as to stabilize their employment of labor.

I do not wish to inject any politics into this discussion, but you know as well as I do, whether you are a Republican or a Democrat, that we have for reasons that may have been fully justified passed through eight years of governmental interference with business. In this, England is in a worse condition than ourselves. Most of you have followed with interest the world career of Lloyd George. You know that fifteen years ago he might be called, if not a socialist at least a semi-socialist; that he was one of the hopes of the Socialist party. You know the socialistic measures that he has developed in England. You know how well cured he is of these doctrines today. In a recent statement with which you probably are familiar he stated that if the labor organization of England had 4 per cent greater strength in the recent election they would have been able to control the destiny of the British Empire. You know that England's economic weakness today is due to the tax burden which is double and treble our own for the maintenance of old age pensions, unemployment gratuities and the other burdens of its socialistic program. The best authorities on economics in this country who recently have visited Europe report that Germany with her indemnity burden is a stronger commercial competitor than England or France.

So, taking the world situation by and large, you will see that we not only have to deal with a serious commercial and industrial depression in this country, but that every other nation on the globe, from Japan to China, to India, to Russia, to Germany, to France, to England, is in the same or still more desperate situation with ourselves. You and I are often asked, "What is there encouraging in the outlook?" I claim there is no optimism permissible to any man who has not first grasped the seriousness of this situation. When we have done that, there is much for encouragement. Today we see those commodities which have held out against readjusting prices falling into line—you merchants can speak more by the book on this than I. It is firmly believed by men whose

(Continued on Page 44)

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
34 W. COLUMBIA ST.
DETROIT
CAD. 6163
CAD. 6164



The Luxeberry Painter Says:

"Specify Berry Brothers Varnishes—be certain of the utmost in satisfaction. For every varnish need — home or industrial — whether you want a can or a carload—you get the best there is when you ask for Berry's."

BERRY BROTHERS
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan. Walkerville, Ontario.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL CO.

Digitized by Google

NEW MICHIGAN CORPORATIONS

FOR WEEK ENDED APRIL 16, 1921

Wolverine State Automobile Assn., Kalamazoo; mutual benefit to all its members and others; Henry L. Toren, Grand Rapids; R. Frank Taylor, Rockford; Mrs. A. M. Renelle, Allegan .....

On the Square Tire Co., Detroit; to engage in retail and wholesale tire and automobile accessory business; Max Kuhnreich, 82 Forest Ave, E.; Henry Kuhnreich; Isadore Bradfield, Detroit .....

Equitable Auto Service Corp., Detroit; to buy, sell, repair, rent and store automobiles and all other kinds of automotive vehicles; G. Anthony Weisenhagen, 284 Nevada Ave.; Edgar A. Clink, Detroit; Charles F. Holderman, Clawson .....

Michigan Iron & Land Co., operations in counties of Marquette, Baraga and Houghton, Iona and Dickinson; office at Sault Ste. Marie; purchasing, owning, holding and improving of timber lands and other real estate; Robert P. Hudson, Sault Ste. Marie; George A. Osborn, Fresno, Cal.; Walter C. Wylie, Sault Ste. Marie .....

Carson City Elevator Co., Carson City; to engage in and carry on a general elevator business. Bernard Miller, Hubbardston; William Hausman, Nevile Davarn, Pewamo .....

Grand Rapids Acme Truck Co., Grand Rapids; to buy, sell, deal in motor trucks, automobiles and motor truck parts and accessories; Jacob Widdicomb, Thomas G. Wanty, G. B. Watson, Grand Rapids .....

Scotland Realty Co., Detroit; real estate; Saul and Harry Feinberg, Cleveland, and Emanuel Goldberg, 3925 East Grand Blvd., Detroit .....

Western Tyre Co., Detroit; to manufacture, buy, sell and deal in toys and novelties of all kinds; W. Fairbairn, Astor Court W. Grand Blvd.; M. L. Bryce, 2229 W. Grand Blvd.; A. L. Lott, Detroit .....

Midway Furniture Co., Detroit; to manufacture, buying, selling and dealing in all kinds of furniture, carpets, rugs and household goods; William F. Carroll, 4343 Allendale; Edward J. Sullivan, R. D. Peterson, Detroit .....

Peoples Sales & Service Corp., Detroit; to act as manufacturers' agents and to sell supplies; D. H. Peoples, 139 Phillip Ave.; H. F. Dervey, F. D. Peoples, Detroit .....

Downtown Auction House, Detroit; to conduct and operate an auction warehouse and deal in general merchandise; Chas. H. Roberts, 1 Grande Ave. 125 Eason Ave., Highland Park; Gustave Otto, Detroit .....

Muenz Shoe Shop, Detroit; to retail boots, shoes, slippers, laces, polishes, etc.; Edith Muenz, 7351 Victoria Ave.; William F. Muenz, Frank J. Quickert, Detroit .....

Kay-Bee Electric Co., Detroit; to buy and sell electric fixtures, wiring devices and supplies, and install same; Herbert H. Warner, 5001 Brush St.; Samuel Dulaney, Detroit; Ralph W. Emerson, Highland Park .....

Clinton Creamery Co., Elsie; to manufacture, buy, sell and deal in dairy products, including milk, butter, cheese, etc.; H. M. Wooley, John Schofield, Elsie; Edwin Hall, St. Johns, R. F. D. .....

Fox Realty Co., Jackson; owning of buildings to be occupied for dwelling houses, halls or business purposes; William R. Hiram W. Fox, Jackson .....

Vandercook Coal & Wood Co., Detroit; to engage in general coal and wood business; buy and sell wholesale and retail coal, wood and fuel; Charles H. Franklin, George W. Daniels, George A. Vandercook, Jackson .....

Herrick-Chadwick Co., Highland Park; to purchase, hold and deal in real estate; James G. Pierce, Highland Park; Robert O. Herrick, John A. Chadwick, Royal Oak .....

C. H. Clark Oil Co. (P.), Cleveland, O.; J. J. Shapiro, 1656 Virginia Park, Detroit, Michigan agent .....

Lauchlin Farm Gate Hinge Co., Jackson; manufacture and sale of the Lauchlin farm gate hinges; Henry Lauchlin, Lansing; Albert S. Pher, H. A. Kinch, Jackson .....

Universal Lightning Rod Co., Owosso; sale of lightning rods; J. B. and F. A. Lewis, Owosso .....

Garber Machine Co., Inc., Bay City; sale as wholesaler, retailer and jobber and manufacturer's agent of marine engines, parts, accessories; Mary F. and Walter S. Cooley, Bay City. W. Fred Garber, Essexville .....

Detroit Rapid Transit Co., Detroit; to own and operate system of motor transportation; George E. and Guy Nester, 805 Badenacher Ave.; J. M. Reay, Detroit .....

Michigan Chair Co., Grand Rapids; to manufacture chairs and other furniture; Thomas A. Scott, Jr., Grant Garratt, John D. Karel, Grand Rapids.

Royal Eight Corp., operations in county of Oakland, office in Detroit; real estate; Albert E. and Elsie K. Meinke, 71 Philadelphia Blvd, Detroit .....

Sebastian Investment Co., Detroit; real estate; Sebastian S. Kresge, 70 W. Boston Blvd.; R. H. Servis, A. E. Lauffer, Detroit .....

Klinger Lake Light & Power Co., Sturgis; to distribute electric current for light and power to those having summer cottages on Klinger Lake; W. A. Cavin, C. W. Kirsch, Sturgis; John A. Howard, Kalamazoo .....

News-Record Printing Co., Ironwood; printing, publishing, book-making, binding, etc.; Frank E. Noyes, Howard A. Quirt, Linwood Noyes, Ironwood .....

Kridler, Welden & Broadway Co., Grand Rapids; buying and selling automobiles and parts, also accessories; service station; renting cars; Guy M. Kridler, John S. Welden, William Broadway, Grand Rapids .....

Auto Transportation & Finance Co., Detroit; to organize and control an automobile system for the carriage of passengers for hire in Detroit; George J. Russell, Arthur Schlatter, 2711 Wrefford Place; Charles H. Buell, Highland Park .....

Motive Industrials Corp. (P.), Wilmington, Del.; George W. Moore, Campau Bldg., Detroit, Michigan agent .....

Detroit Packing Co. (F.), Wilmington, Del.; Joseph Garduski, 901 Russell St., Detroit, Michigan agent; 50,000 shares, no par value.

Crown Die Casting Co., Detroit; to manufacture, buy and sell bearings and die castings; R. Frank Ward, Mt. Morris; John F. Goude, Venancius E. Zimmerman, Detroit 25,000

Prather Wheel Mfg. Co., Detroit; to manufacture and sell within United States the Prather auto wheel, etc.; Frank M. Prather, 427 Temple Ave.; Frank Stack, Detroit .....

Brown-Mill Tire Service Co., Detroit; to manufacture, buy, sell and deal in automobile accessories and supplies; Harry W. Miller, William W. Brown, 366 Philip St.; Edward C. Mitchell, Detroit .....

Bay City Optical Co., Bay City; manufacture and sale of optical merchandise, a prescription house; Max McKay, Bay City; P. H. McKay, W. A. Sanborn, Detroit .....

C. F. Redmond & Co., Inc. (F.), Boston, Mass.; W. A. Dixon, 16-17 Congress Bldg., Detroit, Michigan agent

Detroit Re-Tinning & Repair Co., Detroit; repair and re-tinning of cans, etc.; Frank Vismara, 2981 Baldwin Ave.; Emil Hallberg, Lawrence Pastorium, Detroit .....

Thumb Oil & Gas Corp., Port Huron; wholesale and retail of gasoline, kerosene, oils, etc., grease, tires and accessories; Archie McGillivray, Bert Bowman, trustee, Bad Axe .....

Sanitary Baking Co., Detroit; operating bakery stores in Detroit and other cities in Michigan; Donald Woodruff, 1523 Lime Kiln Road; Caroline M. Hay, Ivan C. Hay, Detroit .....

CHANGES OF NAME

Brown-Furnell Co. (name changed to Cornelius Brown Co.), Detroit ..... $

Case Press (name changed to The Pemberton Press), Detroit .....

Marshall Corset Co. (name changed to Cornet Corset Co., Inc., and station located at Jackson and Marshall), capital increased from $50,000 to.....

Eastman Salt Products Co. (name changed to Saginaw Salt Products Co.), Twp. Carrollton, Co., Saginaw..

INCREASES

New-Way Motor Co., Lansing, from $1,000,000 to 1,250,000

Farmers' Co-Operative Grain Co. of Kinde, Kinde, from $25,000 to.....

Miele Alderton Shoe Co., Saginaw, from $300,000 to.....

Doncan Electric Mfg. Co., Detroit, from $10,000 to.....

Brockton-Noble Co., Detroit, from $17,500 to.....

Detroit Metallic Casket Co., Detroit, from $75,000 to.....

Hotchkiss Co., Flint, from $50,000 to.....

Miracle Mfg. Co., Detroit, from $20,000 to.....

Robert W. Wood Co., Detroit, from $10,000 to.....

Neville Steering Wheel & Mfg. Co., Detroit, from $60,000 to.....

Jackson Screw Products Co. of Jackson, Mich., Jackson, from $25,000 to

Sec. Oil Corp., Port Huron, from $65,000 to.....

DISSOLUTIONS OR CHANGES OF ATTITUDE

West Michigan Machine & Tool Co., Ltd., Grand Rapids .....

Silver Lumber Co., Bldg. Co., Detroit.

K. & H. Shirt Co., Ludington .....

Michigan Home Builders Ass'n, Grand Rapids .....

Indian Motorcycle Co., Grand Rapids.

Case Tire & Service Co., Detroit.....

Electric Park Co., Westphalia.....

Detroit Packing Co., Detroit .....

Southern Cypress Co., Grand Rapids..

Commonwealth Power, Land and Co., Detroit .....

Lepsetz & Sickaroff, Inc., Detroit .

Hammond-Vandawarker Trucking Co., Detroit .....

Cadillac .....

NOTICES OF WITHDRAWAL

Morris Wood Co. (F.), Detroit, Mich., Detroit .....

Besser Safe Co. (F.) (Del.), Wilmington, Del., Alpena .....

It Is Reported W. E. Flanders Will Join Durant

(*Continued from Page 6*)

1,000 years, after which he with William E. Metzger and B. F. Everett started the Everett-Metzger-Flanders Company. This was in 1907. Three years later the concern sold out to the Studebaker interests and later the former E-M-F as the Everett-Metzger-Flanders Company was better known, became the present Studebaker Corporation as far as the automobile business of the latter is concerned. Flanders remained with the Studebaker interests for a short time as vice-president and general manager, but when the Saxon Motor Car Company was organized by his former associate, he left the Studebaker and joined Metzger.

Durant Motors plans the establishment of three big factories—one on the Atlantic coast, one on the Pacific coast and the third at Flint. The motor, specially developed, is being brought out at several factories. The first model was not satisfactory to Mr. Durant, and the present one, which was produced at the factory of the Continental Motors Corporation, is being tested out by Clifford Durant, son of W. C. Durant, and until recently manager of General Motors on the Pacific Coast.

The Durant corporation has appointed the George P. McMahon Company, 52 Penobscot building, as its official representative in Detroit and vicinity. The Durant Motors, Inc., securities will be offered to the public on the partial payment plan, with a view to reaching the small investor.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

American Broaching Machines & Tools



MADE IN TWO TYPES, EITHER OPERATED BY SCREW OR RACK

American Broach & Machine Co.
F. J. LAPOINTE, Pres.
Ann Arbor, Michigan

DETROIT, OFFICE:
305 Scherer Bldg. Phone Cadillac 5381

Why Take a Risk on Forgings?

When at no greater expense you can secure your requirements and eliminate all forging responsibility by having them made

"The Champion Way"

FORGINGS THAT PASS OUR INSPECTION ARE CERTAIN TO MEET WITH YOUR APPROVAL

Try Us

The Champion Machine & Forging Co.
CLEVELAND, OHIO

Detroit Office:
H. B. KENDALL CO.
REAL ESTATE EXCHANGE BLDG.

Digitized by Google

More Light on the Automotive Price Situation

By MARC BRAUN

SEVERAL more letters on the subject of present motor vehicle prices have been received from manufacturers and dealers and are published herewith as a continuation of the article which appeared in this publication last week.

The announcement made by the United States Steel Corporation of material reductions in prices has been taken in some quarters as a forerunner of price cuts by the automotive manufacturers, but from confidential statements made by several officials of motor car and parts concerns, it is not expected that any of the more important producers will reduce prices either at present or during the next few months, for the reason that the steel corporation's cut is not retroactive—does not apply to steel already ordered, but became effective only on the day of the announcement.

"It would be impossible for us to reduce prices on the present output but it will be possible to take into account the lower steel costs when arranging for our 1922 series," said the vice-president of a concern making a car costing between $3,000 and $5,000. He added: "It is absurd to think that price reductions can be made overnight, or in a few days. The announced reductions in quotations by the U. S. Steel Corporation will have to be analyzed. Furthermore, inasmuch as we have not planned a reduction in the prices of our cars, we would have to take the matter up with our distributors. The agent or dealer cannot be ignored, and more so when the present general conditions. And even if after the proposition had been fully investigated it were decided to reduce prices, this could not be done until the end of the present selling season, which means end of July."

One of the foremost automobile parts makers, who uses large quantities of steels, made the following comment: "There are too many people who take the word steel merely in its broad meaning when applied to the automobile. They seem to have no idea that steel in a motor car means varieties or composites of steel, more than just plain steel. Some people figure that the big item of steel cost in an automobile is the frame. They do not taken into account axles, transmission, the engine and a number of other components in which steel and steel by-products enter to a great extent. When it comes to figuring costs, all these items have to be taken separately, and the prices vary a great deal. I have no doubt that the reduction in steel prices will gradually effect the automotive industry, but I am very much in doubt that the manufacturers can afford present list prices before the present production schedule, or the 1921 output, has been completed. I know for instance that we could not allow our customers a reduction on the orders which they are having filled now or which they placed with us yesterday, unless these orders were filled with materials purchased at the new reduced prices."

Frederick J. Haynes, president of Dodge Brothers, is quoted as follows: "I do not think the reduction in steel prices will have any immediate effect on automobile prices. Stocks purchased at the higher levels are still unconsumed. We are in the same case as the grocer who has loaded up on sugar at 10 cents a pound. You would not expect him to be a heavy purchaser now when sugar has dropped about 50 per cent. We must first use up the steel we have on hand and then we shall be in the market again.

"Business generally is not yet normal. It would seem as if the steel men had picked out strategic points where they are advertising reductions. These are in lines where the stocks on hand have run low. They will start their mills and then by the end of the year the rest of us will be in the market and the steel industry will proceed at a normal pace."

President Alvan Macauley, of the Packard Motor Car Company, is quoted as follows: "I cannot see how steel reductions can have any effect on automobile prices. Steel is not the most costly part of the automobile. Aluminum, leather and labor all play a far larger part in figuring costs. The percentage of economy effected by even a large reduction in steel prices is so small as not to be appreciable in the final total."

A Letter From Mr. Jandron

F. L. Jandron, treasurer and assistant general manager, Packard Motor Car Company, Detroit, writes: "A great deal of uncertainty prevailed last fall as to the probable extent of the price decline then in progress and its effect on manufacturing costs generally. In view of the firmness in iron and steel quotations, many automobile manufacturers could then see nothing ahead which would justify lower prices. At the same time, they naturally were anxious to maintain or strengthen their competitive position by price reductions as soon as those should be possible—even at the sacrifice of profit.

"While anxions to avoid panicky or precipitate action, the dominant tendency was to relieve public apprehension by guaranteeing that any price reduction during the winter and spring of 1920-1921 would be made good to those who bought vehicles earlier in the season.

"Now that a clearer view of the situation can be had, it is evident that for the time being at any rate wholesale prices have stabilized themselves.

"The great revival of automobile buying since February 15 indicates that confidence has been in large measure restored, and, until further and radical deflation of basic material costs and wages occurs, no reduction in retail prices of standard established makes of automobiles need be looked for.

"The diminished rate of production during the last six or seven months has enabled manufacturers and distributors to liquidate old inventory and replace it largely with stock purchased at the new prices; but increased charges incident to the readjustment make even present car and truck prices possible only if the retail demand continues to improve."

C. J. Helm, secretary of the Acme Motor Truck Company, Cadillac, Mich., writes: "The writer is inclined to comment only on the motor truck situation, and this as it affects our own company.

"We have made no reduction in prices as yet and do not anticipate a reduction before at least July 1. At present there are no indications that costs will be reduced to justify a reduction in price of our line during the summer months.

"During the war period Acme prices were increased only when absolutely necessary then only in such amounts as were actually required to take care of increasing costs. Our product has not been increased to exceed 50 per cent during the entire war period. Naturally, the lower the increase, the lower the decrease, and the slower it will be in working out.

"As near as we have been able to check up the truck companies which cut prices last fall, they did not materially better their sales for a month or two, and in one or two instances prices have since been increased practically to offset the decrease."

R. H. Collins, president and general manager of the Cadillac Motor Car Company, Detroit, writes: "Present prices on Cadillac motor cars will remain unchanged throughout the year 1921.

"Year after year it has been necessary for us, at this season, to caution prospective buyers of the Cadillac motor car against possible disappointment in the matter of securing delivery. The necessity was never more urgent, as it is our conviction that the months of May and June, and the remainder of the year, will witness the greatest shortage of Cadillac cars in the history of the company."

C. C. Starkweather, president, Starkweather-Buick Company, Detroit, distributor for the Buick cars, has written as follows: "Answering your three questions, I desire to say: First, price reduction is neither warranted nor necessary to stimulate sales; second, the general outlook for business this summer is very good; third, our sales in March are equal to those in the same month in 1919 and double those for April, 1920, and 300 per cent better than January and February, 1920.

"We sold 78 Buicks during the period in automobile show. We believe that business is much as you make it and we have made it good and intend to keep it good. But, this is possible only by the best of salesmanship, which our staff continues to display."

World Economic Conditions And Business in Michigan

(*Continued from Page* 41)

Judgment must be respected that the corporation steel prices will soon take their cut. What is true of commodities is true of labor. One after another of the strongholds of highly organized trades have seen the light of wisdom and accepted both a reduction in the wage per hour and what is of more economic importance, the necessity of performing a fair day's work. Already in those communities where building materials of all kinds have taken their reduction in price and where the building trades have taken their reduction, in such communities business conditions are good. A further hopeful sign for the immediate and intimate future is the return of those in high places in our Government to a better understanding of the framers of our constitution. I wish to close by quoting a paragraph from the report of the Calder Senate committee on the housing situation which was largely penned by Thomas Jefferson or Alexander Hamilton. If you will take this one thought of this one paragraph home with you and think about it, I shall have done more than repaid. The final conclusion or recommendation of this committee with respect to legislation begins as follows:

"The committee believes that, following the American custom, private enterprise must be depended upon to meet the crisis which has been outlined in this report. The Government is an organization to govern, not to build houses or operate mines or run railroads or banks. It is a Government for the general welfare of the people, however; and it should use its governmental power to aid and encourage private enterprise."

MORTON SALT TO INCREASE OUTPUT

Four new vacuum drying pans are about ready for use at the Morton Salt Company plant, at Marysville, which will increase production to 3,000 barrels a day. The pans were installed to replace four older ones which are receiving an overhauling.

The plant now has twenty boilers in operation and two new 500 horsepower boilers recently were installed. The boilers consume 300 tons of coal daily, which is shipped to Marysville by boat from the coal fields in Ohio. The first boat load arrived last week.

Digitized by Google

New Cylinder Reboring Tool Brought Out in Detroit

To overcome certain of the difficulties heretofore encountered in cylinder reboring tools, the Van Dresser cylinder reboring tool has been brought out by the international Purchasing & Engineering Company, Detroit. This has been accomplished by various improvements which, the sponsors say, have produced simplicity of design, accuracy and ease in operating, freedom from wear, and light weight. Points of particular interest are the following, according to a bulletin just issued by the company:

The feed bar is of large diameter, hardened and ground, which results in the wear on this part being practically eliminated. The feed bar has no threads but a small rack which gives it practically a 100 per cent bearing surface. This arrangement also makes it unnecessary to turn the bar in order to remove or back up the feed bar. The mechanism on the rack cut-in-bar can be simply released and the feed bar pulled straight out or dropped through the bottom of the cylinder, whichever is convenient. The feed machine can thus be disconnected when used in operation on a drill press, and gives the operator the option of using either the feed on the drill press, or the feed provided in the tool.

A floating driving socket is provided when this tool is used in connection with the drill press. This eliminates tendency to inaccuracy due to misalignment of the cylinder reboring tool with the drill press.

The bearings are long and solidly constructed, with a total bearing length of 9¼ inches. The lower bearing is very close to the cylinder bore. This insures rigidity in operating when the reamer is at the bottom of the cylinder bore. The reamer blades are made of high speed steel. The reamer head has a long hardened and ground taper shank which is drawn into the feed bar by a floating draw-in screw (same as an arbor in a mill machine or lathe center in a lathe.) This insures, it is asserted, absolute centering of these units when assembled.

The large hardened and ground adjusting pin is provided with two bearings to insure true alignment, rigidity and long wear. The reamer head does not have to be removed from the feed bar in order to adjust the reamer blades.

Probably the most interesting feature is that the tool is so designed as to eliminate guide rings. It is also equipped with heat treated alloy steel gears.

The reboring tool can be instantly removed without disturbing the base, which has been centered separately over the cylinder bore. This allows the operator to try the fit of piston before boring all the way through, and if another adjustment of the reamer blades be necessary, the boring tool when reinserted will automatically be central with the unfinished bore. This prevents a possibility of the new boring being eccentric with the work already done. Electric attachment is also provided.

KELLOG A TRADE ADVISER

It is announced that Mark Kellog, export advertising manager of the Burroughs Adding Machine Company, Detroit, has been appointed a member of the Foreign Trade Advisory Service Staff of the National Foreign Trade Council's annual convention, in Cleveland, May 4 to 7.

BEAVERTON WANTS FORD BRANCH

It is reported from Beaverton that the municipal officials have written to Henry Ford, asking him to consider the community as an advantageous location for a factory, due to the fact that there is plenty of water power. The villagers would like to get a Ford tractor plant.





This little lever moved by the thumb selects the speeds.

A Clean Floor Board

The appearance of any car is enhanced by taking out all the trappings sticking out of the floor board. In closed cars this appearance is a decided advantage.

In an open car where a lap robe may be used, there is a further advantage of getting rid of the "Wobblestick" hand gear shift lever and the emergency brake lever.

This can be done by removing the hand gear shift lever and placing the emergency lever to the left of the steering wheel. The C-H Magnetic Gear Shifts eliminates the hand lever.

The clear floor board, free from levers and other trappings, is well worth considering when designing or purchasing a car.

THE CUTLER-HAMMER CO.
Magnetic Gear Shift Department,
Milwaukee and Detroit

C-H **Magnetic Gear Shift**

C. C. COAL COKE GREY.
1303-4 MAJESTIC BLDG. DETROIT, MICH.

OIL DRILLING IN LENAWEE

Oil drilling in Lenawee county is progressing. The Adrian Telegram says that work has been resumed on the oil well on the James Wheaton farm, a depth of 1,000 feet having been reached. At the well being drilled on the Ray Fatchett farm, in Riga township, a depth of 625 feet has been reached. The W. K. Development Company, drilling on the Guy Weisinger farm, has reached a depth of 1,600 feet.

Digitized by Google

Machinery and Power Equipment

Our Aim is to Render Service

COMPLETE EQUIPMENT

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Plants, Wood-working Plants, Repair Shops, Heat Treating Iron and Metal Foundries.

For electrical equipment industry we always have in stock among the 1,000 or more machine tools the following very desirable Michigan latest type, highly improved re-designed Punch Presses: Better get a detailed copy of our latest stock list.

SIZES No. 1, No. 2, No. 3, No. 4, No. 5, O. B. I.

Two only, 22 Consolidated Horning Presses, like new.
One only, No. 4 Niagara O. B. I. Press; used.
One only, National Premier Motor-Driven Screw Cutting Bench Lathe; something entirely new.
Motor-Driven Bench Drills.
Motor-Driven Bench and Floor Type Ball Bearing Grinders; and many more too numerous to mention.

We buy, trade, sell or exchange only High Grade Equipment.
We have the proper facilities to serve you right—THEREFORE trade with us and save money.

Riverside Machinery Depot

251 ST. AUBIN AVE. *Phone Edgewood* 1581-82-83-84

NORTHERN ELECTRIC HOISTS

Let One Hand

do the work of

two men!

Cut your hoisting and handling costs to less than one-fourth by using our Type D Northern Electric Hoists and Northern Cranes



Northern Engineering Works
DETROIT, MICH.

The Babcock & Wilcox Co.
85 Liberty St., New York

announces the opening of a

New Sales Office
411-412 Ford Building
Detroit, Mich.

Water Tube Boilers
Babcock & Wilcox
Stirling
Rust

Steam Superheaters

Mechanical Stokers

Digitized by Google

MAR 2 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



GENERAL LIBRARY
MAR 9 1921

Fifteen Cents a Copy

Five Dollars a Year

Library Use Only
Return to Desk

Preparing for Death and Taxes
Business, Had There Been No War
Drilling Practice and Equipment
What Is a Lease?

(Editorial.)

(Financial Section Starts on Page 22)

DETROIT, APRIL 30, 1921

Volume 27 Entered as Second Class Matter at the Post Office at Detroit, Mich. *Number 18*

Aladdin



Aladdin Solves Industrial Housing Problems

Firms confronted by problems of Industrial Housing can find a valuable precedent in the experience of many firms who have housed their employes in Aladdin houses. An employe in a good home is a satisfied employe and an asset to your business. Good houses for workmen are not charity nor philanthropy, but a plain case of good business.

Housing Your Men Well and Quickly at Lowest Costs.

The Aladdin system of construction saves 18 per cent of the lumber wasted in ordinary building. Standardization and quantity production further reduce the building cost approximately 30% to you. Also you benefit by Aladdin's stupendous purchasing power. Aladdin houses are easily and quickly erected by unskilled labor. Simple, complete instructions are furnished with each house.

The Aladdin System and Plan.

Aladdin houses are Readi-cut. Every piece of joists, studs, rafters, sheating, siding, flooring, interior finish is cut to proper size, marked and numbered ready to nail in place. Sufficient material to complete more than 3,000 houses is carried constantly in stock ready for instant shipment. Depending upon size of house, we load from one to three complete houses in each car.

Quicker Delivery From Our Four Mills.

Aladdin houses are manufactured and shipped direct from the Aladdin Company's own mills in Michigan, North Carolina, Oregon, Mississippi, and Canada. Aladdin houses come to you in a straight line from the nearest timber region. Aladdin's Industrial Housebuilding Service means shorter routes, quicker delivery and lower freight rates for builders in every part of the United States. Three days to a week are saved in shipments reaching destination. Complete sales and business offices are maintained in connection with each mill. Fully 24 hours' time is saved in your mail reaching our offices.

Single House or Complete Cities.

We will quote you a definite price on a single house or complete cities of 300, 500, 600, 1,500 and 3,000 population. These cities include homes, stores, churches, schools, offices, etc. Several cities are now graphically presented in our book, "Industrial housing." Write for book No. 2081.

The Aladdin Co. *Offices and Mills at* { **Bay City, Michigan**, **Wilmington, N. C.**, **Hattiesburg, Miss.**, **Portland, Oregon**, **Toronto, Canada.**



Industrial Housing

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Preparing for Death and Taxes

Too Few Successful Business Men Today Understand How Much Their Estates Must Pay; Insurance a Factor

By FRANK M. HAYES

Frank M. Hayes, author of this article, has given practically all his time to the study of life insurance as applied to business, especially inheritance tax insurance, guaranteed life incomes, business life insurance and profit sharing counsel. He has familiarized himself with the inheritance tax laws of all the states having such laws and with the details of the federal estate tax law. Taxation, as is well known, is one of the major problems of the day, and inheritance taxation is one of the least understand by the average man. Mr. Hayes is connected with the Phoenix Mutual Life Insurance Company, Detroit office.

I HAVE OFTEN wondered why a successful man keeps on piling up the ducats after he has made his million or so. With pardonable ignorance again I have assumed that the love of achievement, which makes this nation one of men who live to work rather than work to live, as other nations do, was largely responsible. Also I have been told that hard work and money-making becomes a habit, although this is hard to believe, in fact neither answer is wholly satisfactory.

Now, however, I think I have the answer. What the average successful man of wealth is trying to do is keep pace with his inheritance tax. Maybe this is a gruesome joke; perhaps a joke in the attire of a conundrum. One may inquire: How can a man keep pace with his inheritance tax? Doesn't he have to die to have such a thing, and what good is it to him after he is dead? He can't. He does. It isn't any good to him, but it may be a gold mine for the lawyers, a fatted calf for the revenue department and a cross for his heirs.

When Shakespeare wrote: "He that dies pays all debts," either there was no such thing as an inheritance tax or the Bard of Avon was so far removed from such worries that he overlooked it. If I dared trespass on the sacred soil of the classics I would suggest that line to read: "He that dies gets into debt." It may not be literature, but it is fact. "Taxes are the perpetual theme of popular complaint," is a quotation attributed to Gibbon, which applies to the inheritance tax. It is not only a perpetual theme, but a thorn that pricks deepest after death.

Three Ways Out of It

Of course it is useless to try to beat the inheritance tax by increasing wealth. It would be just as sensible to try to climb a mountain by digging a hole. It cannot be done. There are three ways out, so far as I can see. One is to avoid having wealth. Another is to keep on achieving success and collecting the reward with utter disregard of what may happen after the shades of life have been drawn, and the other way is to establish a sinking fund with which to settle state and federal inheritance taxes so that the estate may be left intact.

There is only one reason why a man should worry about the inheritance tax on his estate, and that is his desire that his family be spared undue worry and hardship after he has passed on, satisfied that he has provided well for their future. Often, the more wealth a man leaves behind, the harder it is for his family, which is paradoxical to say the least.

When James Stillman died he left an estate valued at $40,000,000, from which the federal estate tax took $10,000,000 and inheritance taxes in sixteen states lopped off another $1,531,983, making the total inheritance tax $12,354,238. Administration and accounts took $2,887,098; the income tax, $825,349, and the real estate tax in New York, $33,785. Thus the total deductions from the estate were $16,000,000 in round numbers, or about forty per cent of the estate, leaving a net estate of approximately $24,000,000.

An inheritance tax of $12,000,000 is a tidy item to be paid. As a rule taxes are paid in cash, and $12,000,000 is a lot of cash. If the estate did not have this amount of cash, then it had to be raised. Tax collectors do not play with paper assets. They want cash.

The estates of two motor car manufacturers who died in the same year amounted to approximately $100,000,000 and the inheritance taxes were in the neighborhood of $30,000,000. It is going to take some time and some liquidation of quick assets to raise this $30,000,000 in cash.

Henry Clay Frick's estate inventoried at more than $90,000,000, on which the various states in which he owned property collected $4,757,000, and the Government, $11,498,000. Because he owned 44,000 shares of Chicago & North Western Railroad stock, Michigan collected $9,861.

One of the oddities developing from the inheritance tax came up when the estate of Charles L. Freer was inventoried. Mr. Freer left to the Smithsonian Institution his famous Whistler collection, including the Peacock Room. This collection was valued at $2,859,880.25. The Smithsonian Institution is a government unit, and while gifts to charitable and educational institutions are exempt from taxes, both government and state, in this case the Michigan law provides that gifts to institutions outside of the state are taxable.

Therefore, the Government must pay Michigan $400,000 in inheritance taxes out of the estate. The Government can do this readily because it has plenty of cash.

Had this been a gift to private individuals they would have had to find $400,000 in cash or quick assets acceptable to the state revenue department.

So far I have been dealing only with large fortunes, but the rule of cash for taxes applies equally to smaller fortunes, and in many cases imposes greater hardships for the reason that the ratio of quick assets and cash to the total estate is likely to be much lower and the payment of the taxes the more difficult.

The tendency of revenue departments, in collecting inheritance taxes, is to take the center out of the pie—in other words, to pick on those assets easily convertible into cash. For illustration let us take an estate valued at $1,000,000. It consists of some cash and Liberty bonds, some first class securities, investment in a business, some real estate, second class stock and bonds and perhaps some wild cat investments. The tax will amount to $120,000 and the administration costs, $30,000, a total of $150,000 to be collected in inheritance taxes. If this property is scattered about in more than one state, there will be numerous different taxes to be collected according to different laws. What will the revenue departments take out of the estate for these taxes? Very likely it will be the available cash.

Should the cash be insufficient, the next inroad will be made on such securities as can be converted into cash. The Government may or may not take its own Liberty bonds. More likely it will require the sale of these bonds and of securities to an extent sufficient to meet the taxes. If the bonds or other securities are sold on a slow market there will be a loss. The same condition may apply to the real estate. The wild cat stuff, the second class bonds and the business will be the last assets considered available for taxes. It is possible that the sale of any of the securities or of the real estate may seriously affect the business. Disturbance of the business assets would be serious, especially with the directing head removed.

There's No Uniformity

On a net estate of $294,148.81, these costs resulted: Probate court fees, $172; appraisers' fees, $620; administrator's fees, $2,000; attorney's fees, $1,014.88; distributors' fees, $300; clerical service, $100, total, $4,206.88. State inheritance tax, $4,767.27; penalty tax, $119; federal income tax, $35.33; federal inheritance tax, $9,376.46; tax transfers, other states, $828.18; income taxes, other states, $500, total, $13,626.24; grand total, $19,833.12. This is an actual cost and taxation sheet, which shows the depreciation of an estate. Unless there is cash on hand to meet this expense, then some items in the estate must be liquidated to furnish the cash.

Alabama, South Carolina, Florida and the District of Columbia have no state or district inheritance taxes. All other states in the Union have, and they have also different laws governing these taxes. The federal law is uniform, so that in the settlement of an estate the trust company, executor or administrator knows just what the Government will call for. The more states there are having inheritance tax claims on the estate, the more complicated becomes the process of settlement.

Inheritance taxes date back as far as Egyptian and Roman civilizations. They have been known in Europe and Great Britain for years.

Digitized by Google

In 1826 Pennsylvania led the way in the United States by passing an inheritance tax law. From time to time other states have enacted similar laws.

Because questions of economic theory, social justice and political expediency are involved usually in the framing of these laws there is no uniformity. The main differences concern relationship, rates and length or conditions of residence. Inheritance taxes have been considered a penalty to be paid for the privilege of possessing property not earned. It never has been the intention of legislatures to inflict unnecessary hardship upon the beneficiaries of wealthy decedents in the framing of inheritance tax laws, but many times the effect has been just that. It is not regarded as good business to allow large amounts of cash to lie idle. The majority of wealthy men put their money to work. If they did not they would be open to a charge of hoarding. The common definition of a miser is, a man or woman who hoards money—withholds it from circulation.

A man earns the title of "capitalist" because he invests sums of money in various enterprises. The income from these business ventures is what he lives upon. It is the investment and re-investment of income that makes the wheels go around. Therefore the man who invests his available cash in industry, transportation, commerce or science benefits all mankind in one way or another, but he limits his ready cash in so-doing, with the result that, unless he makes definite arrangements for liquidation of quick assets, or establishes a sinking fund to pay inheritance taxes and costs of administration of his estate after his death, his beneficiaries may find themselves in financial difficulties despite the actual value of the estate. The Woolworth estate was obliged to mortgage the famous Woolworth building to pay the inheritance taxes. In California the estate of a wealthy land owner was unable to mortgage his possessions for enough to pay the taxes.

Inheritance taxes must be considered in two general classes, federal and state. The federal tax is called an "estate tax" and is levied on the whole net estate of the decedent, payable by the executor before distribution regardless of its effect on the inheritors. The first $50,000 is exempt. The tax is due one year after the decedent's death, but extensions of time may be allowed up to five years, and by special permission, even longer periods.

The following table shows the rate of federal tax:

Rate of Tax		Tax	Total Federal Tax	Net Estate
No tax on first	$50,000			$50,000
1% on next	50,000	$500	$500	100,000
2% " "	100,000	2,000	2,500	200,000
3% " "	100,000	3,000	5,500	200,000
4% " "	200,000	8,000	12,500	400,000
6% " "	200,000	18,000	31,500	800,000
8% " "	250,000	20,000	51,500	1,050,000
10% " "	500,000	50,000	101,500	1,550,000
12% " "	500,000	60,000	131,500	2,050,000
14% " "	500,000	140,000	301,500	2,550,000
18% " "	1,000,000	180,000	481,500	4,050,000
16% " "	1,000,000	160,000	641,500	5,050,000
20% " "	2,000,000	400,000	1,241,500	8,050,000
22% " "	2,000,000	440,000	1,681,500	10,050,000



FRANK M. HAYES

(*Continued on Page 32*)

What of Business Had There Been No War?

By PHIL S. HANNA

Financial Editor, Michigan Manufacturer and Financial Record

A talk before the Pontiac Board of Commerce, April 21.

LET ME SAY by way of introduction that I hope this discussion will not definitely settle the question, for if it did, many of us financial writers would be out of a job.

Not infrequently we hear references to the years 1913 and 1914 with the inference that all would be well if only conditions prevailing then could be invoked now. And it has therefore occurred to me that perhaps a brief review of those years may throw some light on our present troubles. In fact the similarity of conditions prevailing during the second half of 1913 and the first half of 1914 to those existing today, has given rise to the question as to what would have been the course of business during 1915 and 1916 if there had not been a world war?

Referring to the Annalist, we find the statement in its review of 1913 that "this was a year of stagnation." And here are some figures which go to emphasize the condition of business in that period. Of fifty dividend-paying stocks, twenty-five railroad stocks and twenty-five industrials, listed on the New York Stock Exchange the average price from December, 1911, to April, 1914, dropped from 85 to 65. Of forty high grade listed bonds the average price dropped from 95 to 85½ during the same period. The cost of living, as represented by the Annalist index number, and which was computed by taking a representative number of articles used in the average household, shows an increase from 80.096 in 1896 to 146.069 in 1914.

The United States figures on exports and imports for the two fiscal year ended June 30, 1914, a month before the war began, also reflect the trend of our foreign business immediately preceding the war.

Year ended June 30, 1913	
Exports	$2,465,000,000
Imports	1,813,000,000
Balance	$ 652,000,000
Year ended June 30, 1914—	
Exports	$2,364,000,000
Imports	1,893,000,000
Balance	$ 471,000,000

It will be noted that the avorable trade balance for the second period fell off $181,000,000 and that for the second year exports declined and imports increased, the former $101,000,000 and the latter $80,000,000. So that we have in these illustrations a picture in a limited way of what was going on during the few years that preceded the war. And the interpretation put on this trend is held by many authorities to mean that the same disease, over-production, that is standing in the way of normal business now was gripping the country then.

We have also another barometer which should be consulted in any review of business, namely, the ratio of gold to the total of loans. Now it is a mooted question whether the amount of gold owned by the nation, compared with the total of notes upon which bank assets are based, has a deciding influence for good business or bad business, but nevertheless the figures are interesting at this time when people are watching reserve ratios, and when, incidentally, there is plenty of time to study conditions.

Tingley shows the following figures, which include all the gold in the country (not merely the Federal Reserve hodings), and the total loans and investments of all the banks, national, state and private:

	Total Loans and Investments	Total Gold	Ratio
1890	$3,052,640,000	$856,000,000	19.4%
1920 (June 30)	30,892,000,000	2,688,000,000	8.7%

He also gives the ratio in 1914 as 12.4 per cent.

His next computation is the relation of gold to paper money in use and in this all of the various government, federal reserve and bank notes are included:

1914, ratio 56 per cent; 1917, ratio 66 per cent; 1920, ratio 46 per cent.

He then computes the ratio between the total gold and total bank clearings, which show that for many years the percentage of gold to clearings seldom varied far from 3.5 per cent, but that from 1914 to 1920 the ratio ran down from 1¼ to a little over one-half of one per cent.

Therefore, regardless of whether one believes in the theory, there is this deduction, that when the amount of paper credit or paper money gets beyond a certain proportion to the total of hard money in the country, there is a definite reaction.

On the other hand, prices between 1873 and 1897 dropped 50 per cent, while volume of gold increased from $36,000,000 to $57,000,000, and between 1897 and 1915 prices advanced 80 per cent, while gold volume kept on going up—making a gain of 77 per cent over 1897 and 180 per cent over 1873. So here we have the rule working both ways so far as the relation of gold and prices is concerned. I have never been a very enthusiastic believer in the quantitative theory of money. I think the current of gold into or out of this country depends mainly on the balancing of exports and imports. As an example of this, note the present falling prices in spite of increasing gold imports.

Speaking of prices, recently I ran across figures covering a period of more than 100 years, from 1810 to 1920, furnished by the Russell Sage Foundation, which, as a guide to what we may expect during the next few years, may be worth considering. The curve is most remarkable in that it shows that prices reached about the same levels during the wars of 1812, 1860 and 1914-20; and furthermore, prices reacted between these high points to approximately the same low level. The basis used was the index numbers computed by the government bureau

(*Continued on Page 38*)

Digitized by Google

Drilling

A Discussion of the Various Types of Machines for This Purpose; What Buyer Should Keep in Mind

By JOHN J. RALPH

CUTTING holes in wood, metal and stone has been an important industry since the days when our ancestors ran around in wolf skins for comfort instead of fashion and the jewelry industry began with the popularization of the bear claw necklace.

Probably the first holes were made by rubbing flat stones or shells on a pointed stone. Of course pointed wood and bone were used on soft materials. When discovery was made of iron and how to work it, the heated iron rod was used for boring holes in wood.

Later came the development of steel and means for hardening it. This gave a means of cutting holes in hard metals and shortly afterwards there was developed the first primitive machine for helping with the drilling. This was the bow drill. It probably had been used long before this in primitive fire-making methods, for some of the aboriginal tribes who had not progressed to the point of using metal used the bow to twirl a stick against another to get fire.

This bow drill was of many different forms and has not yet gone out of use. The European jeweler still uses it and it is a standard assistant to the oriental metal worker. In the least developed types there is a bow with a string. This string is wound around the drill itself and pressure is put on the upper end of the drill with a stone having a recess in it. In the more developed form the drill point is held in a quill.



FIGURE 1—THE BOW DRILL

We rather loosely refer both to the cutting tool and the driving machine as the drill. Before we can consider the machine the cutting tool should be thoroughly understood, for the machine is designed to use it.

In the manufacturing industry the drilling of holes in metal is most important, although special trades find it necessary to study carefully the problem of cutting bone, glass, rubber, horn and other substances.

Drills may be put into three classes—those which are hand tools and are usually used for cutting holes in the softer materials, drills for cutting stone and in mining work, and the power-driven drill for metal.

"A" in Fig. 2 is the simplest kind of a drilling bit. It is the flat drill of the metal working industry and is the stone drill of the miner and quarryman.

This tool is merely a round or octagonal or hexagonal rod flattened out on one end. When used as a stone drill the cutting edges are sharpened from both sides. Cutting is done by holding the drill and hitting it on the top with a hammer. The drill is turned after each blow.

Today we have developed machines, both steam and air-driven, for drilling holes in stone. The bits differ from those used in hand work in having four cutting edges in the form of a cross. The method of cutting is the same, consisting of a series of hammer blows on the end of the drill, cutting through the stone by crushing it.

"B" is the little hand wood bit. In some of the older forms the screw end is replaced by a chisel end. The invention of the screw on the end was a great advance because it made it far easier to start and helped to pull it through.

"C" is the modern auger for drilling holes in wood. There is the same screw end to assist in pulling the bit through. There are cutting edges which are keen and knife-like and another knife edge on each side which breaks up the chip. The bit is twisted so that the chips as cut out by the four knife edges are lifted out of the hole.

The driving end is shown as made for use in the ordinary carpenter's brace. In the larger sizes they are sometimes made with a square parallel driving end which fits into a cross bar.

The oldest form, the flat drill, shown in "A," Figure 2, is still used to a certain extent. It is often made in the shop to cut a certain hole for which there is no twist drill available. It has two cutting edges which are backed off to give clearance. It may have either a straight driving end, as shown in the figure, or it may have a taper drive, as has the twist drill shown.

The disadvantages of this drill are that it will not cut as accurate a hole as the modern forms, nor will it cut as quickly or with as little power.

The Twist Drill

The twist drill in its present form is the result of all the past centuries of development. It is today one of the most satisfactory cutting tools we have in our shops. It is used for practically all materials, is made with a range of size of from a few thousandths of an inch to several inches in diameter and in length from about an inch for the small sizes to a couple of feet for the larger sizes. Not until you get to deep hole drilling do you find any competitor.

Made in quantity by a number of manufacturers, the cost of these tools is so small and the quality so good that a manufacturing plant is almost never justified in making its own. The range of exact sizes available from stock is enormous, the interval between sizes being only a few thousandths of an inch.

The range of quality is also equally great. There is the cheap, rather inaccurate carbon steel drill sold for use in the carpenter's bit stock; the so-called jobber's drill with a cylindrical driving end which is held somewhat more closely to size. The best drills are those made for machine shop work, held very closely to nominal size. They may be made either of high grade carbon steel or of high speed steel, depending on the work they are to do.

If you would get perfect results from any tool, it must be in perfect condition and be handled exactly as it should be. The drill is no exception to the rule. A glance at the sketch (next page) will show that it is not a simple shape.

The main body of the drill is a spiral. It is not impossible to bend this body; in fact in the smaller and medium sizes it is easy. If it is not straight it cannot do good work.

At the lower end are the cutting edges. These with the surfaces back of them form almost a section of a cone. It is not a true section because the metal is ground away at "B" so that the edge can be forced into the metal being cut. This surface is not a regular one because there must be just as much clearance at the center as at the outside of the cutting edges and this can be got there only by grinding back more sharply at that point.

The center is not a point but a knife edge. The shorter this knife edge the easier the bit will drill. In some of the more recently designed bits the construction is such as to cut down the length of this central portion. Certain mechanics gain the same result by grinding the groove at the center with a narrow wheel to cut down the amount of metal at that point.

The two-lipped twist drill is not a precision tool. If a really accurate hole is desired it must be either bored, reamed or ground. The accuracy is sufficient for most purposes, however. In order to attain it care must be taken of the bit and both cutting and driving ends and the drilling machine be in good condition.

Mention has been made that the central knife



A B C

FIGURE 2

edge must be as short as possible. If it is not exactly central the drill will run out and cut a larger hole than the nominal size.

The cutting edges must make the same angle with the axis of the drill or only one edge will cut and the unbalanced drill will run out and cut a larger hole than is wished.

The clearance ground behind each cutting edge will be the same or there will be a tendency to cut an unequal chip, with the same result.

The angle the cutting edges make with the axis and the amount of clearance to be ground off behind the edge will differ in different materials. The twist drill when used in slate will have cutting edges making a very acute angle with the axis, while the harder the material the more nearly perpendicular they are. The harder the material the less clearance necessary.

Digitized by Google

For the ordinary run of work in the shop, experience has shown that an angle of 59 degrees with the axis is the most satisfactory. Drills are therefore usually ground to that angle unless there is a very special condition.

An expert man can grind a fairly satisfactory point on a drill. To do a good job by hand requires considerable time and the use of angle measuring instruments. Few mechanics either understand or like to sharpen a drill correctly and in many shops the only tools in condition are the new drills. Very often a man will work with a dull tool rather than sharpen it. The duller the drill the more probable is breakage, the more inaccurate the work, and there is a double loss in the lessened speed of drilling and the excess power required.

For this reason a drill sharpening machine is a good investment for almost any shop and is indispensible where quantity work is done. This machine should be located in the tool room and it should be a fixed rule that none but sharp drills in the best condition shall be issued.

Driving the Drill

To make a drill cut, pressure is needed in two different directions. There must be pressure driving the drill into the work. This is the feed. Then there must be pressure which drives the drill around.

The driving end of a drill is in some respects the least satisfactory part of this tool. For the smaller sizes of drills a cylindrical end is used. These drills usually are held in a chuck by friction, although in the larger sizes keyways are sometimes cut to give positive driving.

For many years the standard driving end has been the taper with a milled tang on the upper end. This type has the advantage that the heavier the feed pressure the heavier the frictional grip on the taper shank. The squared tang fitting into a slot also gives positive drive. This tang is, however, not primarily designed to do the driving. It furnishes the means of removing the drill from the socket, a drift being driven through the slot to drive out the drill. This releases it without injuring either the taper on the shank or the taper socket in the drill spindle.

Careful attention should be paid to the driving end of this tool. Twisted and broken tangs and battered tapers injure the sockets of the drilling machines. Spindle sockets are not easy to repair without tearing down the whole drilling head. If either the taper shank or the taper socket is bent or bruised, or if there is a chip between the two, it will be necessary to cut down on both feed and speed because the drill will slip under high duty unless the contact between the two cones is perfect.

Drilling speeds are figured from the lineal speed of the outside of the drill. The extremes range from twenty feet to three hundred feet per minute. It is impossible to give any absolute range because the conditions vary so much in different shops. The economical speed will depend first upon the drill, its condition and the material from which it is made; second, the material being drilled; third, the machine which drives the drill.

The feed allowable per revolution increases with the size of the drill.

The following table is perhaps a fair average for usual conditions. The proper procedure is to adopt a moderate speed and feed then increase it to a point where breakage of drills, burning of points and decreased quality of work prove that the rate is too high, then drop back to a speed and feed that can be maintained economically.

	Carbon Steel Drills.		High Speed Drills.
Bronze or brass....	150 Ft/Min.		300 Ft/Min.
Cast iron, soft....	85	"	170	"
Cast iron, hard....	40	"	80	"
Mild Steel.....	60	"	120	"
Drop forgings.....	30	"	60	"
Malleable iron.....	45	"	90	"
Tool steel.....	30	"	60	"
Cast steel.....	20	"	40	"

Feeds are .003" to .007" for drills up to ⅝" in diameter, per rev.
.005" to .015" for drills from ⅝" up in diameter, per rev.

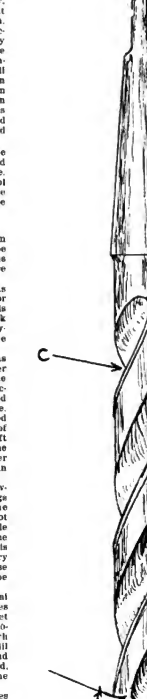


FIGURE 3—THE TWIST DRILL

a—cutting edge; b—clearance ground to allow edge to cut; c—groove which clears the chips; d—land full diameter section of drill; e—relief milled to cut down friction on wall of hole; f—taper end; g—tang; h—center, which must be exactly correct; i—angles of cutting edges with axis, which must be exactly equal.

It is usual to use about the same feed per revolution for every kind of material for the same diameter of drill and for both carbon and high speed drills. The decrease in drilling time coming with the increased number of revolutions.

Drill manufacturers were among the first to adopt high speed steel and to develop methods of machining and hardening which would give the best of results.

They were forced to it by competition and the continual demand for something better. They were able to do it because of the number of duplicate pieces they turned out and because they specialized in that one kind of work.

The development of the high speed steel drill called attention to the fact that the carbon steel drill had not been worked to its maximum capacity, and today good shop practice with these is considerably above that of only a few years ago.

The adoption of the high speed, high capacity drill has forced a complete re-design of drilling machines. A few years ago a drill press was a very simple tool, costing but little, never giving trouble and seldom considered. Today it is one of the expensive tools in the shop and is built in an amazing variety of forms and sizes.

Fifteen years ago a good mechanic could spot any drill press he might see and tell offhand just what kind and make of machine should be used for a certain kind of work. He cannot do it today.

The Advance in Drilling Practice

Of late years the importance of drilling has come to be more justly realized. Almost every piece of metal that goes into a machine has to be drilled. Some pieces must have hundreds of holes drilled in them.

Each hole means that some piece is inserted there or that it forms a part or all of the means of holding two or more pieces together or keeping them in line. Holes are not drilled for ornament and it is very necessary to consider carefully what the exact purpose of each hole is before designing for drilling it.

There is not merely the cost of the hole to consider, but the cost of the operations that come after. In some cases it pays to spend a considerable sum of money on a somewhat insignificant looking hole to save costs in assembling and insure proper functioning of the machine.

Another great factor considered today is interchangeability. This is absolutely dependent upon the accuracy of the holes drilled in the different parts.

Years ago an important hole was never drilled until after the parts had been fitted together. If it was necessary for an absolute fit they were clamped together and drilled as one—with a drill press if the pieces could be bandied on it, or by hand with a ratchet drill, and an "old man" if they were too big to be bandied under the press. This was extremely costly but wage rates were low and competitors worked the same way.

Today the practice is to machine accurately and to do as little hand work as is possible, so cutting both the machining and assembling time.

Some Steps in Progress

The first step was a reform in drafting practice. Full dimensions were demanded with allowable limits. The old type drawing that the mechanic scaled with his pocket rule was relegated to the scrap heap.

The shop equipped itself with real measuring instruments and adopted a system of working to thousandths of an inch. They also developed limit gages. Machine tools were equipped with graduated collars reading to thousandths of an inch. New methods were worked out for locating points.

Our machines have become more rigid and accurate also, so that today the possibilities of accurate machining are greater than they were only a few years ago.

The greatest development came in the per-

Digitized by Google

fection of the practice of using jigs and fixtures. These have always been used, but today they are more elaborate, more accurate, more quickly operated and more general than ever before. They are also used for far larger pieces than was the case only a few years ago.

The design of a machine having been settled, together with its limits of accuracy and the degree of interchangeability, there is today but one criterion by which to judge how it is to be machined. This so that the total cost of making the machine shall be the very lowest possible.

As a general rule the method to be used depends upon the number of indentical machines to be made. The machine shop man makes a big distinction between "building" and "manufacturing." The former term is used where but a few duplicates are made, and the latter where the quantities are large. As a matter of common sense there is considerably less attention paid to assistants in machining where the product is only "built." Here considerable



FIGURE 4—SINGLE COLUMN DRILL PRESS

a—main belt; b—machine belt; c—spindle; d—quill; e—chuck; f—rack on quill; g—lever feed; h—table; i—worm feed.

hand work is permitted, but as soon as the manufacturing condition is approached the entire plant is keyed up for the elimination of hand or individual machine work, and every effort is made to cut down the man hours of labor, with the substitution of unskilled labor for skilled wherever possible.

As a rule, the larger the machine the less the number of duplicates made. It is seldom that very fine machines are made in large quantities. We have, then, as a general rule, that large and very fine machines are built and not manufactured.

Jigs and Fixtures

Jigs and fixtures are mechanisms that take the piece to be machined and hold it in a fixed position with respect to the cutting tool. If this mechanism guides the cutting tool, it is usually called a jig. If it merely holds the piece without guiding the tool, it is usually called a fixture.

The designing of jigs and fixtures has come to be rather a specialized trade. They have been used for many years, particularly in the lines making small metal goods, such as alarm clocks, watches, revolvers and rifles, but the range, both of the kind of jigs and their size, has been greatly extended within the last twenty-five years. There are today large companies which do practically nothing else but design and make the auxiliary mechanisms which really are part of the machine tools and convert a standard tool to a special machine particularly suited to the job in question.

The adoption of jigs, which took away the necessity of skilled workmanship, focused the attention upon the efficiency of the actual drilling, and is one of the reasons for the great demand for the high speed drills.

The development of the automotive industry is the main reason for this change. They have incessantly demanded improvements in drilling machines, new types to meet their needs, lessening of time necessary to set up the machine and the piece and enormously increased speeds and feeds in drilling. At the same time they have demanded a great increase in accuracy and quality of product and higher reliability of the drilling machines.

More than any other industry they have realized the value of these points and the necessity and desirability of paying for them.

The Drilling Machine

In Figure 4 is illustrated one of the simplest of drill presses. It is a single column machine with fixed head, belt-driven, hand-feed either by lever or by worm. The table can be raised or lowered or swung out of the way. It is also arranged so that it can be revolved. There are four changes of speed, all by belt, and there are no back gears.

This is essentially a machine for the small jobbing shop or where only "building" is done. It was correctly located being in a shop where scientific instruments are made in small quantities.

Fig. 5 shows a gang drill with four spindles. Note that the four heads are adjustable and that they are now set at varying distances from the table.

Both pictures show clearly the small diameter spindle which does the driving, being driven by a key in pulley at the top in Figure 5 and in the gear in Figure 4. Feeding is through the rack attached to the quill, visible in Figure 4. There is a thrust bearing easily seen on each of the four spindles in Figure 5. The spindle rotates the drill. The quill does the feeding and stiffens the spindle, increasing its accuracy.

Many Duties of a Drilling Machine

So far we have spoken merely of the drilling which is done on a drill press. As a matter of fact this is only one of the operations it is called upon to perform. Others are boring, reaming, counter-boring, facing, milling and tapping.

In some cases it is desirable to do each of these operations on any one hole at one setting. In other cases it is desirable to drill all holes on one side of a casting at one time, then later to tap those that need it, and do the facing, counter-boring and reaming at another machine.

The size of pieces to be drilled varies from the tiny nuts used to hold together your ingersoll watch to the massive locomotive engines thirty feet high. The size of hole varies from a few thousandths to several inches in diameter. The speed of the spindle to drive the small 1-32-inch drill at 80 feet per minute is about 10,000 R. P. M.

No one machine can do all of these, but it is surprising what a range of work can be taken care of in some of the machines. Still others are adapted merely for one limited range of work but are exceedingly efficient within these bounds.

Some are arranged to do only dry drilling; others have elaborate arrangements to keep a flood of cooling and lubricating liquid on the drill all the time. The number of spindles may vary from one to thirty. Feed may be by hand, automatic or semi-automatic.

The sensitive drill is a vertical drill, often mounted on the bench, or perhaps on a column. This drill will have a maximum spindle speed of from 1,600 to 10,000, depending upon the type. It will not have back gears and feed will be through a lever by hand. The total speed ratio will perhaps be about 6:1.

The higher speed drills will be used for the smallest work. It is necessary when buying these to see that spindles, pulleys and chucks are absolutely in running balance, for if they are not, these extreme speeds are so great that it will not take long to wreck the machine. If they are not in balance the vibration will break drills and will not permit good work.

The chucks used with such high speed drills must also be very carefully balanced, for a chuck can cause as much trouble as any other part of the machine if unbalanced.

It might be thought that the breakage with such high speeds would be great, but the reverse is true. If the drill is running at its proper speed it will drill many times the same

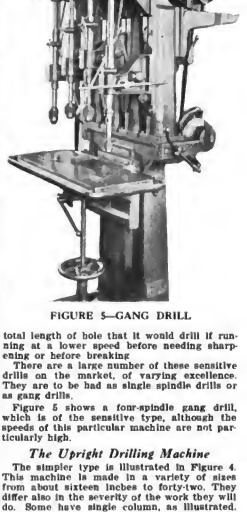


FIGURE 5—GANG DRILL

total length of hole that it would drill if running at a lower speed before needing sharpening or before breaking.

There are a large number of these sensitive drills on the market, of varying excellence. They are to be had as single spindle drills or as gang drills.

Figure 5 shows a four-spindle gang drill, which is of the sensitive type, although the speeds of this particular machine are not particularly high.

The Upright Drilling Machine

The simpler type is illustrated in Figure 4. This machine is made in a variety of sizes from about sixteen inches to forty-two. They differ also in the severity of the work they will do. Some have single column, as illustrated. Others have a re-enforcing column in back of the main column.

The type of drive varies considerably, also. There is the standard belt drive. The heavier duty machines have gone to a speed box drive. Others are motor driven.

Feeds vary greatly, also. The lever feed is used in the smaller sizes. There is almost always a worm feed, also. In many cases the feed is by power as well as by hand. Practi-

Digitized by Google

cally all with power feeds have automatic throw-outs regulating depth of drilling.

This type of machine is also made with a turret on the drill spindle which enables the drill hand to use one tool after another with the same setting of the piece in the fixture.



FIGURE 6—VERTICAL MULTIPLE SPINDLE DRILL

Some of the machines are arranged with back gears. This is usual with the larger ones. This makes boring possible, also heavy tapping and facing.

It was found that the upright drilling machine did not give sufficient power or rigidity for the heaviest kind of work, and there was, therefore, developed for the automotive builders, a real hogging machine which would be sufficiently powerful and rigid to get the most out of any high speed drill.

This meant a much heavier machine and a solid box column type of frame. The parts throughout are very heavy and strong. The feed is particularly heavy. The machine may at times take as much as fifteen to twenty horsepower and all the parts must be made strong and rigid enough to take this. It must also be capable of highly accurate work, so the table has long, strong gibs holding it to the column. The pressure to be taken on the table, together with the weight of jigs and piece, are great, so that it is necessary to support the table from below with a telescoping screw.

These machines are always equipped with a pump so that the tools and work may be kept flooded with lubricant.

It is common to find arrangements made for conveniently holding facing tools and also small tools in the spindle socket.

These machines were brought out as a result of the wrecking of the common upright drills under the heavy service given in the automobile building shops. The speeds of operation are higher and the feeds are greater. This meant that it was necessary to depart radically from usual practice.

Even the first of these machines did not always stand up, and they have been made heavier and heavier. Before buying it will be well to discover whether or not the particular machine you have in mind has really been developed to handle work as heavy as you intend to put on it.

The vertical radial is an old stand-by in the builder's shop. It finds much use in the tool room of the manufacturing plant, and there are many places even in manufacturing where there is no more suitable machine.

The arm is movable up and down on the column and swings over the work. It can be clamped in any position. The head moves in and out on the arm, thus enabling the drill to be located at any point over the part being machined.

Until the development of the high speed drill, the vertical radial was a simple, rather inexpensive machine. Today that is no longer true.

With the increase of feeds and the demand for greater accuracy it has been necessary to make great changes in the design. It will be realized that the radial drill is structurally weak. There is bending in the column and in the arm, and there is play in the swing around the column, in the elevating mechanism, in the fit of the head on the arm. All of these add up.

There are two opposite ideals to be satisfied —rigidity, so that the work may be accurate, and ease of working and movement, so that work may be done quickly and with as little fatigue as possible for the drill hand.

The sizes of radials vary from the little three-foot arm to the usual large radial with a six-foot arm. They have been made with arms as long as ten feet and to take a casting six or seven feet under the arm.

In the larger sizes it has been necessary to add power movements for head and arm. This with automatic trips for feed disengagement, special tapping reverse, a larger number of feeds and speeds, safety knockouts, etc., has made a complicated and expensive machine.

They are used mostly in shops making the larger kinds of machinery and many of them have enormous drilling capacity.

It is usual to supply them with an L-shaped base, on one of the arms of which is placed either a right angle or a universal table, one side of which is parallel to the floor and the other perpendicular to it. This permits the clamping of pieces which must be drilled perpendicular to a finished surface. The top of the table is convenient for working on smaller pieces which would be far too low if clamped on the base.

The universal vertical radial is similar to the vertical radial, but has an arm which can be swivelled about its long axis so that the drill may be made to work at any angle in addition. The drilling head travels up and down plane parallel to the axis of the column. The head differs from the head on the standard radial in that it also may be swivelled in a plane parallel to the face of the arm. The combination of these two movements permits the spindle to be placed at any desired angle.

In many types of machinery a machine such as this is absolutely indispensable. It is necessarily much less rigid than the vertical radial, for there are two more joints. When locked in the standard position of the usual vertical radial it will be almost as stiff. When the spindle has been swivelled it is necessary in many positions to reduce the feed materially because of the leverage against the locking mechanism.

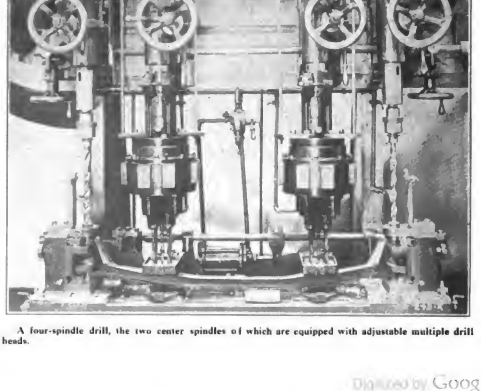
The horizontal radial is a machine built to take care of the large amount of work which must have holes drilled parallel to some machined surface. It is a machine which cuts down materially the time of setting up, but has not been developed to the same point that the vertical radial has for sheer ability to machine.

The horizontal drilling, boring and milling machine is a favorite of the tool room. Extremely rigid, with its deep box bed, and with very accurate movements in and out and up and down, it is an ideal machine for making jigs. The holes in a jig must be far more accurate than is necessary in an ordinary machine part, for the piece machined in the jig will reproduce every inaccuracy of that jig and some that are not there.

Many times to get an accurate hole it is necessary first to drill it and then to bore it. This machine will do it at one setting. At the same time it will do milling and facing both rapidly and accurately. If this can be done at the time the jig is set for drilling, the accuracy is materially increased.

In the building shop it finds a very considerable field, as the same superiorities which make it desirable for making jigs make it very satisfactory for making single pieces which must be accurately machined.

The horizontal drilling, boring and tapping machine has been developed for taking care of two kinds of work. There is the very large casting which cannot be put under the radial drill press but which can be put on the table by the crane without difficulty. The column of this machine is securely fastened to the foun-



A four-spindle drill, the two center spindles of which are equipped with adjustable multiple drill heads.

Digitized by Google

"More Holes"



Each "Cleveland" drill has behind it 47 years of conscientious effort to manufacture a better drill.

And each "Cleveland" drill must uphold the good name of "Cleveland" tools and produce

"More holes per drill"

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

this column. In one type the table is mounted on wheels which run on planed railroad rails, and in another it slides in scraped V's just as does a planer table.

These machines have not yet come into their own. They are direct competitors of the vertical radial drills and because of their construction do not suffer from the compounding of bending and giving in various joints.

They are much simpler to manufacture and should be less expensive, but have been made needlessly complicated. There was an old type with a belt-driven spindle with two round vertical columns instead of the box column which had a large range of operation and was sold rather inexpensively. It was thoroughly satisfactory but did not seem to fit "progressive" ideas of design.

The floor type horizontal drilling, boring and milling machine is made by several firms for machining large pieces. In some of them the column has as much as twelve feet travel in a horizontal direction and the head has almost as much motion up and down. It is of course used for large work which is hoisted to the floor plate. This machine drills, taps, counterbores, faces, bores, face mills, all without changing the position of the piece being worked on until it is necessary to turn it to get at the other side.

The moveable drill press also is used for very large work. Here the piece or machine to be drilled is left on the floor of the shop and the crane picks up the drilling machine, which has a motor attached, and places it in a position where it can do the drilling and tapping required.

The wall radial drill is placed on one of the steel columns of the shop or attached to the wall. The arm may be twelve to fifteen feet long and it is usually driven by a motor attached to the swinging arm. It is one of the indispensible machines in the structural shop. It has not the drilling power of the usual high speed drill but does not need it, for few of the holes it drills are deep and none of them are large in diameter.

There are often several of them placed in a row, each on a column so that they can cover the entire length of a long truss or girder without moving it.

We are here returning to the equipment which is of particular interest in the automotive shop. It was developed for this use.

The particular characteristics are a series of drilling spindles, the locations of which can



Four-way semi-automatic drilling machine designed to drill forty-two holes in one operation on automobile cylinder castings. The machine drills eighteen holes in the top of the cylinder, eighteen holes in the bottom, ten holes in one end and six holes in the opposite end. Machines of this type are made to drill as many as 95 holes in one operation.

be changed and each of which drives a drill. The piece is placed in a jig and the spindles are arranged to drive a drill which is located and held in exact alignment by the bushings in the jig. These machines will drill all of the holes in the top of a cylinder at once. They are made two-way—meaning that they will drill all of the holes on two sides at once—and also three-way and four-way.

It will be realized the great saving in machining time afforded by the four-way multiple drill which requires but one setting in a jig to do the drilling on four sides and which drills all of the holes in the time it takes to drill one.

With the multiple spindle drill it is the very worst economy to try to work the drilling tools up to their maximum. When any one of the drills becomes dull or broken it is necessary to hold up the operation of all of them until it is replaced. It takes quite a bit of time to reset these machines, so that true economy is found when they are set for speed and feed to give a long time run without trouble or changing.

Drilling machines range in prices from $25 to $5,000 and up. You will get much more than you expect for $25. The $5,000 machine will be just as good value if you have chosen correctly.

As the price of your drilling machine goes up, so does the necessity of caring for it. The high duty, high power machines can tear themselves apart if they are not handled correctly. They need oil, plenty of it in the right places. It is mighty expensive to burn out a bearing. Change gear boxes have been ruined by improper handling.

When one of these machines goes out of commission it makes a big hole in the factory output because the product is used in a lot of machines and unless the parts are in the stock room, assembling cannot go on.

(*Continued on Page 33*)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

AUTOMOTIVE

Production* :: *Sales* :: *Service* :: *Financing* :: *Personnel

STATE DEALERS ORGANIZE MAY 10-11

Automobile and truck dealers of Michigan will form a state association at a meeting in Detroit, May 10 and 11. Decision to this effect was reached last week at a conference of forty-two dealers from Detroit and other Michigan cities with officials of the National Automobile Dealers' Association. Harry G. Moock and P. F. Drury, general and assistant general manager, respectively, of the N. A. D. A. made a special trip to Detroit from St. Louis to attend the conference. Mr. Moock will return for the May meeting. Guy O. Simons, president of the Detroit Auto Dealers' Association, and a director of the N. A. D. A., presided.

OVERLAND'S MAY PLANS

John N. Willys, president of Willys-Overland, Inc., announced late last week that the company's output for May would be increased by 50 per cent and the working force 30 per cent. The latter means that there will be 8,500 men at work in the Overland plant next month. Mr. Willys denied that there was any truth in the report that Willys-Overland might be absorbed by the General Motors Corporation.

"Our financial position is remarkably good right now," Willys said. "During the last six months we have reduced $7,000,000 in inventories, and by the end of 90 days they will be cut away down.

"A year ago we owed $46,000,000. Now we owe $22,000,000, and have $7,000,000 cash on hand. We have cut $4,000,000 in overhead expenses. Administrative expenses have been cut to the bone. This is based on normal production. The saving now, of course, is even larger. But these expenses will never go back."

U. S. RUBBER ELECTS DIRECTORS

John W. Davis, until lately American ambassador to Great Britain, was added to the board of directors of the United States Rubber Company at the annual meeting, last week. All the other directors were re-elected. In his address to the stockholders Col. Samuel P. Colt, chairman of the board, said: "I still believe and I predict that the number of tires used in the year 1921 will be greater than in 1919 or 1920, or in any previous year in the history of the world, and our company is going to get its share of the tire business, and, therefore, my message to you today is one of encouragement and confidence in the future."

COMPETITION FOR DURANT PLANT

A New York report is that Oakland, San Francisco and Los Angeles, Cal., are doing some spirited bidding for the Pacific coast plant of Durant Motors, Inc., with C. M. Stevens, vice-president in charge of Durant operations in that territory, receiving delegations. R. C. Durant, son of William C. Durant, is in New York, conferring with his father regarding this and other matters.

NATIONAL MEETINGS IN DETROIT

Directors of the National Automobile Chamber of Commerce will meet in Detroit, May 4. The motor truck committee will convene the day previous. Committees of the N. A. C. C. and the National Automobile Dealers' Association will hold a joint meeting at the Detroit Athletic Club, May 6. The manufacturers' committee will consist of W. C. Hills (Chevrolet); C. B. Voorhis (Nash); C. W. Matheson (Dodge Brothers); F. E. Connor (Chandler); Hal P. Bowden (Selden). The dealer body will be represented by Jesse A. Smith, Milwaukee; H. B. Harper, Philadelphia; A. J. Shorey, Boston; F. W. A. Vesper, St. Louis; P. H. Greer, Los Angeles, and N. H. Cartinhour, Indianapolis.

GMC DIRECTORS RE-ELECTED

The board of directors of the General Motors Corporation was re-elected at the annual meeting, held last week at Wilmington, Del.

BRISCOE AT NORMAL BY MAY 1

Clarence A. Earl, president of the Briscoe Motor Corporation, Jackson, has issued a statement in which he says that the corporation's production has increased daily since April 11 and will be up to normal by May 1. "It is very gratifying to note the increased volume of orders coming in from all sections of the country," says the statement.

GOODYEAR'S PRODUCTION

An Akron dispatch to one of the Cleveland newspapers says that the Goodyear Tire & Rubber went on a three-shift daily basis this week, with the output increased from 18,000 to 20,000 tires. Fifteen hundred men had been employed this month up to that time and it was expected that the number would be increased to 4,000 by May 1.

BONNER HEADS F-W-D SALES

The Four Wheel Drive Auto Company, Clintonville, Wis., announces the appointment of D. Henry Bonner, formerly of the Ford Motor Company, as sales manager.

NEW DUPLEX MODEL

T. C. Walden, formerly with the Kelly-Springfield Truck Company, now directs the research department of the sales division of the Duplex Truck Company. He has been making a thorough study of truck facts and performance data since trucks were first put into use. The Duplex company has brought out a new truck for coal dealers, and the first has been sold. The truck is equipped with a metal body divided into two compartments, each having a capacity of one ton. The body has a hoisting device so that it can be mechanically unloaded.

GOODRICH RUBBER ELECTION

The B. F. Goodrich Rubber Company, Akron, at its annual meeting re-elected Mrs. B. G. Work, W. O. Rutherford, Waddill Catchings and H. K. Raymond, directors. A. A. Tilney, vice-president of the Bankers Trust Company, and Harold Stanley, vice-president of the Guaranty Trust Company, were elected to take the places of A. H. Marks and A. B. Jones, resigned. Present officers were all re-elected except H. E. Raymond, vice-chairman of the board, who announced his retirement from all active work. In his place C. B. Raymond was elected.

GMC EXPORT CO. CHANGE

Paul Fitzpatrick, who has been with the General Motors Acceptance Corporation, has become a vice-president and director in the General Motors Export Company and will take up some of the work which has been performed by Peter S. Steenstrup, vice-president and a director of the company. J. Amory Haskell, vice-president of the acceptance corporation, retains the function of president of the export company. It is stated that Mr. Steenstrup will

Digitized by Google

he also known as general manager of export sales and service and Mr. Fitzpatrick as general manager of operations.

KING GETTING READY

Large constructive preparations for the future of the King Motor Car Company, Detroit, have been made during the last few days by A. Weber, president and general manager, and Sales Manager H. Alperin. With the re-joining of J. Emerson as purchasing agent, the company also announces that the Arnold Joerns Company, Chicago, which handled the King advertising several years ago, has been appointed its advertising representatives. This company has just opened a Detroit office in the Kresge building with Bob Davis in charge. Mr. Weber says: "We have been laying our foundation. It has taken a long time, but we are building the future of the King on a solid basis. It is natural that this takes some time, but King will come through it strong and better than ever. We are well pleased with the general co-operation and pledge of support received from King dealers and owners all over the country."

FRENCH DISCRIMINATION

S. A. Miles, show manager for the National Automobile Chamber of Commerce, and who is now in Europe, has been instructed by the N. A. C. C. to take up with the French authorities the question of the Paris automobile show announcement discriminating against American cars at the next Paris show. Application blanks recently received in this country contains the following clause:

"Manufacturers belonging to Allied nations are admitted on the same terms as French firms, provided they have taken part in three previous Paris shows, and on condition that their pre-war import duties were not more than 15 per cent ad valorem."

Under such a rule, American firms do not have the same choice for space as British, Belgian and Italian manufacturers, because the American pre-war duty was the same as at present.

REO ENTERTAINS DEALERS

Reo dealers and distributors from all parts of Michigan met at the Reo factory, Lansing, last week for a school of instruction, and upon their departure drove away 57 new Reo cars and speed wagons. A preliminary meeting at the local branch was followed by a demonstration of the road floater attachment for the speed wagon. The dealers were entertained at a luncheon in the Reo clubhouse by the factory officials at noon. An exhibition of the new Reo industrial film followed. This week the Indiana dealers in the territory of the Fisher Auto Company, Indianapolis, visited the Reo factory under the name of the "Indiana Raiders." They travel by special train, carrying 175 people. They will drive back a like number of cars and speed wagons.

SHAW SUCCEEDS SHERWOOD

Waring Sherwood has resigned as advertising manager of the Briscoe Motor Corporation, Jackson, and has been succeeded by D. Minard Shaw, formerly with the Richards Motor Company, and who since last February has been with Briscoe as a field representative.

NEW ACME PERSONNEL

The Acme Motor Truck Company, Cadillac, announces that W. L. Shaffner, formerly with the B. F. Goodrich Rubber Company, has joined the company and will have charge of the national account division. L. E. Degroat has been made manager of the dealer promotion department. He was formerly with the Timken-Detroit Axle Company.

BECKER NOW WITH SAXON

Carl H. Becker has joined the Saxon Motor Car Corporation, Detroit, as assistant sales manager.

BROWN & SHARPE



HOBS

Spur Gear
Spiral Gear
Wormwheel
Saw
Sprocket
Spline Shaft
Ratchet
Special
Purpose

There IS A REASON why they satisfy so thoroughly — they are made from the best material obtainable — by skilled workmen, equipped with the most accurate tools — scientifically heat treated — rigidly inspected before shipment — giving the assurance of Brown & Sharpe Quality

BROWN & SHARPE MFG. CO.
PROVIDENCE, R.I., U.S.A.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

MAIN 1491
SPRUNK
ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

STATE CARTAGE DIRECTORS MEET

Officers and directors of the Michigan Highway Transportation Association, the recently formed organization of cartage interests of the state, met at the Hotel Kerns, Lansing, last Monday, F. Foster Moreton, president of the association, presiding.

Legislative matters were quite fully discussed at luncheon and those present expressed themselves as being pleased with the action taken the week previous by the legislature in tabling a number of House and Senate bills inimical to the interests of members of the Association. President Moreton's appointments of chairmen of various committees of the association were confirmed, as follows: Legislative, H. H. Hardy, Lansing; membership, H. H. Stevens, Flint; furnace, H. G. Beebe, Jackson; auditing, F. H. Stevens, Sr., Saginaw; uniform methods and costs, E. A. Hopperstead, Muskegon; insurance, E. H. Raseman, Kalamazoo; publicity, E. M. Radcliffe, Grand Rapids. The chairmen are to select the other members of their committees.

In the discussion of plans for the formation of local events that each unit should bear the name of the city in which it is located. Thus, for example, the Lansing unit will be called the Lansing Highway Transportation Association.

The directors voted to have an emblem designed which will be seven inches in diameter and star shaped. This will be affixed to vehicles operated by the members.

The question of return loads, together with that of rates and costs, was referred to the committee on uniform methods and costs. Plans will be made whereby these problems may be successfully worked out.

An extensive membership campaign will be inaugurated as soon as proper blank forms can be prepared. The directors will meet in Lansing May 23 to start the drive.

Before the meeting adjourned, late in the afternoon, announcement of the appointments of some of the committee members was made, as follows: Finance, W. G. Stone, Hillsdale, and C. Nielsen, Detroit; auditing, C. J. Foster, Cadillac, and W. G. La Strange, Mt. Pleasant; uniform methods and costs, John W. Frantz, South Haven, and O. A. Alden, Benton Harbor; membership, Guy F. Downing, Lansing; A. H. Shank, Grand Rapids; J. C. Downing, Flint, and D. J. Jeannenett, Ann Arbor.

NEW BUS LINE

Samuel Thompson, Muskegon, has petitioned the Grand Rapids city commission for permission to operate a bus line from Grand Rapids to Kalamazoo on 15-minute service, the route being as follows: Campau Square, Monroe avenue, Sheldon avenue, Cherry, Eastern, Adams avenue to Kalamazoo.

STEVENS BUS LINE EXTENDED

The Stevens Line, between Lansing and Williamston, in operation three years, has been extended to include Howell, and if business warrants, it will take in Farmington to connect with the interurban. The bus arrives in Howell at 10 a. m. and 6:30 p. m.; leaves Howell 7 and 10:30 a. m. and 3:15 p. m.

RED STAR LINE'S NEW ROUTE

Besides its routes from Holland to Zeeland, North Holland, Crisp, Olive Center and Grand Haven, the Red Star Bus Line has put cars on a route between Holland and Saugatuck.

DETROIT-HOWELL-LANSING LINE

R. J. Kocsis, proprietor of the City Cartage Company, has established a regular truck line between Detroit, Howell and Lansing. The first truck left Detroit at 6 o'clock Monday morning and reached Lansing at 1:30 in the afternoon. Trucks will leave Lansing at 6 o'clock in the morning and reach Detroit early in the afternoon. Each truck will have a trailer. The Fireproof Storage & Transfer Company, Lansing, will handle connection in that city. Loads are insured and drivers bonded.

D. T. A. HEADQUARTERS OPENED

The new headquarters of the D. T. A. were formally opened Tuesday evening at 1038 Third avenue with addresses and a luncheon. The Association now has sufficient room for the general offices, meeting hall and reading room, facilities which were impossible in the old Fort street rooms.

DUMP TRUCK MEN MEET

The problems confronting the dump truck business at this time were given a thorough airing at a meeting of the dump truck owners at the D. T. A. rooms Friday evening. With the opening of the building season the demand for dump truck service should increase steadily.

DAIL PLANT ON FULL TIME

The Dail Steel Products Company, Lansing, is operating on a full nine-hour basis with all men who have been with the firm a minimum of six months. The volume of business for March equalled that for the same month last year, while the April business is also holding up well.

HAYNES INCREASES PRODUCTION

A. G. Selberling, vice-president and general manager of the Haynes Automobile Company, Kokomo, Ind., is authority for the statement that the company is making 33½ per cent more cars now than ever before and that 16 per cent more men are employed than at any time in the company's history.

FOR SALE
240 Volt D. C. Generators

KW		Speed
1	20	Peerless, MP 1000
1	20	General Electric, 4-pole, type MP, comp., direct-connected on iron subbase to 7x16-inch Ideal horizontal self-oiling automatic steam engine..... 325
1	25	Northern, MP, type B..... 900
1	25	Ft. Wayne, 6-pole, type MI..... 875
1	25	Westinghouse, 6-pole, comp., direct-connected on iron sub-base to 10x10 in. Buffalo auto. vertical steam engine. 325
1	30	Western Elec., MP, type E50B..... 1250
1	30	Northern, MP 850
1	30	Ft. Wayne, 6-pole, type MPL..... 750
1	35	Fairbanks Morse, type TRC, comp., interpole 1125
1	40	Northern, 6-pole, comp., direct-connected on iron sub-base to 11x10 in. Fleming horizontal, side crank, self-oiling auto., steam engine, with accessible stuffing box..... 320

Would YOU buy a SECOND-HAND ELECTRIC MOTOR at ANY price? If you KNEW it to be as good as new? *Were we your inquiries.*
GREGORY ELECTRIC CO. In business since 1893.
We Second-hand Electric Motors Bought, Sold and Exchanged.
16th and Lincoln Streets Chicago, Ill.

Digitized by Google

Highway Traffic Assn. in Detroit Convention

Highway engineers, officials of highway departments, automobile associations, motor car manufacturers' representatives and others interested in highway development came to Detroit Friday of this week to attend the annual convention of the National Highway Traffic Association, held in the Detroit Athletic Club. Three sessions, one at 10:30 o'clock in the morning, another at 2 o'clock in the afternoon, and the third at 8 o'clock in the evening, were held and a large amount of business transacted. The program follows:

MORNING SESSION

Chairman of Session: Arthur H. Blanchard, president, National Highway Traffic Association.

Address of Welcome for the State, Frank F. Rogers, State Highway Commissioner of Michigan.

Address of Welcome for the City of Detroit, Dr. James W. Inches, Commissioner Department of Police, Detroit.

Report of Committee on Regulation of Overloading of Motor Trucks: Chairman, David C. Fenner, manager, Public Works Department, International Motor Company, New York City.

Report of Committee on Traffic Center Lines on Roadways: Chairman, E. L. Benedict, vice-president National Steel Fabric Company, Pittsburgh, Pa.

Report of Committee on Equitable Distribution of the Cost of Construction and Maintenance of State Highways: Chairman, Herschel C. Smith, consulting engineer, Oklahoma City, Okla.

Report of Committee on Status of the Construction of Highway Curves and Recommended Practice to Increase Safety to Traffic: Chairman, H. Eltinge Breed, consulting engineer, New York City.

AFTERNOON SESSION

Chairman of Session, R. C. Hargreaves, vice-president, North Central Division, National Highway Traffic Association.

Report of Committee on Widths of Roadways and Sidewalks in Municipalities: Chairman, H. J. Fixmer, paving engineer, Board of Local Improvements, Chicago.

Report of Committee on Motor Bus Service for Consolidated Rural Schools: Chairman, Ernest Parr, chief, Firestone Ship-by-Truck Bureau, Akron, Ohio.

Report of Committee on Highway Transport Clearing Houses: Chairman, Tom Snyder, secretary-treasurer, Indianapolis Transfer Association.

Report of Committee on Highway Transport Franchises: Chairman, F. W. Fenn, secretary, Motor Truck Committee, National Automobile Chamber of Commerce, New York City.

EVENING SESSION.

Chairman of Session: Roy D. Chapin, director, National Highway Traffic Association.

Report of Committee on Interrelationship of Highway, Railway and Waterway Transport: Chairman, Prof. Henry E. Riggs, University of Michigan.

Report of Committee on Relative Efficiency of Different Types of Car Stop Safety Zones and Their Relation to Parking and Ranking Regulations: Chairman, George A. Waters, second deputy police commissioner, Detroit.

Report of Committee on Segregated Traffic Streets in Municipalities: Chairman, Samuel W. Taylor, president, Rider and Driver, New York City.

Report of Committee on Regulations Covering Speeds, Weights and Dimensions of Motor Trucks and Trailers: Chairman, George H. Pride, president Heavy Haulage Co., New York City.

MAXWELL MOTORS SALE BLOCKED

Holmes Jones, Wilmington, Del., stockholder in the Maxwell Motor Company, Delaware corporation with factories in Detroit, has been granted permission to amend his bill of complaint against the company by Chancellor Curtin. Mr. Jones filed a bill of complaint against the company in chancery court, Wilmington, December 11, asking for a receiver for the Maxwell company on the ground that it was insolvent. Mr. Jones charged that "through reckless waste and dissipation" by its officers the company had lost in 16 months $25,933,194. Application for a demurrer being made, Mr. Jones grasped the chance to ask permission to amend his complaint. The United States Court, Detroit, has given permission for a receivership for the company.



More Happiness

With a smooth motor at all speeds, abundant power for every need, lounging room comfort and beauty that makes human eyes sparkle, the Winton Six is a car of rare merit—fully responding to its owner's demands and faithfully increasing his happiness. May we show you? Simply telephone.

GEORGE H. ZUVER COMPANY
Telephone Glendale 4605
4465 Cass Avenue

WINTON SIX

Russel Wheel & Foundry Co.
DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3200

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

TRANSPORTATION NEWS

Rail :: :: *Water*

Detroit—The Wabash Railway Company has appointed H. F. Bobbitt passenger agent in Detroit to succeed Charles Hamilton, who has been granted a leave of absence. The offices are at 1243 Griswold street.

Washington—The Treasury Department announces the payment of $225,000 to the Detroit, Toledo & Ironton railroad under the guaranty provisions of the Transportation Act.

Muskegon—The Goodrich Transit Company is constructing a dock at Maple Grove, near Montague, which will be 200 feet long and 16 feet wide. Up to last year the company's boats stopped at Whitehall, but this port has been eliminated due to the fact that one of the ships became fast on the sand bar last season, and although the people of Whitehall talked about clearing the bar, nothing has been done.

Washington—Claiming that the United States Railroad Administration refused to make any allowance for salt and only $3 a ton for ice used in the preservation of poultry, butter, eggs and cheese en route in refrigerator cars from points in Illinois, Indiana, Iowa, Michigan and Ohio to points in the East, Swift & Company petitioned the Interstate Commerce Commission for reparations allowing $4 a ton for ice and 75 cents per 100 pounds of salt. The I. C. C. has ruled that, inasmuch as the shipper furnished the ice and salt at a time when the Railroad Administration could not, and for its own interests, the allowance of $3 for ice was sufficient and no allowance for salt should be made, and therefore the case is dismissed. The number of the case on the I. C. C. docket was 11,640.

Lansing—A reduction of 25 and 22 per cent in rail rates on sand and gravel for highway building and other purposes except foundries, glass, fertilizer, chemical and cement manufacture, has been ordered by the Michigan Public Utilities Commission, and will not be resisted by the railroads, it is understood. The state commission takes the position that the Interstate Commerce Commission, in fixing the rates, should not have applied the forty per cent increase to sand and gravel. The twenty-five per cent reduction will apply in the Lower Peninsula, and the twenty-two per cent will apply in the Upper Peninsula.

Washington—Reparations to the amount of $86,478.63, with interest, have been allowed the Solvay Process Company and against the Delaware, Lackawanna & Western Railroad by the Interstate Commerce Commission following a hearing on complaint No. 10,363. The bill set out that the railroad company charged the company $30 and $40 a long ton for hauling limestone from Jamesville to Solvay, N. Y., when the charge should have been $25 a ton. The case came up for hearing in 1918.

Detroit—The Hocking Valley Railroad has appointed F. W. Ditman commercial agent for Detroit, with headquarters at No. 704 Free Press building.

Detroit—Absorption of some of the idle labor and road building work are two promising things seen in an active program for Michigan and Ontario by H. O. Halsted, superintendent of car service of the Pere Marquette Railway from the orders for cars that are still coming in and the movement that is already under way. This applies equally to the Pere Marquette lines in Michigan as well as Ontario. The movement of stone and gravel from the various pits and quarries started recently. Shipments are being made from Green Oak, Hersey, Wings, Quarry, the Fostoria branch, Branch and Petoskey in Michigan and Viney pits in Ontario.

Detroit—The Michigan Aero-Service Corporation has been formed here and expects to begin a passenger business May 15. The officers of the company are: Harold P. Ayres, president; Glenn W. Price, vice-president; Harold H. Moyer, James H. Otto and Don W. Sessions, all of Lansing, directors. The object is principally to make inter-city flights. Flying fields have been leased in Lansing, Jackson, Muskegon, Battle Creek, Petoskey and Detroit. The local field is located at the Six-Mile and Evergreen roads, north of Grand River avenue. Ten planes are said to be owned by the company now. In addition to carrying passengers the company will make air photography a part of its business. Only planes and pilots approved by the National Aircraft Underwriters' Association will be used.

POLK OBSERVES ANNIVERSARY

R. L. Polk & Company, Detroit, publishers of city directories and other similar volumes for the last 50 years, observed their half-century mark by issuing a handsome supplement to the Detroit directory entitled, "Detroit Today." The book includes a buyers' guide, history of the city and other information, in the compilation of which the Detroit Board of Commerce and the Detroit Tourist and Convention Bureau assisted.

L. P. HASTY'S NEW CONNECTION

Lloyd P. Hasty, who has a wide acquaintance among members of the advertising profession in Detroit, having been connected with several commercial art organizations in the city during the last four years as sales and service representative, has joined the staff of Howard-Garfield-Gray, artists and advertising illustrators at 1101 Kresge building. He will be in the sales and service end of the business.

OLDS BUSINESS ON BOOKS

The Olds Motor Works, Lansing, has orders for 4,500 vehicles for June delivery, while the April demand exceeds present production. To meet this growing demand more men will be added to the force. The first trainload of any type of machines ever sent into the state of Oregon is being assembled in Lansing for the Portland Oldsmobile Company, Portland, Ore. The shipment will consist of 40 cars, Oldsmobile fours and eights.

AUTOMOTIVE INDUSTRY LEADS

According to a survey made by the metal trades, the motor car manufacturing business is leading all other industries in recovery from depression. The relative positions are: Automobiles, hardware, machinery, builders' supplies, construction material, engineering and repair, boilers, sheet metal, furniture and automobile accessories.

SEEKING OIL IN U. P.

Following the theory that Trenton limestone deposits and the general structure of the earth's surface indicate the possible existence of oil and gas, Dr. W. I. Robinson, Michigan Geological Survey, is making investigations in the Seul Choix Point district, east of Manistique. Ten days will be spent in making this preliminary survey and if the results warrant it, some drilling will be done.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton

SALES REPRESENTATIVES: Atlanta Denver Portland

EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

L-XX
HIGH SPEED STEEL

Carbon Tool Steels

Alloy Steels

Atlas Crucible Steel Co.

Offices and Warehouse

1437-1459 Franklin Street

Detroit, Mich.

BLANCHARD
High Power Vertical Surface GRINDERS

BLANCHARD

not only handle the work which has always been considered surface grinder work, but machine economically, from the rough, a wide variety of castings, forgings and stampings.

In Your Own Shop

there are Blanchard grinder jobs, which possibly you do not recognize as such. The Blanchard Data book contains 50 typical examples of work done on this No. 16 and our smaller No. 10 Grinder. You'll find it interesting and full of profitable suggestions. May we send you a copy?

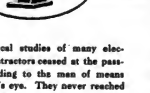


Write for Blanchard Data Book today

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING - DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google



THE Biblical studies of many electrical contractors ceased at the passage alluding to the men of means and the needle's eye. They never reached the Golden Rule.

We are a bit unorthodox. The owner still has a bank balance after we complete our contract.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT



WRIGHT-FISHER
Engineering Company
An Engineering Service

This organization is composed of men whose experience embraces years of practical association with all branches of manufacturing in the metal and woodworking industries.

Our laboratories, associated factories and personnel are at the disposal of manufacturers who are confronted with a production, patent development or sales problem. Let us know your requirements.

3087 East Grand Blvd.
DETROIT, MICH.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602 680 Fort St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Muskegon—Fifty-eight permits were taken out in March involving an expenditure of $49,258. Of the total, $17,400 refers to new buildings. There were 23 permits for garages, total cost being $4,938.

Kalamazoo—There was a considerable drop in the issuance of permits during the week of April 16, only $4,591 being represented in eight permits. It is believed that the bad weather which has prevailed for some time has had much to do with the slump.

Owosso—The Owosso Canning Company's new plant is being rushed to completion by the Granum-Crosby Company. The warehouse, a structure 48 by 92 feet, is almost completed and work will be started soon on the three-story 51 by 104-foot main building, which will be three stories high, and of mill construction. There will also be a two-story office building and a boiler and procession building.

Detroit—Among the contracts and sub-contracts awarded by architects during the week ended April 21 and which are mentioned by the Detroit Builders' & Traders' Exchange, are the following: A $2,000,000 theater for John H. Kunsky, Inc., to be erected at Broadway and Grand Circus Park, to the Longacre Engineering & Construction Company; the general contract for the coal handling conveyors to be erected at the Detroit waterworks, to the Guarantee Construction Company, New York; general contract on the power station to a high pressure pumping station, to Wolverine Engineering & Construction Company; the general contract for a filtration plant to the Thompson-Starrett Company.

Lansing—The city council has awarded the Brick & Supplies Corporation the contract for furnishing 15,000 barrels of cement to be used by the city in construction work this summer. The bid was $2.32, $2.47 and $2.67 a barrel with the promise of giving the city the benefit of any lower freight rate.

Detroit—The department of public works is the lowest bidder on the work of completing the Belle Isle bridge. The amount of money left to finish the bridge is $2,441,567.88, and the D. P. W. is the only one to bid within that allowance. The bids follow: Department of public works, $2,379,957; Arundel Corporation, Philadelphia, $2,599,522, with from $15,000 to $20,000 additional for waterproofing; Great Lakes Dock & Dredging Company, Detroit, $2,943,541.

Detroit—The Detroit police department has instructed Albert Kahn, architect, to advertise for bids on a new headquarters building, to be erected adjacent to the Municipal Courts building. The structure will be 10 stories high and will cost $1,500,000.

Lansing—Since the announcement has been made that a 10-story office building will be erected here by the Prudden Building Company, applications have been pouring in for space until the company now has enough on file to tenant the structure. No action has been taken on them. The first five floors will be occupied by the Dancer-Brogan Company, while another floor will be taken by the J. W. Bailey Company and Michigan Mortgage Corporation. Work on the excavation is being pushed by the Rickman Construction Company.

Detroit—The common council has approved of an appropriation of $1,656,032 to complete the Cass Technical High School building. The structure, which will be seven stories in height, will extend along Second boulevard from High street to Henry street. The present Cass Tech building at Second boulevard and Grand River avenue will be connected with the latter building by an arch.

Detroit—The board of education has awarded to Culbertson & Kelly, Detroit, the contracts for the erection of additions to the Estabrook and Sampson school buildings, the former involving an expenditure of $119,946 and the latter $116,421. The work is to be completed by September 15.

Mount Clemens—Cost of buildings or alterations as represented by permits issued during March is estimated at $47,475. This is considerably better than the February record.

Detroit—The Detroit common council has decided to allow the public light commission $50,000 to defray the cost of preparing plans and specifications for a power plant. The item was cut out of the 1921 budget, but will now be included in the appropriations for 1922.

Escanaba—At least thirty houses are under construction here and permits for more are being taken out practically every day. The Escanaba Press says that it is recognized that the prices of material are at their lowest possible levels and men familiar with market conditions are unanimous in declaring that there is certain to be an upward trend before long. One contractor is quoted as follows: "We have had a hard time convincing the people that costs of material really have trembled. Some insist on making their own investigations. That was all we wanted. Building costs are down. They are lower now than they are likely to be in a few months."

Detroit—During the week ended April 23, 306 permits were issued involving an expenditure of $989,335, as compared with $1,668,265 for the week of April 16, and $5,894,020 for the corresponding week in 1920. Of the total expenditure, $938,495 is credited to 235 new construction jobs and $60,840 to 71 alterations or additions.

Purchasing Agents' Association of Detroit,
is open for membership to every purchasing agent or director who wishes to receive the benefit of our educational work.

Publicity Office 13 Garfield Building *Glendale 3819*

Wanted: Bids on riveting and the erection of a 30,000 gallon sectional gasoline storage tank. Material now on ground.

Box M. C., Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

Digitized by Google

1921 Michigan Pikes Tour Plans Being Formulated

The Michigan Pikes Association, which this year is under the presidency of Fred S. Case, Sault Ste. Marie, already is making active preparations for its sixth annual Pikes tour, scheduled to start from Detroit the second week in July.

The 1921 expedition, according to Mr. Case, will be the banner event of its kind in the history of the Association. In equipment, personnel and route to be covered, it will exceed even last year's trip, which was the first international journey of its kind ever conducted. In 1920 the Pikers utilized a fleet of forty-two motor cars and seventeen trucks to transport 250 persons, including the Ford Motor Company's band, from Detroit to Toronto, north to Sudbury and through the wilds of northern Ontario, crossing back into Michigan again at the Soo and returning to Detroit over the East Michigan Pike.

For the 1921 jaunt, Tour Manager W. D. Edenburn has laid out another trip that is to forge another international touring link for the motorists of both Canada and the United States. It is styled the "Around Lake Superior Tour" and will cover 1,700 miles in fifteen and a half days.

Plans now call for the use of 80 motor cars and trucks to accommodate at least 250 persons on the two weeks' haul. As the big convoy passes through the country it will provide an object lesson in motor transportation to every community on the road. The truck section of the convoy, which serves as the auxiliary of the motor car section, will mount on separate vehicles electric lighting equipment, fire prevention apparatus and ambulance service. Trucks also will be used to convey the tourists' baggage, blankets and cots.

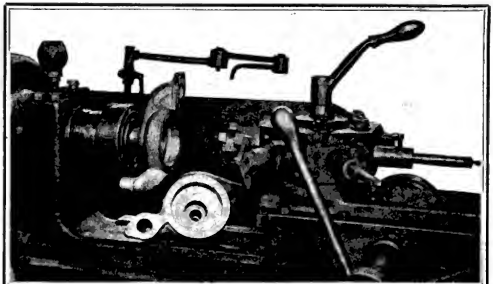
Necessity of camping out on the 1921 tour will be obviated by reason of the fact that the tour passes through well settled territory where sleeping accommodation at the night controls can be obtained in armories or other large public buildings.

As in previous years, every point on the route is to be the scene of a good roads rally with a brass band and the arrival of the touring party to attract the crowd. The corps of speakers, which will be under the direction of Captain W. S. Gilbreath, manager of the Detroit Automobile Club, will be an all-star aggregation.

Manager Edenburn advises that the Steamer Noronic has been engaged for transporting both men and automobiles from Port Arthur and Fort William to the Soo on the return leg of the journey. It was originally planned to ship the automobiles via boat and transport the men by special train.

HANNUM TO MANAGE OAKLAND PLANT

George H. Hannum, general manager of the Saginaw Products Company, Saginaw, will succeed Fred W. Warner as general manager of the Oakland Motor Car Company, Pontiac. Mr. Warner has resigned after seven years with the Oakland company, but will retain his connection with the General Motors Corporation as vice-president and director. Both the Saginaw Products Company and the Oakland Motor Car Company are subsidiaries of the General Motors Corporation. Mr. Hannum was formerly connected with the Detroit Lubricator Company, Detroit, but went to Saginaw in 1912 as shop superintendent of the Wilcox Engineering Company, one of the first plants taken over by the GMC. He is president of the Saginaw Board of Commerce, director of the Bank of Saginaw, vice-president of the Saginaw Shipbuilding Company and director of the Saginaw Financing Corporation.



The hub of this Cast Iron Water-Circulating Pump-Body has been turned and drilled on another No. 4 Turret Lathe. The tools on this No. 4 rough bore and true up for shaft, ream to size, counter-bore for clearance and finish bore and face large diameter—all in 5½ minutes. Most of these tools are standard.

Proper Tools for Turret Lathes

To do work well
a turret lathe must be equipped
with the proper tools.

Tools make or mar
a good turret lathe.
Re-tooling a turret lathe
often doubles its production.

In our catalog
we illustrate turret lathe tools
for all kinds of work,
bar or chucking,
and if you desire,
we help you select
the right tools for your work.

Send for our Small Tool Catalog.

World's Largest Manufacturers of Turret Lathes

The Warner & Swasey Company
CLEVELAND, U. S. A.

Detroit Office and Showroom—5928 Second Boulevard
Chicago Office and Showroom—618-622 Washington Boulevard
Milwaukee Office—209 Sycamore Building

Digitized by Google

MICHIGAN MANUFACTURER and FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, APRIL 30, 1921

The Comeback of Mr. Durant

NOT many weeks ago when this paper commented upon the loss of control of the General Motors organization by Mr. William C. Durant, it indulged in a prophecy that it would not be long, very likely, until we heard more of Mr. Durant. The reasons set up were that he was a man still in the active years of life, had great powers of organization, and had the prestige of success.

Publications which have been made in the Manufacturer in the last two or three weeks seem to have indicated that that prophecy has come true almost earlier than we expected. Mr. Durant has erected a new motor car company, the plans for which involve factories on the Atlantic and Pacific coasts, and for the midwest in his favorite city of Flint. That city was the scene of his early industrial successes before the motor car had come across the horizon. He established the principle of quantity production there, it is true, only as applied to cheap vehicles, but Flint was the vehicle city of the country long before the motor car was dreamt of as the foundation of a commercial business.

There are many people who indulge in speculation as to what the future of the motor car industry is going to be in this country. Whatever else it may be, it seems now that it is not going to be a survival of individual small factories producing small quantities of product, making service difficult on the country-wide basis and requiring as much capital for spare parts for service purposes as is required to maintain the central factory.

We have seen several aggregations of manufacturing units grow into greater ones. The foremost of these was the General Motors. Several former organizations are represented in the existing one of the Studebaker; as several more are represented in the rapidly completing reorganization of the Maxwell-Chalmers Company. It would seem that the tendency in motor car manufacturing is toward the manufacture of "lines," so called, which include variety of product, of high and low costs, with which it is desirable to consolidate the manufacture of motor trucks, thereby reducing sales expense and service cost to the minimum by spreading them over the largest possible area.

It is not at all unlikely, although no information has been given out to that effect, that Mr. Durant's new organization will take account of the existence and development of earlier types of cars, consolidate their manufacture under good engineering and sales organizations and produce something along the lines of the products offered by the General Motors Corporation. If such a project can be financed in this or later days, it means a great deal to the industry in Michigan, not only by putting into the state the midwest factory of a great organization, but by furnishing a recourse for meritorious or illy-capitalized organizations, which really need a safe financial harbor in which to land.

We do not know Mr. Durant's plans, but we do know that he is in the saddle again. That is as much as the Manufacturer predicted a few weeks ago, and it is no more than those who admired this Michigan industrialist's genius of organization wish for him, and those who associate themselves with him. He has been one of the great figures in industry in the country, is the product of Michigan, and Michigan people are proud of him.

What Is a Lease?

THE recent decision of the Supreme Court of the United States on the subject of leases leaves some very interesting questions in the air.

In a case growing out of a housing situation in the District of Columbia, wherein the Congress of the United States determined that housing was affected by a public interest and that, therefore, a tenant whose lease had expired, or who was in relation with his landlord from month to month, might refuse at the expiration of his stated period of tenancy to pay a higher rate of rent without the same becoming a subject of legal review, the court decided that such a theory was entirely in harmony with our constitution.

It is rather significant that four members of a court which does not usually express itself strongly, found it necessary in a dissenting opinion to ask striking questions as to whether or not the constitution and the guaranteed rights of property owners in this country had become anachronisms.

It is true that the defenders of the recent opinion of the court qualify it as applying in principle only to the District of Columbia, and perhaps to a New York tenancy case which seems to have been collaterally involved. But already legislatures throughout the country are being besought to pass laws which will have as their basis this opinion of the court. It will be noted by those who read the opinion closely that the decision of the court is based upon the principle that the Congress may definitely and finally decide that housing is affected by the public interest and that this phase of the matter is not to be controverted by the court. If that be so and the reasoning be carried to its conclusion, then Congress or the legislatures for their respective states —because Congress in the District of Columbia case assumed to act as the legislature of the District of Columbia—have only to determine that the business of grocery-keeping or of selling shoes, or of running general stores, is affected by the public interest in order to make possible a judicial review of the rentals asked from tenants of places of business fitted for such purposes.

We have seen somewhere a criticism of the opinion to the effect that long leases have been rendered unstable by the decision, but this does not seem to be within the logic of the opinion of the majority of the court, because it has only applied its rule to cases where the contract has expired. Yet conceding so much as the majority of the court has conceded, it is not an impossible step, which it is hoped will never be taken, for a case to be framed during the period of a lease, in which the conditions of prosperity are altered, seeking to reform the laws and reinstate the cost of tenancy.

One thing is certain, and that is not two, and it is that a very severe blow has been dealt industrial cities by this decision, and will be dealt in whatever state the legislature of which assumes to declare that the tenancy of houses is affected by the public interest. It may be that a landlord does not control his property

Digitized by Google

absolutely, and may not set the price at which he will rent it. The farther step that has been suggested that the courts may order the making of leases may possibly come to pass, but it never can be held, so long as this republic remains free, and the disposition of private capital may be controlled by its owners, that people who have money can be forced to invest it for rental property for housing purposes.

Now the supply of houses is a commodity that has limits. They become antiquated or obsolete and the demand for them in industrial cities is constantly growing. If there is no surety of income based upon the operation of the law of supply and demand for those who invest their money in houses, there will not be many more houses built, and industrial cities that have attained one stage of growth cannot advance to another and a great one. Once the application of the rule laid down by the federal supreme court is further defined and limited, so that for instance, vote-seeking politicians in Michigan can pass laws, assuming to affect housing with a public interest, and thereby gain control of month-to-month and short-time tenancy, there are not going to be many more houses built in Detroit, Grand Rapids, Jackson, Flint or any other of our growing cities, until the rule is very definitely restated, so as to make it very clear that there is to be whatever return from investment from house-building and house-owning that grows out of the operation of the law of supply and demand. House-building, both from the standpoint of investment and from the standpoint of furnishing a market for the labor and material that enter into the operation, is going to experience a serious setback.

Cured

DR. MORRIS ZUCKER, of Brooklyn, who last June was pardoned by President Wilson after having been sentenced to spend fifteen years in the penitentiary for sedition against the United States, sailed for Russia in September "to ascertain," he said, "whether under the soviet form of government there was a real dictatorship of the proletariat or of a handful." He found out. On presenting himself to the red authorities at Moscow he was told that it would be inadvisable for him to conduct his investigation and that he would be sent out of Russia shortly. Meanwhile he would have to spend his time in jail—which he did, until March 27. It was while incarcerated that he did his investigating. He is entirely satisfied with his conclusions and says he is coming back to the United States "to disillusion those who think there is anything like freedom under the soviets."

Inside the prison, Zucker says, he met victims of bolshevik "freedom" of every sort and condition. Former grand dukes rubbed tattered elbows with former workmen, all of them having been locked up on scant rations because they spoke out in meeting against the red terror. They were a hungry, dejected, sorry looking lot, but were hardly more discouraged than the mass of the people on the outside, who could not be sure of a meal a week, let along the one or two crusts a day which the prisoners usually were fortunate enough to lay hands on. Most of the prisoners were dragged with great regularity into star chamber sessions, where, under threat of death, they were invited to confess to crimes of which none of them were guilty. Many, worn out physically and mentally, and believing death could be no worse than imprisonment, did confess, and the punishment meted out made a Roman holiday for the bolsheviki.

"That's the way they do with everybody," says Zucker. "Their opponents are imprisoned immediately. The bolsheviki are finding peace more dangerous than war."

Zucker, who was one of the organizers of the communist party in the United States, is pretty well cured of the notion. So is Emma Goldman, who, if reports from Russia are to be believed, would give twenty years of her life if she could only return to the land which for so many years she reviled. It might not be a bad idea to crate as many of the red agitators in this country as could be carried by the Atlantic fleet on a couple of voyages and then ship them to Russia for a few months' close communion with the system they so loudly are espousing here. Such of them as survived would come back missionaries for law and order as it is maintained under the American form of government.

Short Measure Stuff

The Chicago Tribune declares 1921 will reward fighters. How, with another bonus?

* * *

Says a want ad: "Man speaking German, to work in sausage department." They must use nothing but dachshunds.

* * *

We hope not too many American leaguers try to get even with Cobb.

* * *

This year's styles have dissolved one mystery of long standing. We can now tell at a glance whether they are knock-kneed or bow-legged.

* * *

And now in Ontario also, it's all going out and nothing coming in.

* * *

MORAL QUATRAIN

Apostles of scrappiness, hark to my lay,
Or you may recall it with sorrow:
'Tis better to patch up a quarrel today
Than patch up a black eye tomorrow.
—Louge, in Cleveland Plain-Dealer.

And pacifists, too, here's more wholesome advice,
Preparedness should not diminish;
'Tis best to be always in good fighting trim,
And then don't start what you cannot finish.

* * *

And meanwhile, the Allies are waiting for their cup of indemni-tea.

* * *

JAZZING UP THE OLD FARM

to place one of these new-fangled amplifiers in every farmhouse where the electric lines travel and put on a jazz band and a cabaret at the power house. Then the boys could make cider to the tune of "The Alcoholic Blues." Pa could call for "Razzing the Dog" when he makes sausage. Sister could phone for something sentimental on the night that her bashful beaux calls. And on the day the taxes have to be paid, it would be most appropriate to play, "Carry Me Back to Old Virginny."

—A. F.

The general tie-up of British industry threatened by the so-called "triple alliance" of miners and railway and transport employes has failed. When it comes to a choice between organized government and organized browbeating, public opinion in 1921 is siding with organized government. And public opinion is the controlling force in any situation.

When the Railroad Labor Board announced the abrogation of the national agreements between the roads and their employes it signalized the first step in the real return of the transportation systems to their owners.

A Buffalo man was driven insane trying to make out his income tax blank. Write your own comment.

Digitized by Google

FINANCIAL

General Motors Annual Report and Statement

PRESIDENT Du PONT, of the General Motors Corporation, in his annual report for the fiscal year ended December 31, 1920, reviews the development of the automotive industry from 1899. Lack of space prevents giving the full report but several points of interest are covered below. Mr. du Pont says in part:

"The history of the General Motors Corporation parallels in a general way the greater development. The statement of July 31, 1912, compared with December 31, 1920, sufficiently reveals the great progress that has been made. Thus we find the following comparative items:

	1920	1912
Net working capital	$144,452,796	$20,986,895
Capital expenditures charged to plants and investments	70,668,217	2,124,181
Fixed assets in plants	247,748,765	19,280,888
Miscellaneous investments	67,965,100	569,200
Good will and patents	14,814,813	9,000,000

"The Corporation has not grown by the issue of securities only, for during the period from 1912 to 1920 there has been invested out of earnings $128,070,238 and the corporation has received in cash through sale of securities, largely on stockholders' rights, $130,826,635, a total cash capital paid-in of $258,896,873. It is encouraging that the accumulated earnings and the cash subscriptions of the new investors have added so largely to the Corporation's development, showing on the one hand strength in earning capacity, and on the other faith in the investing public in the stability and prospects of the industry.

"The growth of the business is further reflected in the increased production of cars and trucks. In the year ended July 31, 1912, 50,070 units were produced, in the year 1920, 401,610 units. At the height of the 1912 season, 11,474 were employed in the factories. In 1912 this had risen to 16,984. In the height of the manufacturing season of 1920 the total employes had risen to 97,576.

"It is not possible to state accurately the percentage of the parts of any automobile manufactured by the General Motors Corporation, but the field has been developed to insure an ample supply. Such additional quantities as may be needed can be purchased to advantage, so that no further substantial investment in facilities for the manufacture of parts will be necessary at a nearby date.

"It has been thought unwise to undertake production of materials that do not relate largely to the automobile. Thus a comparatively small portion of total tires produced are consumed by the automobile manufacturer, the larger percentage being sold directly to users of cars for replacement purposes; the greater part of the production of sheets and other forms of steel is consumed by trades other than the automotive industry; therefore investment in these fields has been made. By the pursuit of this policy the Corporation has become firmly entrenched in lines that relate directly to the construction of the car, truck or tractor, but has not invested in general industries of which a comparatively small part of the product is consumed in manufacture of cars.

"The rapid development of the industry has called for equally rapid changes in the character of manufacturing plants, but by constant reinvestment and rebuilding the Corporation has kept well in advance and its factories may now be considered in satisfactory condition. The great plant of the Cadillac division, in Detroit, which will be fully occupied in the summer of 1921, is the last large item of construction to be finished. There still remain several small and somewhat antiquated plants that have been reingated to minor manufacturing or assembly purposes, but these items are of little consequence and may be abandoned at a not distant date.

"The growth of business has necessitated repeated enlargement of office force and office facilities, finally culminating in the acquisition of the General Motors building at the corner of Broadway and Fifty-Seve th street, New York, and the erection of the General Motors building, covering the entire block bounded by Grand Boulevard West, Cass avenue, Milwaukee avenue and Second boulevard, in Detroit, which is practically completed. The interior of one-half of the building is nearly finished and will soon be entirely occupied by the Corporation. It is intended that the interior of the other half will be finished as the expansion needs of the Corporation demand additional space but it may be finished sooner and rented temporarily to other tenants."

The progress of the earning power of the corporation's properties and the disposition of the resulting cash is of interest, and follows:

	General Motors Proportion of the Net Earnings before Federal Taxes	Federal Taxes	Dividends	Interest Retained in Business
1920	$ 87,348,392	$ 8,000,000	$29,117,722	$ 14,230,669
1919	91,182,222	30,000,000	22,715,792	28,466,430
1918*	81,205,197	15,375,546	14,184,296	1,647,355
1917 (Aug. 1 to Dec. 31)	17,165,156	2,840,274	2,786,189	13,508,393
1917	28,540,928	4,652,316	8,165,872	16,201,650
1916	18,812,305		7,801,650	17,010,655
1915	16,796,690		1,387,851	13,408,839
1914	5,642,904		1,541,896	4,201,008
1913	8,541,494		2,130,557	6,410,937
1912	5,166,557		2,252,474	2,954,003
Totals	$382,003,295	$60,368,136	$94,423,800	$128,070,238

*Years 1912 to 1917 are fiscal years ending July 31; years 1918, 1919, 1920 are calendar years.

Earnings retained in business to July 31, 1917, were capitalized through the issue of common stock.

DISTRIBUTION OF STOCK OF THE CORPORATION.

The following statistics in regard to the number of stockholders are of interest:

Year Ended	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Dec. 31, 1917	1,977	2,175	2,460	2,900
1918	3,910	3,777	3,615	4,729
1919	8,013	12,035	12,258	16,716
1920	24,143	26,126	31,029	36,804

SALES.

The net sales of the corporation for the year 1920 were $567,320,603, being an increase of $57,643,909 over sales for the preceding year. The net income was $93,150,308, from which, however, there has been deducted $47,766,787 to cover various items, including Federal taxes, net write down inventories, full depreciation of plants, and for amounts written off in connection with operations conducted by the corporation pursuant to its policy of assisting employes to buy and own their own homes. The net profits, after these charges were made, were $45,383,521. In addition to the abovementioned deductions, reserves previously set up were utilized, with a view to providing for all contingencies and towards writing down the value of inventories and other accounts to a level which is unquestionably conservative.

INVENTORIES

The motor car business, in common with other lines of manufacture, suffered acutely from the conditions which obtained during the last four months of the year. The demand for the corporation's products, which had been very urgent during the first part of the year, was sharply curtailed in September. Inventories reached their peak about the middle of October, but during the ensuing ten weeks, to December 31st, the corporation was able, notwithstanding shrinkage in sales, to effect a net reduction in inventories of approximately $25,000,000. In addition, inventories were further reduced $25,776,112 at December 31, as a result of charging off all obsolete materials as well as adjusting values to cost or market, whichever was the lower.

SPECIAL RESERVE FOR UNFORESEEN CONTINGENCIES.

While all known losses and appropriate writedowns of inventories have been taken care of in closing the books as of December 31, 1920, nevertheless it has been deemed advisable to set up a special reserve of $7,500,000 to take care of possible losses in respect to outstanding commitments for materials undelivered and for the other unforeseen contingencies. This item is applied as a special charge again earnings of the year 1920 and appears in the statement of income following.

INVESTMENTS IN ALLIED AND ACCESSORIES COMPANIES, ETC.

Included in investments, totaling $67,985,100 on the balance sheet, are the corporation's holdings in the following companies:

Bearings Service Company ..... Detroit Michigan
Brown-Lipe-Chapin Company, Syracuse, New York
Desbler Die Casting Company, Brooklyn, New York
Fisher Body Corporation ..... Detroit, Michigan
General Leather Company ..... Newark, New Jersey
General Motors Acceptance Corp., New York, N. Y.

CONSTRUCTION.

The construction program, inaugurated in recent years, was about completed during the year 1920 by the expenditure of approximately $79,161,951. There remains for expenditure during the year 1921, the sum of $19,521, on authorized appropriations or approved projects, which will complete the building program. No further large appropriations for construction are needed in the near future.

DIVIDENDS.

The regular dividends on the preferred and debenture stock have been paid during the year and also $1.05 in cash and three-fortieths shares in stock to each outstanding share of General Motors Corporation common stock. A detailed record of the quarterly dividend payments during 1920 is as follows:

Dividends Cash, Common Stock (Stock par value);	Period.	Payable.	Stock of Record.
$2.00	Quarterly	Feb. 2 1920	Dec. 31 1919
2.50 ¼ share	Final	May 1 1920	Apr. 5 1920
Common Stock (no par value):			
$0.25 1-40 share	Initial	May 1 1920	Apr. 5 1920
.25 1-40 share	Quarterly	Aug. 2 1920	July 15 1920
.25 1-40 share	Quarterly	Nov. 1 1920	Oct. 5 1920
6% Preferred Stock:			
$1.50	Quarterly	Feb. 2 1920	Dec. 31 1919
1.50	Quarterly	May 1 1920	Apr. 5 1920
1.50	Quarterly	Aug. 2 1920	July 6 1920
1.50	Quarterly	Nov. 1 1920	Oct. 5 1920
6% Debenture Stock:			
$1.50	Quarterly	Feb. 2 1920	Dec. 31 1919
1.50	Quarterly	May 1 1920	Apr. 5 1920
1.50	Quarterly	Aug. 2 1920	July 6 1920
1.50	Quarterly	Nov. 1 1920	Oct. 5 1920
7% Debenture Stock:			
$1.75	Initial	May 1 1920	Apr. 5 1920
1.75	Quarterly	Aug. 2 1920	July 6 1920
1.75	Quarterly	Nov. 1 1920	Oct. 5 1920

Digitized by Google

THE OUTLOOK.

In the early months of the year 1920 there was promise of increasing annual sales and net profits. As stated above, the volume of sales reached this expectation notwithstanding the sudden diminution of business during the latter quarter of the year, but the net profits fell somewhat short of the previous year's record, although far in excess of any other year of the corporation's history. The dullness of the latter months of 1920 has continued during the early months of 1921, but as this report goes to press there is evidence that the year will show a substantial recovery and a reasonably satisfactory business with foundation well laid for future prosperity.

CONDENSED COMPARATIVE CONSOLIDATED BALANCE SHEET OF GENERAL MOTORS CORPORATION AND SUBSIDIARY COMPANIES AS OF DECEMBER 31, 1920 AND 1919.

ASSETS—	Dec. 31 1920.	Dec. 31 1919
Cash in banks and on hand	$ 17,008,940.90	$ 66,221,260.04
U. S. Government Bonds	41,262.21	219,219.49
Marketable securities	34,096.21	999,448.38
Sight drafts against B/L attached	8,584,394.27	19,943,067.06
Due from United States Government on war contracts		264,264.80
Notes receivable	13 449,274.90	1,776,911.31
Accounts receivable, customers and others	23,021,026.23	24,668,766.74
Inventories at cost or less	164,684,473.72	128,696,651.76
Prepaid expenses	1,891,364.66	857,362.64
Total Current Assets	$259,233,577.80	$276,607,141.14
Investments in allied and accessory companies, etc	$ 67,986,100.31	$ 52,206,491.26
Real estate, plants and equipment	569,760,766.63	176,980,467.60
Deferred expenses	6,323,606.27	2,729,307.19
Good-will, patents, copyrights, etc.	22,414,874.21	20,325,886.81
	$646,471,350.35	$254,850,264.25
Total Assets	$905,806,928.12	$469,727,345.39
LIABILITIES, RESERVES AND CAPITAL—		
Accounts payable and trade acceptances	$ 30,140,279.35	$ 27,846,314.36
Notes payable	72,421,464.45	6,613,316.68
Taxes, pay-rolls and sundries accrued not due	31,122,197.78	11,821,776.64
Accrued dividends on Preferred and Debenture Stock, payable February 1	1,019,942.73	891,982.00
Total Current Liabilities	$134,703,871.31	$ 57,070,284.68
Purchase Money Bonds	$ 1,679,070.14	$ 150,000.00
Purchase Money Notes, account Fisher Body Corporation stock purchase	9,840,000.00	21,840,000.00
	$ 11,469,070.14	$ 21,990,000.00
Reserve for depreciation of real estate, plants and equipment	$ 93,285,968.04	$ 32,084,824.56
Reserve for employes' investment fund and sundry contingencies	5,123,100.01	4,041,072.40
Reserve for Federal taxes and extraordinary expenses	4,942,134.45	36,262,472.70
Reserve for bonus to employes	1,558,950.87	505,579.85
Special reserve for unforeseen contingencies	7,500,000.00	
Total Reserves	$ 22,410,156.84	$ 69,893,949.33
Capital Stock:		
Debenture Stock 7%	$ 25,153,000.00	
Debenture Stock 6%	96,302,900.00	$ 68,339,100.00
Preferred Stock 7%	18,142,400.00	16,907,000.00
Common Stock, no par value: 32,264,580 Tr. Ctfs'es shares issued outstanding at $16 per share	$202,846,805.25	
224,764 shares held in reserve account of subscriptions not fully paid, at $10 per share	2,247,640.00	
	205,094,445.25	
Common Stock ($100 par value)	229,000.00	153,411,000.00
Total Capital Stock	$393,326,745.25	$238,707,100.00
Bonus Stock awarded		$ 7,946,570.00
Interest of minority stockholders in subsidiary companies, with respect to capital and surplus	$ 1,614,999.08	1,586,343.57
Surplus	*121,273,217.00	78,641,897.23
Total Capital Stock & Surplus	$436,214,771.33	$326,783,110.80
Total Liabilities, Reserves and Capital	$634,806,868.12	$469,727,345.39

Note.—The corporation had a contingent liability of $1,454,338.11 on December 31, 1920, on account of sight drafts discounted.

*Included in this amount is $66,822,415.90, covering paid-in surplus growing out of the issuance of stock for cash and for acquisition of properties.

(Continued on Page 30)

THE OLDEST HOUSE IN MICHIGAN

FOR twenty-seven years we have been furnishing our customers with government, municipal and high grade corporation bonds. We are prepared to furnish a selected list of securities which are attractive at this time.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

How Safe are Foreign Bonds?

Those interested in this subject are invited to send for our circular F-17

Bonbright & Company
UNION TRUST BUILDING, DETROIT

Telephone Cherry 4320

New York Philadelphia Boston Chicago

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½ % fee, making them
FREE OF ALL STATE TAXES.

The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. M. Dunham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

MANAGED BY MEN YOU KNOW

Why Stake Your Family's Security on Human Frailty

Not a week passes but fresh evidence appears of the improvidence of appointing an individual executor or administrator.

Friends, though well-intentioned, often make costly mistakes through inexperience. Some prove subject to influence, and prejudice creeps into the management, with resultant quarrels.

Far better, mature business men decide on consideration, to appoint an impartial, trained agent such as the Grand Rapids Trust Company, proof from human ills.

A booklet prepared on this subject will prove interesting. Send for copy.

GRAND RAPIDS TRUST COMPANY
Grand Rapids, Michigan
CAPITAL AND SURPLUS $ 450,000.00

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

LEWIS G. GORTON

Stocks and Bonds

1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

RESOURCES	Apr. 22, 1921	Apr. 15, 1921	Apr. 23, 1920
Gold and gold certificates	339,422	$ 327,437	185,654
Gold settlement fund—Federal Reserve Board	477,229	466,241	374,350
Gold with foreign agencies	.....	.....	112,781
Total gold held by banks	816,661	793,678	672,815
Gold with Federal Reserve agents	1,221,815	1,346,668	1,160,654
Gold redemption fund	159,894	146,443	126,320
Total gold reserves	2,298,071	2,286,879	1,949,693
Legal tender notes, silver, etc	194,733	199,198	133,875
Total reserves	2,492,804	2,485,077	2,083,568
Bills discounted			
Sec. by U. S. Government obligations	942,663	929,186	1,446,804
All other	1,171,191	1,176,368	1,029,376
Bills bought in open market	104,852	119,684	404,672
Total bills on hand	2,218,308	2,224,136	2,682,854
U. S. Government bonds	25,891	25,914	26,797
U. S. Victory notes	19	19	68
U. S. certificates of indebtedness—			
One-year certificates (Pittman Act)	240,875	245,475	269,675
All other	5,827	7,624	7,491
Total earning assets	2,490,720	2,503,766	3,178,785
Bank premises	21,782	21,614	12,628
5% Redemption fund against F. R. bank notes	11,662	12,166	13,428
Uncollected items	850,950	618,167	815,915
All other resources	12,710	11,812	8,291
Total resources	5,880,128	5,652,524	6,108,325
LIABILITIES			
Capital paid in	101,231	101,374	91,364
Surplus	202,036	202,036	129,120
Deposits—			
Government deposits	87,463	21,117	42,810
Due to members—reserve account	1,648,858	1,685,502	1,858,092
Other deposits, including foreign government credits	13,010	38,323	98,588
Total deposits	1,749,351	1,744,943	1,995,490
F. R. notes in actual circulation	2,856,760	2,868,527	3,068,307
F. R. bank notes in circulation—net liability	169,590	163,187	180,631
Deferred availability items	484,234	507,724	558,125
All other liabilities	56,962	64,832	67,248
Total liabilities	5,580,128	5,652,524	6,108,325
Ratio of total reserves to deposit and F. R. note liabilities combined	64.1%	53.7%	*42.6%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	65.8%	65.2%	*47.7%

*Calculated on basis of net deposits and F. R. notes in circulation.

Banks and Bankers

WIXSON JOINS MANNING

Roscoe C. Wixson, well known to many of the bankers of Michigan, and who for the last four years has been Detroit manager for the Detroit & Northern Michigan Building & Loan Association, has resigned his position, effective about May 15, to join Albert E. Manning in the Michigan Finance Company, Flint. Wixson served as a cashier under Commissioners Doyle and Merrick, from which connection he came to Detroit four years ago.

NEW CENTRAL SAVINGS BRANCH

The west side ground floor space of the G. A. R. Memorial building, Detroit, is undergoing alterations preparatory to occupancy by a new branch of the Central Savings Bank, about June 1. The Central Savings Bank and First & Old Detroit National Bank are under one ownership.

BANKERS' CONVENTION PROGRAM

President John W. Staley, of the Michigan Bankers Association, is grooming up some unusually attractive speakers for the annual convention in Detroit, June 6 and 7. We are not at liberty to divulge the names of the speakers at this time but it suffices to say that any Michigan banker who misses this convention will regret it. The program includes only men of nation-wide reputation whose messages will have unusual value to the banking fraternity.

The sessions this year will be limited to two days in the interest of conserving the time of the busy banker, and promoting 100 per cent participation in all the activities of the meeting.

NATIONAL BANK BRANCHES AGAIN

Senator Frelinghuysen, according to Washington advices, has introduced a bill in the Senate to permit national banks to open branch offices under certain conditions. By the terms of the bill, in cities with population of between 25,000 and 50,000 two branches may be opened; between 50,000 and 100,000, three; in cities over 100,000, four branches, which is the maximum. The bill also provides that the capital of the bank shall be increased not less than an amount equal to 50 per cent of the minimum capital necessary for the organization of a new national bank in each city, for each branch so established.

PROCTOR IS CASHIER AT EVART

Harry W. Proctor, for many years in charge of the Fairview branch of the American State Bank, Detroit, and also an assistant cashier, has become cashier of the Evart Savings Bank, Evart, succeeding J. A. Hall.

LIVINGSTONE SUCCEEDS CRIMMINS

It is reported in the Charlevoix Sentinel of April 21 that Archie L. Livingstone, since July 1, 1913, assistant cashier of the Charlevoix State Savings Bank, will succeed Alvah D. Crimmins as cashier. Livingstone has a wide

Digitized by Google

acquaintance in Charlevoix and is in close touch with the business and customers of the bank and the promotion comes in recognition of his efficient and faithful services.

GRAND RAPIDS SCHOOL SAVINGS

Reports made public by the Grand Rapids banks March 31 show that school children who have been depositing money in the banks through the medium of 50-cent savings stamp purchases for the last few years have accumulated $90,625. A newshoy who has saved $575, most of which represents his earnings from carrying papers, is the largest depositor. The number of children depositors grew from 6,000 on June 2, 1919, to 9,500 in June, 1920, and the total March 31 was 10,000.

PACKARD LEAVES NATIONAL UNION

It was announced in Jackson last week that R. A. Packard, vice-president of the National Union Bank, had resigned to become manager of the bond department of Webb, Lee & Company, and that L. B. Chapple, for several years manager of the east side branch of the National Union, will become resident manager of Webb, Lee & Company in Jackson.

SUNSHINE BONDS SELLING WELL

E. L. Withey, of the Grand Rapids National City Bank, advises that more than half of the "Sunshine" hospital bonds have been subscribed for. The Owens-Ames-Kimball Company, which will put up the building, has taken $120,000.

BISHOP OFFERS SAVINGS PLAN

President Arthur G. Bishop, of the First National Bank, Flint, has announced a savings plan which should appeal to the thrifty as well as to those who customarily take in the good things in life. Anyone who cuts out a coupon published in the Flint Journal and presents it with 50 cents at the First National may open an account credited with $1, and he will be presented with a Liberty Bell home savings bank. The only string attached to the offer is that the depositor must make an additional deposit of 50 cents within six months. Failing in this, the 50-cent coupon will be deducted when the account is closed and the Liberty bell bank must be returned.

DETROIT SAVINGS' NEW BRANCHES

The Detroit Savings Bank opened two new branches, April 18, one at Warren avenue and Junction and one at Hamilton boulevard and Collingwood avenue. This makes a total of 18 branches now in operation.

Bank Personals

E. A. Blakeslee, president of the Commercial National Bank, St. Joseph, died April 21. Mr. Blakeslee was a well known figure in banking circles in western Michigan.

O. B. Hipp, president of the Farmers and Merchants National Bank, Benton Harbor, is back on duty after spending a pleasant vacation in Florida.

L. R. Barnes, cashier of the First National Bank, Boyne City, was a Detroit visitor a few days ago.

The Commercial National Bank, St. Joseph, is putting up a fine new building on the site it has occupied for many years.

The American National Bank, Benton Harbor, of which W. F. Dowland is cashier, has purchased the corner adjoining the Benton Hotel and shortly will remodel the structure as a modern bank building.

Edmund D. Fisher, former vice-president of the Bank of Detroit, leaves this week for Washington, D. C., to become chairman of the metric committee of the United States Chamber of Commerce, which committee will undertake some special investigations. Mr. Fisher will be absent from Detroit three or four weeks on this mission.

DIME SAVINGS BANK
FORT E. GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Information

regarding Detroit and other sections of Michigan is often obtained upon request by the Dime Savings Bank for banks and other business firms to whom it may be of special interest.

This is one of the phases of our service which extends beyond the regular routine financial transactions.

Capital and Surplus $3,750,000

Get 7% Now!

Get the most out of your money—without sacrificing safety. Get 7%. It is now possible. But it is obtainable with safety only from a few sources.

7% is but a *temporary* offering to meet present conditions. You can always get 6%.

It is doubtful if you will ever again have the chance to receive this rate of interest from such a high grade security as our First Mortgage Bonds.

These securities rank with the best in the country. Every bond is a unit of a direct closed first mortgage secured by Detroit property worth at least double the amount of the mortgage.

These bonds are as safe as Detroit—and Detroit is as safe as the nation.

Remember that the payment of the 7% interest and the return of your principal is guaranteed to you by Detroit's largest Mortgage Corporation.

$7,000,000 of resources back up these 7% Bonds.

Take advantage of this unusual offering now and enjoy this high rate of interest for a long term of years while other investors are receiving 5% or at best 6%.

Resources over $7,000,000

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

AUTO BODY TO ISSUE STOCK

The Auto Body Company, Lansing, plans distribution of $600,000 additional common stock, which, it is stated, will be made in the very near future. Pending execution of these plans the company has requested removal of both preferred and common issues from the listed board of the Detroit Stock Exchange. The report states that both issues will be reinstated when the new stock has been distributed.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We however do obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	148	152
Columbia National Fire	16	17
Commerce Fin.	18	20
Detroit Mortgage, com	6¾	7¾
Detroit Mortgage, pfd.	8	9
Detroit Copper & Brass	18½	21
Detroit Home & Fire	65	68
Detroit Life	57	58
Eureka Croseus	81	83
Federal Bakeries Co.	27	30
Federal Internat. Co.	7¾	8¼
Fisher Body	84	88
General Necessities Corp.	10¾	13
Gladdey-Belle Oil, com.	29	31
Gladye-Belle Oil, pfd.	69	
Great Lakes Engineering, new	11	14
Greet Lakes Engineering, old	58	66
Hoover Steel Ball	14½	16
Hayes Wheel Co.	18½	14½
Interstate Fire	88	92
Invader Oil	118	
Invader Oil (new)	70	70
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks Units	9¾	10¾
Jewett, Bigelow & Brooks, com.	5½	7½
Kelsey Wheel	58	68
Little Wonder Stove	1¼	1¾
Monroe Binder Board	89	41
Detroit Motor Bus.	8	9
McCord Manufacturing, com.	10¾	10¾
McCord Manufacturing, pfd.	46	50
Michigan Copper & Brass	15	16
Mich. Fire & Marine	75	80
Noble Oil, com.	39	41
Petoskey Portland Cement	18	14
Peninsular Fire Ins.	21	31
River Raisin Paper	12	18
Trippensee Mfg. Co.	2¾	7½
Union Mfgs., 100% com.	6¾	8¾
Union Mfgs., 90% com.	6	11

Motor Stocks	Bid	Asked
Brisco Motors	17	19
Columbia Motors	4¾	4¾
Chelmore	¾	1¼
Chevrolet	165	190
Cleveland	275	325
Curtis Aeroplane	3	4
Durant Motors	21½	26½
Elcin Motors	6¾	7¾
Haynes	160	178
Hupp	14¾	14¾
LaFayette Motors	80	60
Liberty Motors	6	7
Liberty Motors, pfd.	40	50
Lee Tire	28½	66½
Maxwell Motor	6	5¾
Mercer	4	5
Mitchell Motor	8	9
Motorbue	8	9
Nash	800	820
Pierce-Arrow Truck	34¾	34¾
Republic Truck	16¾	16¾
Saxon Motors	6¾	7¾
Scripps Booth	65	88
Stearns	85	90
Stromberg Carburetor	40¾	46¾
Studebaker	36½	37½
Willye-Overland	7½	8
Wilson Truck	6¾	7½
Grant Motors	8¼	8¾
Jordan Motor		125
Peerless Motor	26	27½
White Motor	40¾	41½

Pontiac Stocks

	Bid	Ask
Altlite Baking Co.	10	11
American Forge & Socket	5	8
Michigan Drop Forge	9	14
Pontiac Mortgage & Investment Co.	95	
Van Auken Top	7	8½

BONDS

Detroit & Pontiac Ry. 5s, 1922	66	66
Detroit & Pontiac Ry. 4½s, 1926	86	64

BANK STOCKS

Pontiac Commercial Savings	168	170
Oakland County Savings	160	155
American Savings Bank	145	150
National Bank of Pontiac	180	140

Quotes by Hughes, Burke & Co., April 26.

Detroit Listed Bonds

Sales Week Ended April 26

Detroit Edison 8's, 1931, $1,000 @ 101¾
Detroit Edison 7's, 1936, $1,000 @ 95¾

Sales Bank Stock

15 United Savings @ 225.
48 First and Old @ 271.
10 American State @ 218.
Listed stocks, 16,857 shares.
Unlisted stocks, 279,189

AMERICAN LOAN EXPANDS TRUST DEPT.

The American Loan & Trust Company, Detroit, announces the appointment of Fred M. Breen, of Cadillac, as trust officer and it is stated that the company will seek additional trust business with its increased personnel and facilities. Mr. Breen has been judge of probate of Wexford county for nine years, and was probate clerk of the same county three years and is well equipped by experience and legal training to handle the trust department of the company. He is an attorney and is president of the Probate Judges' Association of Michigan and has made a special study of probate law.



FRED M. BREEN

In 1912 he gained considerable notice throughout the country when on being elected probate judge of Wexford county it was learned that he was the youngest probate judge in the United States. His legal experience includes service as United States commissioner since 1912, and circuit court commissioner for three terms. As probate judge he has handled many of the estates of the large lumbermen of northern Michigan. It is said that there has been only one appeal from his probate decisions and that was sustained by the higher court.

This addition to the business equipment of the American Loan is in line with the progressive policies of that institution which have been noticeable the last two or three years. A stock transfer department is another recent addition. The company heretofore has handled a few receiverships and has done a limited business in handling estates but has not exercised to any extent the trust powers granted it under its charter. Since 1906 the company has underwritten about $25,000,000 of first mortgage bonds, which have been sold to small investors in denominations of $50 and $100.

Detroit Stock Exchange

The official Detroit Stock Exchange list is omitted this week because changes since last week have been insignificant. There were sales the first time this year of Edmunds & Jones preferred and Kresge common, the former at 70 and the latter at 141. Motor Products moved up from 43 to 52, presumably on publication of the annual statement, which showed an unusually splendid condition.

Liberty bonds changed but little during the week, the greatest change being in the 3½s, which dropped from 89.90 last Wednesday to 88.50 Wednesday of this week.

Official bid and ask prices April 27 of listed stocks were:

	Bid	Ask
American Light	91	98
Charcoal Iron, com.		8¾
Charcoal Iron, pfd.	2¾	
Cities Service, com., XD	.851	256
Cities Service, pfd., XD	67¼	67¾
Consolidated Gas Since	6	
Columbia Sugar	11	11¾
Commerce Motor Car	7¾	
Continental Motor	7¼	7¼
Detroit Edison	66¾	67
Ford of Canada	256	
Hayes Mfg., com.	2¾	
Kresge, com.	134	145
Lincoln Motors	18½	18½
Mexican Crude Rubber	5¾	
Motor Wheel, com.	9¾	9¾
Packard, com.	10¼	10¾
Packard, pfd.	74¾	76
Paige-Detroit Motor	20	22½
Parke, Davis Co.		87½
Reo	21¼	21¾
Timken, com.	85	90
U. S. Radiator, pfd.	80	84

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,866,994	$121,468,294
January 12	90,178,447	120,867,006
January 16	101,995,828	181,841,867
January 28	79,013,907	97,641,888
February 2	87,995,286	111,734,266
February 9	78,806,482	101,049,806
February 16	70,921,988	101,284,770
February 28	87,711,081	96,828,767
March 2	98,826,892	127,068,864
March 9	75,762,952	104,211,689
March 16	96,888,486	129,176,965
March 23	60,166,422	146,867,666
March 29	69,061,971	114,481,666
April 6	78,146,971	104,666,761
April 13	81,881,967	136,661,867
April 20	99,777,826	181,666,146
April 26	85,828,894	112,866,767
Month of		
January	386,480,656	467,281,670
February	306,541,668	446,266,666
March	377,878,840	570,428,288
April		540,878,666
May		484,386,666
June		466,706,667
July		888,684,146
August		566,866,686
September		561,644,640
October		616,486,760
November		466,668,440
December		486,981,645
Year totals, 1920		$6,108,183,886
Yearly totals, 1919		$4,804,888,165

Cleveland Stocks

	Bid	Asked
American Multigraph	..	20
Dow Chemical	..	200
Firestone Tire & Rubber	84	86
Do, preferred	90	90
Fisher Oldo Body	17	19
Do, preferred	68	70
Goodyear Tire & Rubber	16	16
Do, preferred	68	67¾
Miller Rubber	75	80
Murray Ohio	5	6
National Acme	20	22
Paragon Refining	20	86
Prod. & Refin. Corp.	4¾	4¾
Do, preferred	7	7¾
Portage Rubber	17	
Do, preferred	24	
Standard Parts	1¾	
Do, preferred	6¾	
Victor Rubber	29	80
Youngstown Sheet & Tube	67	
Do, preferred		103

Quotes by Otis & Co., April 26.

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd.	80	100
Austin Machinery Corp., com.	8¼	2
Brunswick-Balke-Collender Co. com., A	85	
Brunswick-Balke-Collender Co. com. B		88
Brunswick-Balke-Collender Co. pfd.	87	88
Continental Motors Corp., com.	7¼	6¼
Continental Motors Corp., pfd.	88	86
Lansdrman Steel & Machine Co.	100	
Muskegon Finance Co., pfd., with 100% bonus of common	9	10
Occidental Hotel Co., pfd.	80	90
Shaw-Walker Co., pfd.	9¼	10
United Home Telephone Co., com.	1	2
United Home Telephone Co., pfd.	6	7

Quotes by Allen G. Thurman & Co., April 28.

McPHERSON SUCCEEDS MERRICK

Advices from Lansing Wednesday were that Governor Groesbeck had accepted the resignation of F. W. Merrick as state banking commissioner and had appointed Hugh McPherson, of Howell, as Merrick's successor. Mr. McPherson is a widely known banker in Michigan, having been connected with the McPherson State Bank of Howell for many years. Mr. Merrick's letter of resignation appears on another page of this issue.

COST ACCOUNTANT

Twelve years practical experience, thoroughly conversant with manufacturing costs. Can install systems and take full charge of work. References furnished. Box P, Michigan Manufacturer & Financial Record, 611 Free Press Building, Detroit, Mich.

Digitized by Google

$230,000,000
(Total Issue)

Northern Pacific - - - Great Northern

Joint 15-Year 6½% Convertible Gold Bonds

(C. B. and Q. Collateral)

To be dated July 1, 1921 | **Interest Payable January 1 and July 1** | **To Mature July 1, 1936**

Convertible at any time, at the option of the holder, as more fully described below, into 6% Bonds of the Northern Pacific Railway Company and/or 7% Bonds of the Great Northern Railway Company

Redeemable, at the option of the Companies, as a whole or in amounts of not less than $5,000,600, at 101½% and accrued interest at any time on 75 days' notice. Any Bonds called for redemption, in order to be converted, must be presented for conversion fifteen days before the redemption date.

Coupon Bonds in denominations of $1,000, $500 and $100, with privilege of registration as to principal. Fully registered Bonds, in denominations of $1,000 and authorized multiples thereof. Coupon and registered Bonds and the several denominations interchangeable.

THE FIRST NATIONAL BANK OF THE CITY OF NEW YORK, Trustee

The following summarized description of these Joint 6½% Convertible Bonds has been prepared for us by Howard Elliott, Esq., Chairman of the Northern Pacific Railway Company, and Louis W. Hill, Esq., Chairman of the Great Northern Railway Company, from their letter to us dated April 25, 1921:

Security The Joint 15-Year 6½% Convertible Bonds are to be the direct and joint obligations of the Northern Pacific and of the Great Northern Railway Companies, and are to be secured by a pledge of 1,658,674 shares (approximately 97% of the outstanding stock) of the Chicago, Burlington and Quincy Railroad Company (which percentage of stock has heretofore constituted the sole collateral security for the maturing "Burlington Joint 4s"), and in addition by $66,000,000 of mortgage bonds of the two obligor Companies, the deposited collateral being valued at an amount in excess of 120% of the principal amount of Joint 6½% Bonds to be issued.

Conversion Privileges The Joint 6½% Bonds may be converted, par for par, without charge, at the option of the holder at any time (upon presentation not later than fifteen days before maturity or earlier redemption), into 6% Refunding and Improvement Mortgage Bonds (Series B) of the Northern Pacific Railway Company, due 2047 (callable after 15 years at the Company's option at 110% and accrued interest), or into 7% Fifteen-Year General Mortgage Bonds (Series A) of the Great Northern Railway Company due 1936 (with no option of prior redemption), or into bonds of both issues in any ratio between the two which the holder of the Joint 6½% Bonds may desire, but not more than $115,000,000 of either of such mortgage bonds will be issuable upon such conversion.

Legality
for Savings Banks and Life Insurance Companies

Such Northern Pacific Bonds are, in the opinion of counsel, a legal investment for savings banks and trust funds in New York, Massachusetts, Connecticut and Vermont. Both such Northern Pacific Bonds and such Great Northern Bonds are, in the opinion of counsel, a legal investment for life insurance companies in the state of New York.

Earnings During the ten and one-half years from 1911 to 1920 inclusive, the combined average surplus income of the Northern Pacific and Great Northern Railway Companies, after payment of combined fixed charges, other than the interest on the outstanding joint bonds which are to be refunded by the new issue, was about $44,000,000 annually, and, in addition, the share of the two roads in the surplus income of the Chicago, Burlington and Quincy Railroad Company, after the payment of its fixed charges, averaged about $20,960,000 annually, the total annual average being about $64,960,000 as compared with $14,950,000 which will be required annually for interest on the new issue of Joint 6½% Bonds.

Equity—Since July 1, 1901, the Chicago, Burlington and Quincy Railroad alone has increased its surplus in the amount of approximately $200,000,000, against which no securities prior to the stock have been issued. The combined net assets of the Northern Pacific and the Great Northern, after deducting their prior debts, together with 97% of the net assets of the Chicago, Burlington and Quincy Railroad, after deducting its debt, indicate an equity, at book value, for these properties of close to $1,100,000,000.

The above bonds are offered, subject to issue as planned, for subscription at 96½% and interest, to yield approximately 6⅞%

Discount will be allowed at the rate of 6½% per annum on the principal sum of the Bonds from the date of payment to July 1, 1921, from which latter date interest will accrue on the Bonds.

Subscription books will be opened at the office of J. P. Morgan & Co., at 10 o'clock A. M., Thursday, April 28, 1921. The right is reserved to reject any and all applications, and also in any case, to award a smaller amount than applied for. The amount due on allotments will be payable at office of J. P. Morgan & Co. in New York funds on or about May 16, 1921.

Northern Pacific-Great Northern, C. B. & Q. Collateral 4% Joint Bonds, due July 1, 1921, with final coupon attached, will be accepted in payment at 100% and accrued interest to date of payment on allotments.

Temporary Bonds, exchangeable for definitive Bonds when prepared and received, will be delivered upon payment.

J. P. Morgan & Co. | **First National Bank, *New York***

The National City Company

Guaranty Company of New York | **Bankers Trust Company**
Harris Trust & Savings Bank | **Lee, Higginson & Co.**
Halsey, Stuart & Co. | **Dillon, Read & Co.**
First & Old Detroit National Bank | **Detroit Trust Company**

Digitized by Google

COLUMBIA SUGAR ANNUAL REPORT

The annual report of the Columbia Sugar Company was sent out this week. Below is presented a comparative balance sheet. The report of the executive committee dated April 15, 1921, is in part as follows:

"The conditions prevailing during the fiscal year closing March 31, 1921, make it a difficult period upon which to report to you. Opposition to the best contract, as conducted by the farmers' organization, delayed somewhat the writing of contracts for the growing of beets; but the final results were that 100 per cent were delivered to us more beets than in any other year of our history. The season was a fair growing one and when harvesting started the beets had a high sugar content. Warm weather, extending through the entire manufacturing season, caused an abnormal deterioration in the beets and a corresponding loss in sugar. High prices of supplies extended past the time beyond which we dared not delay purchasing, and labor was at its peak during the campaign.

"The net seahoard quotation for beet sugar on October 1, 1920, was 12.642 cents per pound. We had no sugar to offer until after the middle of the month, when the price had declined to 10.632 cents. From then on the decline was steady up to February 13, when the price reached 6.615 cents. Since then there has been some recovery and the price is now 7.44 cents.

"There has been very little demand for sugar since early last fall. When our plants closed we had sold only 16 per cent of our entire production, and to date 43 per cent. This necessitated borrowing more extensively than we had ever done to finance a campaign. The outlook for the fiscal year just starting is promising. We have sufficient acreage written to guarantee a full supply of beets at each plant, provided the growing season is favorable. Beets, supplies of all kinds and labor undoubtedly will be secured upon a more reasonable basis than they were last year.

"Combined operations of our three plants during the last season are as follows: Beets purchased, 243,046 tons; sugar produced, 59,826,599 pounds; dried pulp produced, 11,871 tons; molasses produced, 3,458 tons.

COLUMBIA SUGAR STATEMENT.

	Mar. 31, '21.	Mar. 31, '20.
Real Estate Bldgs. & Machinery	$4,888,694.53	$3,362,091.22
Cash	16,967.59	368,092.61
U. S. Bonds & W. S. Stamps	361,674.00	361,674.00
Notes Receivable	5,000.00	
Accts Receivable	29,271.63	35,861.82
Merchandise at Cost	3,011,370.60	949,326.13
Supplies	295,142.00	196,668.25
Cranes, Tanks, Cars, Trucks, etc.	104,272.00	63,070.00
Pre-payment on Beet Seed	4,132.26	13,780.58
U. S. Beet Seed Co. Stock	7,510.00	7,510.00
Weigh Stations, Track Acct. Houses	116,722.45	27,640.18
Advances	2,598.05	6,656.56
	$8,943,647.11	$5,503,571.49
Capital Stock	$3,000,000.00	$3,000,000.00
Reserve for Depreciation	1,343,926.71	1,117,251.73
Reserve for Insurance	25,000.00	
Reserve for Federal Taxes	$5,000.00	475,000.00
Accts. Payable	62,540.45	728.28
Bills Payable	3,295,000.00	
Surplus	1,132,080.58	910,591.48
	$8,943,647.14	$5,503,571.49

Officers are: John C. Ross, president and treasurer; N. R. Wentworth, vice-president, and E. W. Cressey, secretary and general manager.

TREASURY OVERSUBSCRIPTION

Subscriptions for treasury certificates of indebtedness of the series H-1921, dated April 15, 1921, and maturing October 15, 1921, aggregated $329,036,000 and the total of subscriptions allotted was $190,511,500. Subscriptions of the Chicago Federal Reserve district, including lower Michigan, were $30,421,000 and the allotment to the district was $22,932,000.

National Association of Cost Accountants

The preliminary program for the annual convention of the National Association of Cost Accountants, which is to be held in Cleveland, September 14, 15 and 16 next, has just been issued. It provides for three days of conferences on practical cost questions, including "Interest As An Element of Cost," "Cost Systems As a Means of Preventing Waste," "Uniform Methods and Standardization Costs," "Executive Use of a Cost System" and a number of similar topics. It is expected that upwards of a thousand cost men will take part in these conferences.

The National Association of Cost Accountants has just issued as Volume 11, No. 10, of its official publications, "A Bibliography of Cost Books." This probably contains the most complete list of cost books which has been published in this country. It is limited to books, it being the intention to cover pamphlets and other material in a supplementary bibliography to be issued later.

The bibliography is divided into five sections, one containing books devoted to the general field of costs; one to books on accounting and auditing, which contain sections dealing with costs; one to books on industrial engineering, with sections on costs; one to books on costs for particular industries, this section being divided into the leading industries; and one dealing with special phases of cost accounting, such as overhead, depreciation and the like. In all, about 350 titles are listed.

Copies of the book may be had on application to the Detroit Chapter of the National Association of Cost Accountants, 924 Book building. The price is 75 cents a copy to non-members of the association.

The national headquarters of the National Association of Cost Accountants have been moved from the Woolworth building to the twenty-first floor of the Bush Terminal building, 130 West Forty-second street, New York.

LANSING FOUNDRY STOCK SALE

Lyman Covell, of G. M. Murchey & Company, Lansing, has resigned to become director of stock sales of the Foundry Equipment Company. This company has placed on the market $100,000 of eight per cent preferred at $10 a share. Purchasers of the preferred are given the option of buying an equal amount of common stock at the same price. The stock is being sold through the Murchey company. The last annual report of the foundry company shows total assets of $462,557.33, there having been a steady increase since the concern was founded in Lansing in 1913.

SIMPSON ON TAX COMMISSION

Governor Groesbeck has appointed Nathan F. Simpson, Hartford, former warden of Jackson prison, a member of the state tax commission to succeed Orlando F. Barnes, whose term expired in January.

DETROIT EDISON REVENUES

Detroit Edison Company's gross revenues for March were $2,055,387, an increase of 10.1 per cent, compared with March, 1920. Total operating and non-operating expenses were $1,463,366, an increase of 3.6 per cent. Balance after interest was $317,569, an increase of 13.9 per cent. For the three months ended March 31, total revenues were $6,230,689 and net was $1,772,695, being an increase in the former of 12.4 per cent and an increase in the latter of 23.6 per cent. Balance after interest was $975,417, an increase of 5.9 per cent.

BRUNSWICK-BALKE-COLLENDER

The balance sheet of the Brunswick-Balke-Collender Company, Muskegon, for the year 1920 shows a deficit of $331,715, as compared with a surplus as of $2,258,601 for 1919; $734,196 for 1918 and $692,688 for 1917. The net profit and loss surplus carried over was $309,326, as against $8,015,560 in 1919; $5,756,969 in 1918 and $5,022,781 in 1917. Assets of the company on December 31, 1920, were $44,939,375, as compared with $29,132,030 at the end of 1919.

The assets are listed as follows: Real estate, etc., $17,152,895, as against $7,674,931 in 1919; sundry investments $204,236, as compared with $220,775; inventories, $17,662,331, as against $12,098,415; accounts and bills receivable, $9,163,039, as against $7,228,601; cash, $1,068,341, as compared with $863,303; deferred charges, $1,028,131, compared with none; no United States or Canadian securities, compared with $1,452,128 in 1919.

The liabilities are made up as follows: Preferred stock, $4,818,500, as compared with $4,833,506 in 1919; A stock, $9,000,000, and B stock, $13,500,000, as compared with $6,000,000 common stock in 1919; gold notes, $3,200,000, as compared with $4,000,000 in 1919; note payment due, $400,000, compared with none; bills payable, $9,386,000, as compared with $2,179,189 in 1919; accounts payable, $3,955,895, as against $2,839,185; reserves for taxes, $70,000, compared with $1,000,000; sundry reserves, $98,330, as compared with $60,000; dividends payable, $84,323, as compared with $84,586; surplus, $309,326, as compared with $8,015,560.

During the year, says the report, the company added $2,484,486 to its surplus through a revaluation of its properties. This sum represents $0 per cent of the increased valuation shown. During the year a 150 per cent stock dividend, amounting to $13,500,000, par value, was paid on the new Class A stock in Class B stock.

CORUNNA BRICK RECEIVERSHIP

On petition of a majority of the stockholders of the Corunna Brick Company, Corunna, Judge Ira W. Jayne, of Wayne circuit court, has appointed the Security Trust Company, Detroit, receiver of the concern. The company, which manufactures face brick, owns 100 acres of land, from which it obtains its shale and coal. Lack of capital, together with dissatisfaction among the stockholders, is said to be the reason for the application for dissolution. The receiver will continue operations on a limited scale pending decision on the dissolution of the company and sale of its property, hearing on which has been set for May 19.

COMMONWEALTH POWER EARNINGS

For the twelve months ended March 31 the Commonwealth Power, Railway & Light Company reports gross earnings of $31,756,269, an increase of $4,430,495 over the total for the preceding twelve months. After providing for charges and taxes, the net was $822,879, a decrease of $742,266.

The company has passed the preferred quarterly dividend of 1½ per cent, payable in scrip, to avoid an increase in indebtedness through the issuance of additional scrip.

WOLVERINE INSURANCE STOCK ISSUE

The second issue of the Wolverine Insurance Company capital stock has been passed by the Michigan Securities Commission and is being offered for sale. The first issue of $100,000 was absorbed some time ago. The company, located in Lansing, handles automobile insurance and selected business risks, and was organized as a running mate of the Michigan Employers' Casualty Company. This second issue has been made necessary on account of large re-insurance business offered by the larger eastern insurance agencies.

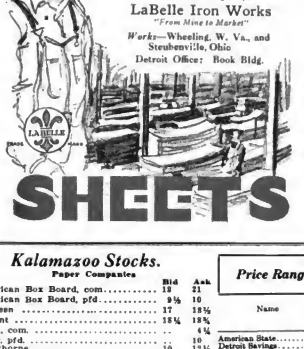
Digitized by Google

LABELLE

Service Without Waste

It's because LaBelle sheets are made of clean, purely refined, open-hearth steel that they show freedom from those hidden defeets which cut down length of service and cause wastage in the operations of bending, tinning, galvanizing, etc.

Wheeling Steel Products Co.
WHEELING, W. VA.
Exclusive Sales Agent for
LaBelle Iron Works
"From Mine to Market"
Works—Wheeling, W. Va., and Steubenville, Ohio
Detroit Office: Book Bldg.



SHEETS

Prompt Payment

BY providing him with an income while disabled by accident, the Compensation Act is designed to make the injured workingman self-supporting.

WHEN payments of compensation are long delayed, this purpose is defeated.

IT is no more than good business and common justice that the injured workingman should receive his compensation as quickly as legal formalities will permit.

SINCE the organization of the Company in 1913 it has been the consistent purpose of the Michigan Mutual to pay all compensation claims as promptly as possible.

ITS success in this is proven by the fact that our Company holds the State record for promptness in the payment of compensation.

CONSIDER the interests of your employees and insure in the

Michigan Mutual Liability Company

Real Estate Exchange Building
Detroit — Michigan
President
Home Office—Cherry 3870 Grand Rapids Lansing and Saginaw Hemlock—Cadillac 2670

Kalamazoo Stocks.

	Bid	Ask
Paper Companies		
American Box Board, com	18	21
American Box Board, pfd	9½	10
Bardeen	17	18½
Bryant	18¼	18⅝
Eddy, com.	..	4¼
Eddy, pfd.	..	..
Hawthorne	10	12½
Kalamazoo, new	20	26
Parchment, stock	17¼	18
Parchment, rights	..	8¼
King	18	19¼
Lee, units	125	160
Mac Sim Bar	12½	13¼
Michigan	18	18½
Monarch	12¼	13½
Rex	16	18½
Northern Michigan Pulp	100	125
Standard	28	30
Sutherland	9½	10½
Watervliet	19¾	20¼
Western Board	..	20¾
Banks		
First National	225	..
Home Savings	175	180
Kalamazoo City Savings	190	200
Kalamazoo National	160	162
Miscellaneous		
Barley Motor, com	35	50
Barley Motor, pfd.	65	85
Hayes Wheel	16	18
Kazoo Loose Leaf	12½	14½
Kazoo Corset	..	16¼
Utah-Idaho Sugar	6	6¾
Kalamazoo Sanitary Mfg.	..	10¼
Limousine Body	..	12¼

Quotes by Olmsted & Mulhall, April 26.

Ann Arbor Stocks.

	Bid	Ask
Aon Arbor Wire Fabric	..	6
Economy Baler Co., com	9	10½
King Trailer Co., pfd	..	..
Hoover Steel Ball, com	14½	15½
Mich. Milling Co., com	..	7¼
Motor Products Co., com	42	44
Prod. Foundries, com	7¼	8
C. A. Sauer Co	5	6

Quotes by Langley, Hildner & Co., April 26.

Price Range Detroit Bank Stocks

Name	Detroit Stock Exchange					
	Range 1921 High	Low	Range 1920 High	Low	Apr 25, '21 Bid	Ask
American State	221	215	226	200	*218	..
Detroit Savings	260	258	350	259	*260	..
					*200	..
Dime Savings	258	258	259	256	*258	..
First and Old Detroit Nat'l	273	271	274	268	*273	..
First State					*200	..
Highland Park State	260	260	268	265	*260	..
Merchants National	149	149	163	142	140	..
Nat'l Bank of Commerce	210	210	210	190	210	..
Peninsular State	215	215	220	215	*220	..
People State	360	355	335	305	*355	..
United Savings	225	208	215	209	*225	..
Wayne County Home	..	..	347	305	347	..
American Loan and Trust	..	..	155	155	*155	127
Bankers Trust	..	..	..	..	..	..
Guaranty Trust	..	..	148	148	..	160
Detroit Trust	295	255	..	..	*275	300
Security Trust	..	..	..	..	1300	..
Union Trust	180	180	197	195	*180	195
Commonwealth-Federal	..	..	130	..	1105	107
Bank of Detroit	..	..	..	..	192	200
Continental Bank	..	..	..	..	1125	..

*Last Sale.
†Nominal Quotation.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co	24	25½
Auto Body, com.	..	7
Auto Body, pfd.	..	8
Bates & Edmonds Motor Co	..	15
Federal Drop Forge Co	8½	10
Firt Bond & Mortgage Co., Lansing Company	28	42
Michigan Mortgage Co.	2¾	10
Michigan Screw Co.	18	28
Motor Wheel Corporation	8¾	10¼
Novo Engine Co.	22	25
Reo Motor Car Co	21¼	21½
Lansing Stamp & Tool	..	20

Quotes by G. M. Murchey & Co., April 26.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	11¾	13¼
Commonwealth Power	13	13½
Lufkin Rule, pfd.	10	15
Michigan Sugar, com	7¾	7¾
Michigan sugar, pfd.	8	8¼
National Grocer, com	7¼	7½
National Grocer, pfd.	81	84
Saginaw Shipbuilding Co.	8	10
Symons Bros.	11¾	13
Valley Home Tel. Co., pfd.	..	45
BANK STOCKS		
Second National	205	215
American State Bank	200	210
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	..	..

Quotes by Phippe, Williams & Beeson, April 26.

Grand Rapids Stocks

American Public Utilities, Common	7	- 12
American Public Utilities, pfd	18	- 21
Commonwealth P. R. & L., com	9	- 11
Commonwealth P. R. & L., pfd	28	- 31
Citizens Telephone Company	4¾	- 4¾
United Light & Railways, com	22	- 24
United Light & Railways, pfd	53	- 57
Cities Service, Bankers' Shares	30¼	- 31
Cities Service, com	250	-255
Cities Service, pfd	85¼	- 87
Cities Service, Debenture "B"	125	-130
Cities Service, Debenture "C"	32	- 34
Cities Service, Debenture "D"	34	- 36

Quotes by Howe, Snow, Corrigan & Bertles, April 26.

A CORRECTION

In our issue of April 2 it was stated that the mason contractors of Detroit and their employes had reached an agreement whereby the wage scale was to be $1.12½ an hour, effective May 1. This was incorrect. The actual situation is that the brick layers and master masons have agreed upon a reduction from $1.25 to $1.12½ until May 1, after which date the rate will be $1 an hour.

Digitized by Google

CANADA AS A PRODUCER

We have prepared a pamphlet which contains valuable information on Canada's resources and trade.

Those interested in the trade possibilities of this country, or seeking fields for profitable investment will find the brochure of special interest. It will be sent to you on request, without charge, by any of our branches.

THE CANADIAN BANK OF COMMERCE

Paid-up Capital, $15,000,000 *Reserve Fund $15,000,000*

Walkerville Branch—H. B. Parsons, Mgr. Windsor Branch—W. G. Lynch, Mgr.

RIVER FRONT

Unrestricted; Mile Circle. *Sacrifice for Cash*

Have good tenant who will take long or short lease. Rental will pay good return on money invested. The only land at this location which can be purchased.

LOUIS G. PALMER & CO.

558 Penobscot Bldg. Cadillac 317

C. C. COAL COKE OREY.

1300-4 MAJESTIC BLDG. DETROIT, MICH.

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg. Phones Cherry 8640

We solicit your inquiries

MUNICIPAL BONDS

Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS

Yielding 5½% to 6.75%

Send for our list.

Bolger, Mosser & Willaman

2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

GMC Statement

(*Continued from Page 23*)

INCOME ACCOUNT.

	Year Ended Dec. 31 1920.	Year Ended Dec. 31 1919.
Net earnings for year before during interest, but after all expenses of manufacturing (including maintenance), selling and administration, as well as ordinary taxes, insurance, depreciation ($10,300,545.17 in 1920) of plant and equipment..	$ 83,702,063.28	$100,067,099.50
Less: Provision for employes' bonus	$ 1,488,658.49	$ 8,026,929.85
Provision for employes' investment fund	4,007,186.00	1,935,391.61
Interest on notes and trade acceptances	5,694,006.47	1,176,777.62
	$ 11,594,749.96	$ 11,138,099.08
	$ 71,107,313.42	$ 92,029,630.51
Less: Special write-offs and write-down of inventory in excess of reserves available set up in previous years	$ 19,002,188.43	.....
Employes' housing development	3,207,003.43	2,013,111.13
	$ 25,899,791.85	$ 2,013,111.13
	$ 45,277,521.58	$ 90,016,519.38
Less: Provision for Federal taxes and extraordinary expenditures	3,594,000.00	30,000,000.00
	$ 41,353,521.58	$ 60,016,519.38
Less: Special reserve for unforeseen contingencies	7,500,000.00	.....
	$ 37,883,521.58	$ 60,016,519.38
General Motors Corporation proportion thereof	$ 37,750,375.01	$ 60,005,484.49
Debenture dividends at rate of 7%	$ 5,476,721.31	.....
Debenture dividends at rate of 6%	3,169,987.00	3,180,138.00
Preferred dividends at rate of 6%	973,749.00	1,032,374.00
	$ 5,620,436.31	$ 4,212,512.00
Amount earned on Common Stock	$ 32,129,948.90	$ 55,792,971.89

SURPLUS ACCOUNT.

	Year Ended Dec. 31, 1920.	Year Ended Dec. 31, 1919.
Surplus at the beginning of the year	$ 79,641,897.32	$ 26,408,937.43
Addition through acquisition of properties and other adjustments	.....	$ 764,539.00
Addition arising through adjustment of no par value common stock outstanding to a basis of $10 a share	7,635,180.00	.....
Addition arising from sale of common stock in excess of $10.00 a share	33,709,916.23	.....
Amount earned on common stock as per income account above	32,129,948.90	55,792,971.89
	$152,106,941.45	$ 86,966,438.32
Less: Cash dividends paid on common stock:		
Feb. 1, 1920—2%	$ 4,734,932.60	$ 4,431,439.00
May 1, 1920—20.25 share on no par value	4,449,015.35	4,058,001.00
Aug. 1, 1920—20.25 share on no par value	4,449,353.25	4,215,147.00
Nov. 1, 1920—20.25 share on no par value	4,559,997.00	4,643,956.00
Stock dividends paid on common stock:		
May 1, 1920—2½%	3,921,696.50	.....
Aug. 1, 1920—2½%	4,497,546.25	.....
Nov. 1, 1920—2½%	4,560,000.30	.....
	$ 30,833,724.45	$ 17,324,541.00
Surplus December 31	$121,273,217.00	$ 79,641,897.32

STATEMENT OF RECEIPTS FROM ALL SOURCES AND DISPOSITION THEREOF FOR THE THREE YEARS 1919 TO 1920, INCLUSIVE.

Receipts—	
Net income as per income account	$175,299,614
Charged to depreciation reserve	21,660,948
Employes' bonus	12,849,806
	$209,810,368
Less: Decrease in miscellaneous reserves	8,206,793
Total received from operations	$201,543,569
Proceeds from sale of common stock	$ 95,494,836
Proceeds from sale of 6% debenture stock	25,475,000
Proceeds from sale of 7% debenture stock	10,898,700
	$134,868,536
Less: Purchase of debenture stock	4,091,800
	130,876,086
Properties acquired and paid for in:	
Common stock (at $10 a share)	$ 51,291,700
Debenture stock (par value)	41,248,300

Digitized by Google

Value of such property in excess of foregoing amounts, accounted for as paid in surplus	29,601,620	
		122,141,520
Amounted contributed by corporation to Investment Fund	$ 6,437,577	
Payments made by employes in Savings Fund	2,901,344	
		10,340,921
Purchase money notes issued in payment for common stock, Fisher Body Corporation		9,940,000
Miscellaneous mortgage obligations assumed in purchase of properties		1,629,970
Total to account for		$676,321,506
Disposition—		
Permanent investment increased:		
Real estate, plant and equipment		$198,505,598
Investment in allied and accessory companies:		
General Motors Building Corporation	$ 13,982,521	
Modern Housing Corporation	11,161,523	
Fisher Body Corporation	27,455,711	
General Motors Acceptance Corporation	4,000,000	
General Leather Company	1,250,000	
Securities in escrow, covering additional purchase of property	3,940,700	
Miscellaneous	4,828,771	
		65,364,826
Good-will, patents, etc., acquired in connection with acquisition of properties		10,443,215
Total increase in permanent investment		$274,302,929
Deferred expense		5,056,722
Working capital increased:		
Cash and marketable securities	$ 27,561,662	
Sight drafts, notes and accounts receivable, inventories and prepaid expenses	151,267,784	
Total	$178,831,446	
Less: Increase in accounts and acceptances payable and accrued items	21,835,088	
Increase in notes payable	72,421,464	
	$94,256,539	
Increase in net working capital		84,574,967
Payment of Federal taxes		47,374,750
Payment of preferred and debenture dividends	$10,931,230	
Payment of common dividends	46,455,140	
		57,386,370
Invested under the Employes' Investment Fund		3,392,977
Payment to minority interests in subsidiaries and purchase of minority interests		995,453
Payments to bonus beneficiaries in cash and purchase of stock for bonus		2,136,308
Total accounted for		$676,321,506

DETROIT TRUST SAFE DEPOSIT COMPANY

Articles of incorporation of the Detroit Trust Safe Deposit Company, with a capital of $100,000, have been filed. The organizers are Fred T. Murphy, Sidney T. Miller, A. H. Buhl, Charles A. Dean and Ralph Stone, each of whom has 200 shares of stock of par value of $100. This company has been organized under the safety and collateral deposit company act to handle the new safe deposit department of the Detroit Trust Company. Under this act the powers of the company are somewhat enlarged. The new department will be thrown open to the public about May 1. There are 3,300 individual boxes. Entrance is from the lobby of the trust company.

LINDERMAN STEEL COMPANY

Following is a balance sheet of the Linderman Steel Company, Muskegon, as of December 31, 1920:

ASSETS.	
Plant and Equipment	$ 187,260
Cash and investments	2,517,151
Notes accounts rec	1,037,949
Inventories	20,662
	$3,692,693

LIABILITIES.	
Preferred stock	$ 590,000
Common	1,068,000
Accounts payable	222,977
Accruals	1,855
Reserve for taxes	673,857
Surplus	1,136,260
	$3,692,943

We do not vouch for the correctness of this statement.

STOCK SALESMAN BRINGS SUIT

John H. Colleton, formerly a stock salesman for A. W. Wallace & Company, Grand Rapids, has entered suit for slander and malicious prosecution against Harold Davies, whose charge of selling stock in the Michigan-Colorado Copper Company by misrepresentation against Colletton was thrown out of court recently.

New Issue

$95,000

Sanilac County, Michigan

6%

Highway Improvement Bonds

Tax exempt in Michigan and free from Federal Income Tax

Dated May 1, 1921. Due Serially.

Principal and semi-annual interest payable at Peoples State Bank, Detroit.

FINANCIAL STATEMENT

Assessed valuation $37,466,595
Total bonded debt, including this issue (less than 1%) 335,000
Population 33,930

PRICES AND MATURITIES

COUNTY PORTION			TOWNSHIP PORTION			DISTRICT PORTION		
$4,000	May, 1922	.8 ¼ % Basis	$1,000	May, 1922	.8 ¼ % Basis	$1,500	May, 1922	.8 ¼ % Basis
4,500	" 1923	.8 ¼ % "	2,000	" 1923	.8 ¼ % "	3,000	" 1923	.8 ¼ % "
5,000	" 1924	.8.00% "	2,000	" 1924	.8 ¼ % "	3,000	" 1924	.8 ¼ % "
5,000	" 1925	.8.00% "	2,000	" 1925	.8 ¼ % "	3,000	" 1925	.8 ¼ % "
5,000	" 1926	.8.05% "	2,000	" 1926	.8 ¼ % "	3,000	" 1926	.8 ¼ % "
4,000	" 1927	.8.05% "	2,000	" 1927	.8 ¼ % "	3,000	" 1927	.8 ¼ % "
5,000	" 1928	.8.00% "	2,000	" 1928	.8.00% "	3,000	" 1928	.8.00% "
5,000	" 1929	.8.00% "	2,000	" 1929	.8.00% "	3,000	" 1929	.8.00% "
5,000	" 1930	.8.05% "	2,000	" 1930	.8.00% "	3,000	" 1930	.8.00% "
5,000	" 1931	.8.05% "	2,000	" 1931	.8.00% "	3,000	" 1931	.8.00% "

Sanilac County is rich in agriculture, and one of the most thriving farming communities in the "Thumb of Michigan." Sandusky is the county seat.

Legal Opinion—Messrs. Miller, Canfield, Paddock & Perry, Detroit.

Established 1880

Paine, Webber & Company

BOND DEPARTMENT

140, 148 Penobscot Bldg., Detroit
Main 5766.

Boston New York Chicago



WAKE UP!!
IT'S TIME TO BUILD

"Build for the ages with UNITED Supplies"

UNITED FUEL & SUPPLY CO.
BUILDING SUPPLIES & COAL

Digitized by Google

Need an Elevator?

Ask LEITELT

Modern Designs

Superior Construction

LEITELT IRON WORKS

Office and Factory

315 Mill Ave., Grand Rapids, Mich.

Eastern Michigan Service

1900 N. Mich. Ave., Saginaw, Mich

THE BABY TYPEWRITER STAND

$6.50 F.O.B. DETROIT

SAVES SPACE and TIME



A strong, well-built Stand, five-ply oak, veneered top. Will last a lifetime. Easy to move about. Suitable for small office and home use.

Write for free trial offer.

Auto Parts Mfg. Co.
1821 Trombly Ave.
Detroit, Mich.

The Bellefontaine Bridge & Steel Co.

Engineers, Fabricators and Erectors

STEEL BUILDINGS AND BRIDGES

Main Office and Works, Bellefontaine, O. Detroit Office, Ford Bldg. Cadillac 4653.

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforte and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

Preparing for Death and Taxes

(Continued from Page 6)

On all amounts in excess of $10,050,000 the tax is 25 per cent. The law specifies that a certain amount of life insurance shall be exempt from the inheritance taxes.

The majority of the states having an inheritance tax law impose a tax on transfers of property, wherever located, belonging to a resident deceased. Because this is not an invariable rule, liability for inheritance taxes presents a difficult problem. For instance, if A dies in state X leaving shares of stock in a company located in state Y, and this company does business in state Z, it can be seen that any transfer of these shares will be taxed in all three states, and if the certificates are on deposit in a fourth state that commonwealth also may claim a tax. The tax is not a levy upon property but upon the right of succession to property. Where stocks are held by an estate, or where bonded or other debts are owed to it, the laws of the state where the corporation is organized, of the states where it controls property, of the states where the debtors live, and of the states where the securities or evidences of debt are actually held, must be examined. The questions arising here are governed largely by the growing need for revenue—that is, they are governed by political expediency.

Four Classes of Beneficiaries

The Michigan law divides beneficiaries into four classes: A—Grandparents, father, mother, husband, wife, child, brother, sister, widow of son, husband of daughter, adopted or mutually acknowledged child, for whom all real property is exempt entirely and personal property is exempt up to $5,000 for the wife and $2,000 for all others. After exemptions the rate on the first $50,000 of valuation is one per cent; $50,000 to $500,000, two per cent; over $500,000, three per cent.

B—Non-resident allen collaterals and strangers to the blood and corporations incorporated without the United States, $100 exemption; twenty-five per cent on all other property.

C—All other persons and corporations except Class D, $100 exemption; first $50,000, five per cent; $50,000 to $500,000, ten per cent; over $500,000, fifteen per cent.

D—Gifts to religious, charitable and similar purposes, to Michigan corporations, entirely exempt.

The tendency of the average man is not to give serious thought to the prospect of shuffling off this mortal coil until on the brink of the grave, but when a man does begin to think about the end he is inclined to seek ways and means of avoiding as much of the inheritance and estate taxes as possible. This often is attempted by property transfers or joint ownership. One case cited is that of a man who had property valued at $1,200,000. He drew an agreement with his son, which showed that one-half of his estate constituted a debt owed to his son. When the father died the son had some difficulty showing the tax collectors what the debt was for, but finally it was put down as remuneration for services rendered. The inheritance tax was greatly reduced but the income tax got the son. The inheritance tax on $500,000 was about $23,000 but the income and sur taxes amounted to $267,638, a total of over $290,000. The inheritance taxes on the total estate would have amounted to approximately $110,000.

The transfer of property before death is looked upon with suspicion by the revenue departments of the Government and the states. There have been reciprocal transfers—a father transfers his property to his son; the son transfers the property back to his father. The transfers are held by the trust company or attorney until the death of one or the other of the parties to the agreement. Suspicion is directed to these transfers in contemplation of death and no effort is spared to collect taxes on them. Also there is the danger of a breach of faith where property is so handled.

Where property is held jointly, if one half was contributed by the decedent and the other half by the survivor, the decedent's estate pays the tax on one half of the property. On the other hand, if the survivor contributed all of the property and merely agreed to joint ownership, no tax can be collected on any of the property until the survivor dies. If the decedent contributed all of the property, then the decedent's estate pays the tax and there is no claim against the survivor.

Life Insurance as a Solution

The growing importance of protecting estates from disorganization, and in some cases, wholly annecessary and unreasonable depreciation in the payment of inheritance taxes has brought into favor the purchase of life insurance in large sums, not primarily to indemnify life but to indemnify the estate. All the rules and regulations, rates and premiums governing life insurance apply to policies taken out to meet inheritance taxes and other costs levied upon estates. The sale of life insurance for this purpose adds another department to underwriting. The company and its agents specializing in inheritance tax insurance must be well versed in inheritance tax laws as well as the numerous subterfuges attempted to avoid these taxes.

Personal life insurance up to $40,000 is exempt from taxation. Estates up to $50,000 are exempt from federal inheritance taxes, and certain exemptions are allowed in various states. Omitting the states, the federal exemption and life insurance exemption provide a total exemption of $90,000. Life insurance is paid in cash and is available for taxes, leaving the estate intact.

A man in the prime of life, with every prospect of living at least his allotted three score or more years, cannot determine what his estate will be at death. It may be multiplied many times over, but the flexibility of insurance provides against this uncertainty. It can be increased as the estate grows, with the result that at the time of death the insurance can be made sufficient to cover all expenses and taxes, maintain the integrity of the estate and protect business from disorganization and the heirs from exorbitant fees and undue worry.

There is an increasing tendency on the part of men with considerable property to be passed on to their families, business associates or relatives to place the final settlement of their estates in the hands of a trust company. This is particularly advisable in these days of supertaxation, for the reason that trust companies have the facilities and the experts to administer estates with the least loss to the beneficiaries. It is equally advisable, when considering insurance for business purposes, to seek the services of competent life insurance counsel. There need be no obligation—in fact, there should not be an obligation where such counsel is sought. With the benefit of life insurance counsel and trust company advice and service, the man with property to pass on can proceed with the business of living long, happily and prosperously without worrying about the fate of his life's earnings after he has ceased to watch over them.

FLOORING COMPANY RESUMES

The West Michigan Flooring Company, Manistee, has resumed operations with a force of about fifty men.

Digitized by Google

B. OF C. CRUISE JUNE 9

It is announced that the 1921 cruise of the Detroit Board of Commerce will start June 9 and end the following Monday. The steamer Noronic has been charted and the point will be Georgian Bay. The cruise committee is composed of W. A. C. Miller, of the W. A. C. Miller Lumber Company, chairman; C. Hayward Murphy, of Simon J. Murphy Company; Arthur W. Winter, of Evans-Winter-Hebb, Inc.; Jacob Nathan, of Detroit Stock Exchange; William F. Holliday, of Burroughs Adding Machine Company; Robert H. Clancy, United States customs appraiser; Charles A. Hughes, Detroit Athletic Club; Sidney R. Small, of Harris, Small & Lawson; Harry Andrews, of Boyer, Campbell & Company; James Ballard, of the Solvay Process Company; Edward R. Grace, of the Michigan Manufacturer & Financial Record, and W. A. Mara, of the Board of Commerce.

SAFETY CAMPAIGN STARTS MAY 23

In a proclamation announcing another safety campaign for the week of May 23, Mayor Couzens, Detroit, calls attention to the fact that an a resmit of the work of the Citizens' Public Safety Committee last year the insurance companies cut the accident liability rates more than $1,000,000 for Detroit automobile owners this year. In the streets of the city last year 228 persons were killed, of whom 85 were children.

INCREASING LOWELL OUTPUT

Ten additional machines have been installed in the Lowell branch plant of the Michigan Garment Company. The company is reported to have received several important foreign orders.

Drilling

(*Continued from Page* 11)

The main types of drilling machines have been discussed. In each of these types there are many variants. This is particularly true of the smaller machines. There are several manufacturers who will make the machines to fit the purchaser's individual needs.

The first thing in looking over the proposition is to make sure just what your drilling requirements are. It sometimes happens that you really do not need a machine for the operation on which you are crowded. It may be that some other operation apparently well cared for could be performed on some other machine to much better advantage and the purchase of a small machine to do this would release enough capacity to handle the excess drilling requirements.

There is a tendency to run true to form in buying machine tools as in buying clothes. You become accustomed to one type of machine and your first thought is how to do that particular job on that type of machine. This is particularly wrong at the present time, for there are so many excellent machines of so many varieties that it is necessary to study the whole problem carefully to get the best solution.

Do not rely entirely on what the salesman tells you about his machine, because not all of those new models put out have proved to be just what was expected. Find out who is using that particular machine and go take a look at it and see how it is standing up.

A trip through the factories of this country shows many a paradox. In certain departments the factory will be well up to the times but in other departments there will be much out-of-date machinery which could have been delivered to the scrap heap years ago at a considerable net saving. This is particularly true of drilling machines.

Have you any which would appear to advantage in a Museum of Ancient Practices?

LET A SHEPARD HOIST HANDLE YOUR COAL



A SHEPARD HOIST WILL SAVE DOLLARS FOR YOU

SHEPARD ELECTRIC CRANE & HOIST CO.
Exclusively Represented by
J. W. DOPP & CO. (Inc.)
CAD. 6163 — 34 W. COLUMBIA ST. DETROIT — CAD. 6164

NOT AN AGENT BUT A MANUFACTURER
I WANT YOUR WORK



J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.
TELEPHONE MAIN 3345

MAY I SERVE YOU?
CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES
Production Machine Work
PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS
SEND ME YOUR INQUIRIES

FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $500,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Motor Stocks

Wm. A. Neer & Co.

Members Detroit Stock Exchange

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

NOTICE OF BOND SALE.

For $120,000 6 Per Cent School Building Bonds, City of Clare, Mich.

The Board of Education of School District No. 2 Fr., City of Clare and Townships of Grant and Vernon, Counties of Clare and Isabella, State of Michigan, will at 7:30 P. M. on May 18, 1921, at the City Hall, consider bids for $120,000 School Building Bonds of said district, dated March 15, 1921, as follows: $42,000 serial bonds as follows: $2,000 due March 15, 1924; $3,000 due March 15, 1925; $3,000 due March 15, 1926; $3,000 due March 15, 1927; $3,000 due March 15, 1928; $3,000 due March 15, 1929; $3,000 due March 15, 1930; $4,000 due March 15, 1931; $5,000 due March 15, 1932; $5,000 due March 15, 1933; $5,000 due March 15, 1934; $4,000 due March 15, 1935; $5,000 due March 15, 1936; and $78,000 refunding bonds due (to be reissued) March 15, 1936. Interest 6% payable annually. Said bonds constitute general obligations of said district which includes the whole city of Clare and some adjacent territory. No other indebtedness. $57,000 insurance money on hand. Assessed valuation, $1,312,203. Population of district about 2,000. All bids must be accompanied by a certified check payable to the order of the undersigned in amount of 2% of the par value of the issue. All bids must be addressed to the undersigned and be received not later than 7:30 P. M., May 10, 1921. Right to reject any or all bids is reserved.

C. A. READING,
Secretary Board of Education, Clare, Michigan.

Detroit Tigers' Home Dates for 1921

April 29, 30, May 1, 2	St. Louis
May 3, 4	Chicago
May 10, 12, 13	New York
May 14, 15, 16, 17	Washington
May 18, 19, 20, 21	Boston
May 22, 23, 24, 25	Philadelphia
May 26, 28, 29	Chicago
May 30 a. m., p. m., 31	Cleveland
June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Cleveland
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

NEW MICHIGAN CORPORATIONS

FOR WEEK ENDED APRIL 23, 1921

Detroit Steering Control Co., Detroit; manufacture and sale of the Lord steering control and other mechanical devices and products; Franklin L. Lord, 2101 Jefferson ave.; Maurice N. Prange, Frank J. Jeschke, Detroit.... $ 20,000

Work-Organizer Specialties Co., Detroit; to manufacture, buy and sell patents, trade marks; originals, invent, design or produce same; issue bonds, etc.; Charles G. Camp, 4720 McGraw ave.; Claude A. Dumont, Anna Barfoot, Detroit..... 50,000

Purity Co., Grand Rapids; purchase, bottling and sale of beverages, malt syrups and allied products; Fritz W. Just, Philip J. and Julius J. Petersen, Grand Rapids..... 25,000

John R. Tire Repair Co., Detroit; to buy and sell new and used tires; tire repairing and to deal in automobile accessories; E. J. Cutulis, 1423 John R. st.; R. D. Bond, T. G. Thurston, Detroit..... 5,000

Ament Candy Co., Detroit; manufacture and sale of candy and confectionery goods, wholesale and retail; Geraldine E. Proper, 239 Grand River ave., E. J. Campbell, Morris and O. W. Schoening, Detroit..... 12,000

Vander Pool, Paumer & Jeffrey, Inc., Detroit; to engage in and conduct general insurance agency business; S. G. Vander Pool, Fred D. Paumer, New York; Charles W. Roe, 1949 W. Grand blvd., Detroit..... 2,000

Merchandising Service, Kecanaba; to conduct general advertising business; Hal A. Waterbury, Alvin R. Moore, Clare E. Waterbury, Escanaba..... 2,500

Right Stores, Inc., Detroit; to buy and sell ladies' men's and children's ready-to-wear garments, furs and jewelry on cash and credit terms; Fred A. Mirrin, 1949 W. Grand blvd.; Sol H. Kahn, Alexander Friedman, Detroit..... 20,000

Samuel M. Crombie Agency, Inc., Detroit; general insurance agency business; Samuel M. Jones and Florence L. Crombie, 41 Buhl block, Detroit..... 15,000

Thompson & Charlet, Detroit, to carry on the sale and factory service and automobile accessory business; Harold J. Thompson, 6531 12th st., Frank J. Kuhn, 3204 Charlet, Detroit..... 5,000

Ahlon Motor Sales Co., Albion; to establish, conduct and carry on business or garaging, selling, repairing and reconstructing of automobiles, motors, parts; Richard L. E. King, Albion; Byron G. Doolittle, Tekonsha..... 20,000

Sorg Laundry and Manufacturing Co., Ionia; to manufacture and sell at wholesale and retail, woven wire, adder brackets, sprays, wall board dump boxes, etc.; Albert F. Sorg, Grand Rapids; John H. Furnell, Forest Park, Ill.; Charles H. Koerber, Highland Park..... 5,000

John H. Castle Co., Inc., Detroit; buying and selling real estate; John H. Castle, 110 Louise ave., Highland Park; William G. Warren, Horace He; Samuel J. Beaner, Detroit..... 10,000

John D. Iwaldson Woodwork Mills, Eaton Rapids; to manufacture and sell wooden and merino yarns and other fabrics; John D. and Anna Iwaldson, Joseph L. Lambert, Eaton Rapids..... 50,000

A-1 Stove Sales Co., Battle Creek; to purchase, sell, repair and trade with and in stoves furnaces, heating apparatus and fuel; Albert Oliver; Frank K. Berry, Paul C. DeVoy, Wendell L. Smith, Merrill Park..... 10,000

Wolverine Petroleum Syndicate, Inc.; to engage in business of buying and selling at wholesale and retail crude oil products, automobile accessories, etc.; Herman H. Smith, Lyman G. Cronk, Clarence L. Holmes, Flint..... 50,000

Guaranteed Abstract Title Co. of Port Huron; to transcribe records of St. Clair county, Mich., and such other records as may affect the record title to real estate in said county; George K. Warren, Marjorie R. Hempstead, Lena Lotermoser, Port Huron..... 10,000

William Suehner & Sons, Detroit; manufacture and sales of sausages at wholesale and retail, purchase and sales of meats, wholesale and retail; William Suehner, Sr., 2606 17th st., Herman and William R. Suehner, Jr., Detroit..... 10,000

Knickerbocker Press, Grand Rapids; printing, publishing and bookmaking; Gerrit J. Vanda Bunte, Floyd M. Patrick, Coe Wierenga, Grand Rapids..... 20,000

Detroit Trust Safe Deposit Co., Detroit; to carry on safety deposit business, offer provisions for said act; Fred T. Murphy, Sydney T. Miller and A. H. Buhl, Detroit..... 100,000

West Side Iron Works, operations in Chicago, Kewaunee, in Grand Rapids; to manufacture, buy, sell and deal in wood working machinery, accessories and supplies; Theckla G. and Walter H. Giertsen, Andrew Hummeland, Chicago..... 60,000

Vigil Publishing Co., Grand Rapids; publishing newspapers, a newspaper under name of the Catholic Vigil and other publications; Edward D. Kelley, Grand Rapids; Dennis P. Tighe, Roseville, Matthew M. Goebel, P. C., Detroit..... 25,000

First State Bank of Parma, Parma; commercial and savings; Frank J. Harrington, Parma; Z. E. Eldred, Jackson; John B. Hubert, Parma.

Mitchell Phonograph Corp., Detroit; to buy, sell, transfer and deal in all musical instruments and accessories, all electrical goods, merchandise; Felix P. Sadowski, 3126 Bigelow ave.; Dorothy J. and Vincent Sadowski, Detroit..... 2,000 5,000

Streng, Williams Co., Detroit; selling as agent upon a commission basis of various and non-ferrous castings, tools and supplies; A. Benedict Streng, Abraham Lincoln Williams, Will Williams, Detroit..... 2,500

Lake Ernest Co., Inc., Detroit; to buy, sell or exchange groceries, and to buy, sell and deal in real estate that may be part of or pertain to grocery business; George Bayer, Michael and John Bayer, 7503 Scarland ave..... 15,000

Grand Leger Theater Co., Grand Ledge; to conduct, operate and run motion picture theater business or general theater; Jay K. Newman, Ralph David Williams, Pontiac..... 35,000

Hutchison-Smith Co., Caledonia; to conduct general mercantile business in dry goods, boots, shoes, groceries, etc.; Ralph E. Hutchison, Roy Smith, Edna C. Hutchison, Caledonia

Hilker-McGregor Chevrolet Service, Detroit; to engage in and conduct general photographic business; Arthur Hilker, 3230 14th st., Donald McGregor, Albert E. McGregor, Detroit..... 50,000

Blizzma Store, Grand Rapids; to establish and conduct a department store in all its branches; Leonard J. and Rhoda Blizzma, Anna A. and Schafama, Grand Rapids..... 10,000

Michigan Co-operage Co., Detroit; storage of products, furs and perishable goods of every kind; Wallace Bruce Hamilton, Robert H. St. James Frothingham, Elizabeth A. Smith, Detroit..... 50,000

1. See Co., Detroit; to buy and sell at wholesale and retail, men's furnishings, clothing, hats, shoes, etc.; L. L. Cohen, Fairview hotel, Byri T. Lochin, Ben Tannenbim, Detroit..... 10,000

Superior Food Products Co., Detroit; to carry on general business of preserving, pickling and canning all fruits and relishes and food products; Casimer Kocut, 2433 Garfield ave., Anthony Iris, Edmund Trzaka, Detroit..... 10,000

$2,800

Digitized by Google

Mr. Automotive Parts Manufacturer:--



Did You Get That Order You Figured On?

Maybe this is your predicament.

The other day a local parts manufacturer called on the Purchasing Agent of ——— Motor Company.
He wanted to quote on wrist pins, oil pump plungers, cam rollers and pins, etc.

Says the P. A.: "Have you got a Detroit Centerless Grinder?"

"No. Why?" said the Parts Manager.

Here is what the Purchasing Agent said:
"You can't compete with others unless you grind by the Centerless Method, and you better buy one of the machines."

AND WHY NOT?

Piston Pins, 1 1-16" dia. x 3½ long—125 per hr.
Piston Pins, ¾" dia. x 2¾ long—200 per hr.

Write for Circular Today

DETROIT MACHINE TOOL COMPANY
6545 St. Antoine St., Detroit, Mich.

Better Treatment Homes Co., Detroit; to buy, sell and build residences and other buildings, do general construction business; Hen Tannenholz, 1706 Real Estate Exchange, Harry H. Zickel, Harry Orman, Detroit.....

CHANGES OF NAME

Hastings Sporting Goods Works (name changed to Hastings Sporting Goods Co.), Hastings ..... $ 10,000

Democrat Printing & Publishing Co. (name changed to Monroe Evening News Co.), Monroe 3,500

Master Plumber Supply Co. (name changed to Anchor Pipe and Supply Co.), Detroit 25,000

New Era Mfg. Co. (name changed to New Era Metal Products Co.), Kalamazoo 30,000

H. M. Grier Co. (name changed to Grier Battery Supply Co.), Detroit 10,000

Sel Serve (name changed to John Kolacny, Inc.), Muskegon 10,000

Will A. Cavin Lumber Co. (name changed to Citizens Lumber Co.), Sturgis, cap. increase from $75,000 to 130,000

R. A. Hugill Co. (name changed to Wyandotte Sales Corp.), Wyandotte. 20,000

INCREASES

Blanchard State Bank, Blanchard, from $20,000 to 25,000

Polish National Co-Operative Ass'n, Detroit, from $100,000 to 180,000

White Star Line, Detroit, from $750,000 to 950,000

Texas Co. (F.), Texas, Houston, Texas, Detroit, from $30,000,000 to.... 143,000,000

Benton Harbor Picture Frame & Novelty Manufacturing Co., Benton Harbor, from $10,000 to 30,000

Belle Isle Coliseum Co., Detroit, from $250,000 to 400,000

Jager-Asmus Hardware Co., Wyandotte, from $15,000 to 50,000

One Hundred Associates Co., Highland Park, from $50,000 to 200,000

Detroit Finance Co., Detroit, from $200,000 to 500,000

Continental Land Contract Co., Redford, from $100,000 to 500,000

Walker & Co., Detroit, from $25,000 to 500,000

Viking Corporation, Hastings, from $2,500 to 50,000

Home-Martz Glass Co., Detroit, from $4,000 to 25,000

DECREASES

Bolger & Reiter, Inc., Detroit, from $50,000 to 25,000

Ann Arbor Furniture Co., Ann Arbor, from $45,000 to 10,000

Schuiter Ice & Coal Co., Grand Rapids, from $200,000 to 100,000

NOTICES OF DISSOLUTION

Addison Co., Ltd., Grand Haven..... 40,000

There's A Reason Co., Ltd., Battle Creek 25,000

American Motor Castings Co., Detroit.. 100,000

Michigan Truck Farm Co., Detroit.... 30,000

Merrick Resigns, With Hot Letter to Groesbeck

Frank W. Merrick, who for six years has been Michigan state banking commissioner, sent his resignation to Governor Groesbeck on April 26, together with a pointed letter in which he says he does not care to continue to serve in case the bill now in the legislature empowering the governor to remove the banking commissioner at will becomes a law. He makes it plain that he believes the governor's purpose in supporting the bill was to enable him to remove him (Merrick) and that, by resigning, he will "satisfy" the governor's "personal wishes" and not make it necessary to change the banking law—a change which he believes would be a mistake. The body of the letter follows:

"There has been introduced in the present legislature House Bill No. 507, which, if it becomes operative, makes a change in the tenure of office of the banking commissioner and provides for a day-to-day appointment as the bill is now understood.

"The tenure of office of the banking commissioner was established in the original Michigan banking statute and has been effective for the last thirty years. During all of this period the Michigan state banks have enjoyed the confidence of the public and have made a growth, particularly during the last six years, that is somewhat phenomenal. It is a generally recognized fact that the banking business should be regulated by statute and supervised in order to bring about a satisfactory condition in this line of business. In order to supervise banks in a satisfactory way the supervising official should be free to exercise his best judgment and should not be controlled by political affiliations or connections.

"I have had the honor of serving as commissioner of banking for the last six years, during which time the institutions under the supervision of this department have grown from $400,000,000 to over $1,000,000,000 in resources, and there have been no failures of Michigan state banking institutions. While I consider public service a duty of all citizens who are in a position to accept the same, as above stated, I have served in this capacity for six years, and feel that I have fulfilled my duty in this respect.

"I have no desire to continue in office under existing conditions, particularly as I am advised that the legislation referred to has your support and is probably the outcome of personal differences which have arisen between you and myself. If this be the case, I do not wish to assume the responsibility of having the tenure of office of the banking commissioner changed in this manner, as I am certain that it will seriously impair the standing of the Michigan banking department, both in the state and in the nation, where it stands second to none at this date.

"In order that there may be no question in regard to my position in this connection I herewith tender you my resignation as commissioner of the banking department, to take effect immediately. In tendering this resignation I am doing so in the hope that you may now feel that your personal wishes have been satisfied, and will conclude that the best interests of the state will be served by allowing the present banking law to stand."

Digitized by Google

Goodyear Control Passes From F. A. Seiberling

Reorganization of the Goodyear Tire & Rubber Company, Akron, was effected a few days ago. During the next twenty years the banking interests which made the refinancing possible will practically control the destinies of the big concern. F. A. Seiberling, president and general manager, having resigned. The bankers directly interested are Dillon, Read & Company; Goldman, Sachs & Company; the Guaranty Company of New York; Lee, Higginson & Company; Blair & Company and a number of other associates.

The bankers in connection with the refinancing plan offered for public subscription an issue of $30,000,000 of first mortgage twenty-year, eight per cent sinking fund gold bonds, which issue, it is reported has been entirely subscribed. During the life of this bond issue control of the Goodyear company will be vested in management stock, which will name a majority of the board of directors and will be held by Clarence Dillon, Read & Company; John Sherwin, of the Union Trust Company, Cleveland, and Owen Young, of the General Electric Company.

The proceeds of the new issue of first mortgage bonds, together with the proceeds of the $27,500,000 ten-year, eight per cent debentures, which have been sold and will be offered to stockholders, will be utilized in payment of the company's current obligations and in increasing working capital. The mortgage provides that the company at all times should maintain net current assets equal to 125 per cent of the entire amount of bonds outstanding.

Under the reorganization the old preferred stock will remain unchanged. There is authorized $40,000,000 of new preferred seven per cent stock, of which $30,000,000 has been taken by merchandise creditors. There will be also 900,000 shares of no par value common, which will be exchanged for old common stock of $100 par value.

In all, 70,000 stockholders and merchandise creditors assented to the plan for reorganization as presented by the bankers as follows: Common stockholders, holding about 560,000 stock; preferred stockholders, holding about $65,000,000, and merchandise creditors, holding about $85,000,000 of claims.

The general balance sheet of the company on February 28, 1920, after giving effect to the present financial readjustments, shows net property account of $54,252,059; net tangible assets, less all reserves, of $135,344,153, and net current assets of $63,139,808. Net current liabilities amount to about $9,000,000, representing contracts for construction work. All bank loans have been paid, and through issuance of the securities mentioned the company will have about $11,000,000 in cash. In all there was provided nearly $43,000,000 for adjustment of inventories and raw materials.

In connection with their purchase of $30,000,000 first mortgage twenty-year, eight per cent sinking fund gold bonds, the bankers of company notifies the bankers that net income available for interest, taxes and inventory adjustments for the fiscal year ended October 31, 1920, was $10,384,908. However, as of October 31, 1920, inventories were written down to market value by a deduction from net income for the year of $9,870,000. Furthermore, in the balance sheet as of February 28, 1921, adjusted to show the effects of the present financing, an additional $8,850,000 has been written off, and provision made, amounting to $24,000,000, for possible loss on raw materials under contract but not yet received.

The balance sheet referred to as of February 28, 1921, gives effect to the losses from operation during the period from October 31, 1920, to February 28, 1921, together with the adjustments of inventories and provisions against possible loss on raw materials under contract. This balance sheet shows the following current asset items: Materials and supplies, (less reserves) $21,289,776; work in process, $1,298,888, finished products, $19,622,250; customers' notes, trade acceptances and accounts receivable (less reserves) $19,332,996; cash, $11,176,095; total, $72,711,006. Current liabilities mainly payable only as materials for which incurred are acquired by the company, amount to $9,571,198. In addition, there are reserves of $4,972,717 for contingencies and possible federal taxes, and $8,750,000 for additional possible loss on rubber and fabric under commitments but not delivered, in excess of amount of $15,250,000 provided for by issue of prior preference stock.

Goodyear capitalization after the present financing will consist of: First mortgage bonds, $30,000,000; debenture bonds, $27,500,000; eight per cent preferred preference stock, authorized $40,000,000; to be presently issued exclusive of stock held as collateral only) reserved for creditors and contractors not yet assenting to plan, etc., $30,342,000; preferred, issued $65,532,600 (less $450,000 in treasury); management stock, $10,000; common stock (no par) $1,000,000; total stock, $96,434,600.

Statistician figure that the income return on the new $30,000,000 Goodyear Tire & Rubber eight per cent bond issue will range from 50 per cent down to 8.51 per cent, depending upon when the bond is called for payment at the callable price of 120 and interest, says the Wall Street Journal.

Under the bond indenture the company is required to provide a sinking fund to retire $750,000 of the bonds each six months beginning November 1, 1921, by offering for bid at 120 and interest. Bonds called for instance on November 1, 1921, will receive $124 for each $100 bond with interest and other cash income of $25 for the half year period, which is at a rate annually of more than 50 per cent. Return on the last $750,000 will be 8.51 per cent.

Vice-President M. Edelman, who will be general manager, is confident that the company's business will gradually return to normal. The plant has a capacity of better than 35,000 tires a day and at present is operating at about 50 per cent of normal, according to recent reports.

Flint Making Rapid Progress to Normalcy

Flint ranks second among the cities of the United States reporting an increase in employment during March, according to the Industrial Survey Bulletin issued by the Department of Labor. The report shows Flint's increase as 14.4, a gain of 12 per cent.

Indications point to a gradual resumption of business and the announcement by the Buick Motor Company that the St. Louis assembling plant is being moved to Flint should serve as an added stimulus to a reviving market.

Another hopeful sign is the increase of the bank clearings during March as compared with February. The total gain for the month being $823,760.04. The market director reports that the farmers are gradually comink into the market again and, with the crops looking in splendid condition, hope for an increased building program in the country districts is revived. The decline in the price of lumber averaging 40 per cent in the last few months is responsible for this revival of interest.

WESTINGHOUSE REPAIR STATION

The Westinghouse Electric & Manufacturing Company has opened a large, well-equipped repair shop for the repairing of all kinds of electrical machinery, at 1535 Sixth street, Detroit. The personnel is under the supervision of engineers who received their training at the factory. The Detroit sales office of the Westinghouse company is at 1205 Dime Bank building.

Engineering Research Work Is Facilitated

The third meeting of the Executive Committee of the Department of Engineering Research of the University of Michigan was held at the Detroit Club, Friday, April 22. There were present M. J. Murphy, chairman, presiding; President M. L. Burton; ex-Governor Chase S. Osborn; Henry M. Leland; A. B. Williams; H. H. Smith; Frank Fletcher; M. W. Neal; Walter Russel; E. B. Perry; Mr. English; John L. Lovett; Profs. A. H. White; H. C. Anderson; H. W. King; J. C. Parker; Emil Lorch; H. C. Sadler and Prof. A. E. White, director of the Department of Engineering Research.

President Burton made some brief remarks. He expressed his gratitude to the manufacturers for the splendid manner in which they have stood in back of the university requests. Ex-Governor Osborn stated that he believed that the university had taken a great forward step in the establishment of a Department of Engineering Research and that he believed this department would grow to he one of the largest and most useful in the university. He considered that it was essential to the welfare of the state and to the university. He pointed out that Michigan must do more than the average state in research if it is to maintain its position, since it becomes in certain with national and international competition to a greater extent through the exportation of automobiles.

Prof. A. E. White, as director of the department, made a report to the committee recommending that the members of the Advisory Board be divided into sub-committees so that the work of the department may be more adequately performed. On the completion of his report the following resolutions relative to the same were submitted by E. B. Perry, seconded by Mr. Williams, and unanimously passed by the committee:

WHEREAS, We have heard this report of the Director of the Department of Engineering Research; and

WHEREAS, it is recommended that the Advisory Board be divided into committees for each type of industry; and

WHEREAS, it is recommended that sub-committees be appointed in the case of those industries with diversified interests; and

WHEREAS, It is recommended that these appointments be made by the Chairman of the Executive Committee of the Advisory Board; and

WHEREAS, Since there may be men who should be on these main or sub-committees who are not now members of the Advisory Board, it is recommended that the Chairman of the Advisory Board be authorized to recommend such men to the president of the university for appointment on the Advisory Board; and

WHEREAS, Since it may be desirable to have the assistance of men who devote the major share of their time to industry on the technical character, it is recommended that the chairman or members of any given committee be empowered to appoint such person or persons to technical or advisory committees as desired, it being understood that these appointees may or may not be members of the Advisory Board.

It is resolved that the report be accepted and the recommendations approved and adopted, so proper steps may be started whereby the university and the industries and technical interests of the state may work toward that end for which the Department of Engineering Research was established.

CAMPBELL MENTIONED FOR I. C. C.

A report from Washington says that President Harding is looking with favor upon the appointment of Milo D. Campbell, Coldwater, as a member of the Interstate Commerce Commission. It is said the President wishes to make us one member of the Commission a man identified with the agricultural interests.

HOWELL MOTORS ELECTS DIRECTORS

The Howell Electric Motors Company, Howell, has added as directors M. R. Carrier, president of the Federal Drop Forge Company, Lansing, and C. E. Bement, vice-president and general manager of the Novo Engine Company, Lansing.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

The Babcock & Wilcox Co.
85 Liberty St., New York

announces the opening of a

New Sales Office
411-412 Ford Building
Detroit, Mich.

Water Tube Boilers
Babcock & Wilcox
Stirling
Rust

Steam Superheaters

Mechanical Stokers



Pressed Steel Parts

Special Sheet Metal Articles and Parts Made to Order:

Oil Pans
Radiator Shells
Radiator Tanks
Radiator Side Members
Gasoline Tanks
Maxim Silencers
Gear Covers
Cylinder Top Covers
Chain Covers
Cylinder Side Plates

We are at your service for Drawing, Stamping, Pressing, Spinning, Blanking and Forming in all sheet metals such as Aluminum, Brass, Copper, Sheet Steel, Tinplate and Sheet Zinc; Hot Galvanizing, Ternecoating, Japanning, Tinning and Porcelain Enameling.

Send us blueprints, samples or perhaps a casting we can replace with sheet metal—consult our Engineering Service.

Geuder, Paeschke & Frey Co.
1325-1600 St. Paul Avenue, Milwaukee, Wis.
Detroit Office, 712 Dime Bank Bldg.

Digitized by Google

Machinery and Power Equipment

Our Aim is to Render Service

COMPLETE EQUIPMENT

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Plants, Wood - working Plants, Repair Shops, Heat Treating Iron and Metal Foundries.

Among the 1500 or more new and used Machine Tools of all descriptions and quality we have on hand for immediate shipment are the following standard makes of drilling machines:

2—Dumora Motor Driven Bench Drills, 110 volts, new
3—No. 1 Burke Bench Drills, with chucks, new
2—Avey High Speed B. B. Drills—bench type, used
3—No. 28—½" cap Canedy-Otto Bench Drills, new
3—14" Excelsior Sensitive Floor Type Drills, new
2—16"—¾" cap. Hoosier Floor Type Drills, new
1—20" Barnes All Geared Single Pulley Drive Prod. Drill, used
3—21" Milwaukee Upright Drills, wheel and lever feed, new
5—20" Champion ditto, with back gear, power fd. a. s. No. 4 M.T., new
2—24" Milwaukee Sliding Hd. B. G. P. F. A. S. with T. A. built in, new
1—25" Buffalo Stat. Hd. B. G. P. F. A. S. No. 4 M. T., new
3—No. 2 M. Baker Hvy. Duty Prod. Drills, used
4—No. 310 Baker Hvy. Duty Prod. Drills, used
1—20" spindle Rockford Gang Drill, b.g. p.f. a.s. No. 3 M. T., used
1—4 spindle Cleveland Rail Drill, adj. hds., No. 4 M. T., used
1—26" Barnes Sliding Hd. Upright Drill, used
1—2½ ft. Fosdick Radial Drill, complete, used
and many more too numerous to detail here.

We sell and recommend for your consideration the following well known makes:

Hoosier complete line of drilling machines, including the famous heavy duty single pulley drive.
Langalier line of High Speed Ball Bearing Drilling Machines.
Milwaukee complete line of Upright Drilling Machines.
Canedy-Otto line of Wall and Floor Radial Drills.
Western complete line of highest quality Radial Drills, all types and sizes.

We have a copy of our latest stock-list ready for you.
We always are interested in buying, selling, trading or exchanging only high grade equipment.
We maintain our own repair-shop on our premises.
Our warehouse contains 100,000 square feet of floor space.

Our motto is—We must satisfy you absolutely.

Riverside Machinery Depot

251 ST. AUBIN AVE. *Phone Edgewood* 1581-82-83-84

What of Business Today Had There Been No War?

(*Continued from Page* 6)

of labor statistics and other treasury information, and so far as history is a guide, may be given careful consideration. The high and low points are as follows:

War of 1812 Period		
1810	173	19 years steady fall, high to low level.
1814	247	
1843	84	
Civil War Period		
1860	105	4 years to high level, 15 steady fall to low.
1864	237	
1879	99	
Recent Period		
1896	69	7 years to high level, 7 years to low level.
1913	101	
1917	176	
1920	244	
April, '21	175	

It is very probable that an absence of banking and currency troubles may have a different effect on the time it will take to reach a permanent lower level but there is every reason to believe, in the light of past performance, that the bottom has not yet been touched.

The reaction, however, should not be so violent as heretofore, for under the old banking system we had no watch dogs. Each community went along serenely until something happened elsewhere and then all rushed for cover, each concealing the available money within reach, whereas we now have almost an automatic machine which increases or decreases currency and transfers money or credit from that part of the country which has a surplus to that which needs it, and there is fortunately a board of watchmen down in Washington that keeps an eye on the speedometer.

Getting back to 1913 and 1914, however, we have observed the same trend of many factors the last year that was operating against prosperity then. Stocks and bonds were gradually working down to lower levels, foreign trade was falling off and the ratio of hard money to paper money and credits was growing steadily smaller. There are many, no doubt, who will recall the nation-wide efforts of the National City Bank and one or two other New York banks to wake our people up to the necessity of increasing foreign trade. Young men by the score were going into the foreign banking service. So that from many angles the business drift of the country was much the same during two years before the war as it has been the last ten months. And right here is the point I desire to emphasize: That the war supplied the very foreign trade the new York banks were appealing for, and it supplied that trade in such volume as we never dreamed. But of course there has to be an end to such an unnatural forcing of trade out of its normal channels, and instead of ending with the war as most of us expected, it kept up about eighteen months thereafter, until a great many merchants and manufactrners thought the swollen stream of orders was going to continue permanently. Some thought we had simply reached a higher price level in all things and would so continue for some years.

But as we know now, most of the money for this carnival of trade came out of our own treasury and the treasury borrowed it from the Federal Reserve System and the latter got swelled up out of normal shape issuing currency and credit like a poisoned pup.

That swelling has gone down. Everywhere things begin to look more natural; business, banks, bank rolls and not a few heads show now the healing effects of the deflation process. But instead of gont the malady threatening now is idleness and hunger, and to prevent either getting a grip on our people we must immediately take up the fight for foreign markets for our surplus that was dropped when the war began.

The world outside of the United States wants our $8,000,000,000 surplus badly but there is a limit to the prices they are willing to pay. We must look back on the profits of the last six years as something that comes once in a lifetime and begin finding out how we can compete with the German and the Briton who, notwithstanding much greater increases in the cost of living in those countries in terms of their own currency, are by reason of lower relative costs of production seriously threatening the foreign business of ours in countries like Mexico, where we have held 80 per cent, but are making it increasingly difficult to get a foothold elsewhere.

War gave us a temporary advantage which taxes and declining inventories at the present rate of absorption will soon wipe out. War paid off the three billions we owed Europe before 1914 and it created debts of about $15,000,000,000 in our favor. But war spoiled a good cash market in Europe; it left us with a surplus of goods and facilities several times larger than those of 1914; and it left us on a cost level based on gold (not exchange rates for currency or drafts) twelve times higher than that of Germany, four times higher than France and two times higher than Britain.

Must we go down to their level or will they come up to ours? I look for neither; but we will have to go down a lot more, and as they get on their feet they will come up. But if we could only see now the importance of letting them have our surplus at almost any price, the equilibrium which must come eventually will be restored much quicker and with much less shock to our own profit and loss account.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

UNIVERSITY OF MICHIGAN
NOV 30 1921



Fifteen Cents a Copy

Five Dollars a Year

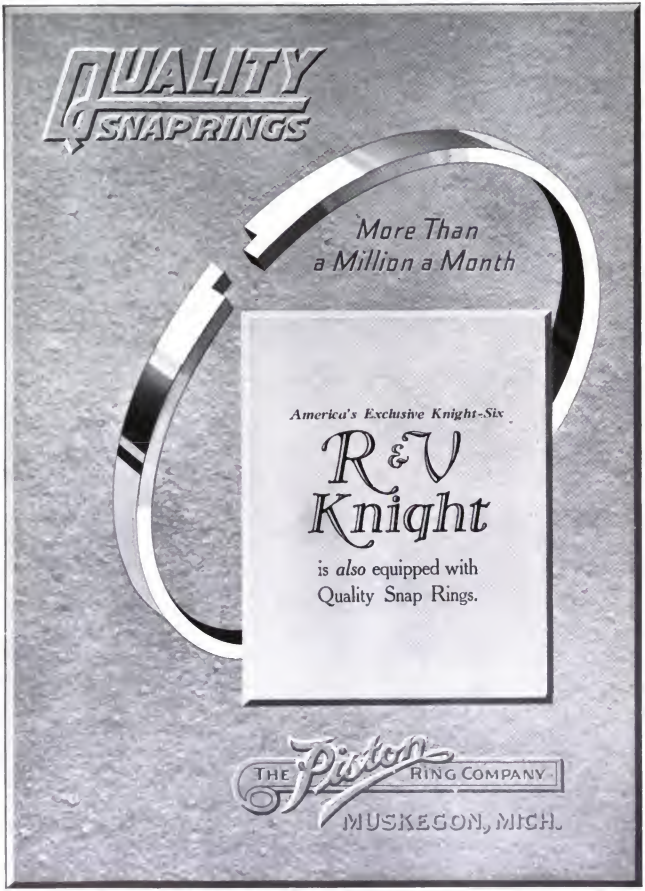
A Detroit College of Aeronautics
America's Four Chief Problems
The Michigan Legislature of 1921
Motor Car Price Cuts Announced

(Financial Section Starts on Page 26)

DETROIT, MAY 7, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 19*

Digitized by Google



Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

U. of D. Takes Leadership In Making City U. S. Aero Center

Establishes Five-Year Course in Flying Science And Brings 1921 Exposition to Michigan Metropolis

By F. W. HERSEY

WHEN the United States was plunged into the most scientific and destructive war in the world's history the supreme importance of aircraft as the "eyes" of the artillery and the "cavalry of the air" had been established. In character and numbers Germany had a marked advantage over the Allies. Her air scouts flew faster, her combat planes fought more successfully and her "air-pointers" for the artillery were making her guns more deadly as the war progressed.

The answer? Just this: While France, England and the United States were "playing" with aviation, Germany had been developing aeronautics with one view in mind—war. War calls for efficiency, endurance, quantity production, precision—the best of them all. In aeronautica, as in every other branch of the vast war machine, the equipment had to be the best and the knowledge the most complete—and Germany had all this to the very last degree of her capacity. That was why she was slowly but surely winning when the United States stepped in and turned the tide.

So, when the United States decided to step in, her war chiefs knew all about the importance of aircraft, and all about the airplanes, balloons, dirigibles and blimps used by the contending armies and navies up to that time. More than this, it was definitely known that, if this war was to be won before the heavy part of the civilized world gassed itself to death, better aircraft, driven by better engines, would have to be found. Germany must be beaten in the air, was the slogan.

When the War College turned its searching gaze over the country in its quest of engine brains and manufacturing facilities, where did this gaze rest? Upon Detroit of course. Detroit was the automotive center of the United States. Its citizens made engines, talked engines, rode behind them—knew all about them. Therefore, Detroit's automotive engineers were drafted and commissioned to produce an engine that would beat anything the common enemy could put into the air. The Liberty motor was the result. Had the war lasted a few months longer the air over Europe would have been as clear of enemy aircraft as a billiard ball is of hair.

Well, where are the Liberty engines today? Where are the Liberty-engined flying machines? Where is Detroit on the aeronautical map of the world?

S' e just ain't, that's all. She spoke her little piece, made her little bow and then went way back and sat down, and she has been sitting ever since, apparently quite unconscious of her potentialities as the aeronautical center of the United States.

During her brief appearance upon the war stage she was press-agented from Dan to Bersheba. Friend Caproni, over in Italy, where they jump into an airplane and hop over the Alps before breakfast, was so successfully sold on Detroit-made Liberty engines that he just had to have them for his super-passenger-carrying ships. He is putting a flock of these engines into his new 100-passenger machine which soon will be making new records for sunny Italy. I suppose a little research work would disclose the fact that Germany and Japan have some of these engines and are trying to make a ship that will, when driven by them, reduce the rest of the world to pulp when the next war is announced. That is the way usually with American inventions.

Two major factors made Detroit's success with the Liberty engine possible—experience with gasoline motors and the facilities to turn them out like animal crackers. The experience produced engineering brains and the demand for automobiles developed the productive facilities and power.

As was said earlier, the manufacture of engines and parts for aircraft was one of Detroit's most important activities during the war period, and, if advertising is essential to the manufacture and distribution of product, Detroit has had the advantage of 100 per cent advanced advertising on a product she does not make and has not for sale. Admitting that the demand for aerial limousines and flying box cars is not so feverish as to encourage profiteering just now, if there is anything in this vision stuff, it is about time Detroit prepared for the commerce and industry horn of the air that is surely coming.

The Vision of the U. of D.

Anyway, while there is a University of Detroit and a few brave citizens with eyes that focus beyond the points of their noses there is hope. While the automotive industry is waiting impatiently for the return of normal (whatever that may mean) in this industry, and wondering at the same time what they are going to do with the excess space and machinery added during the war emergency and later during the money-burning orgy, the University of Detroit has been quietly planning a five-year course in aeronautics, confident in the belief that eventually Detroit will become an aircraft and aircraft equipment center and the demand for men trained in this science will be greater than the visible supply.

This confidence is based upon the knowledge that Detroit has the plants, the industrial genius in trousers, the natural sources of much of the material needed; is motor wise and vehicle broken; has led the world in the construction of motor cars and motor trucks, and is most advantageously located for the manufacture and operation of aircraft in commerce.

In laying out this course the University of Detroit becomes at once the first educational institution in the country to recognize aeronautics as a science of itself worthy of a special degree, and one that can be properly taught only by co-ordinating all its numerous phases into a uniform curriculum that will cover this science completely.

The uninitiated may wonder what there is in aeronautics to require five years' training. The average man who has flown an airplane in war or peace is more likely to wonder if it is possible to cram all there is to know about aerial navigation and aerial equipment into five years. Whether or not it is possible to do the subject justice in that length of time remains to be seen, but judged by present standards the University of Detroit can produce aeronautical engineers of a caliber superior to anything now known. Like medicine, law, chemistry and a multitude of other sciences, theory in aeronautics is one thing; practice is quite another.

Lieut. Thomas F. Dunn, dean of the new department of aeronautics at the University of Detroit puts it this way: "There are lots of engineers who can tell you all about aeronautics on the ground, but when they get up into the thin air their theory is like a ship without a rudder and no compass—very active but with indefinite plans as to the future." The impression that takes hold of us is that there are two ways of getting an aeronautical education. One is to go up in the air first and gather some experience, and if spared for future investigation, return to solid earth and tackle the theory. The other way is to tackle the theory first and then try it out on the air.

So far, such institutions as the University of Michigan, the Massachusetts Institute of Technology and perhaps a few others have given some instruction in one or perhaps several branches of learning which have some bearing upon aeronautics, but none of them have gathered all the loose ends together in one knot and given the knot to the student to untie. This is what the University of Detroit is determined to do. It means the addition of special laboratories, a wind tunnel, equipment of various kinds, aircraft, a flying field, the organization of a faculty and possibly the arrangement of special textbooks which will bring together in orderly fashion the present-day knowledge of air transportation, air technology and mechanics.

Some idea of the latitude of this subject is

Digitized by Google



This map shows the transcontinental and coastal airways and the air routes in the United States and part of Canada. The arrow shows the location of Detroit between the Wilson and Chanute and Bell airways. A circle drawn around Detroit on a radius equal to the compass distance from Detroit to New York will show the wonderfully advantageous position of Detroit as an aeronautical center, commercially, industrially and educationally.

conveyed by the following subjects to be taught: Higher mathematics, communication, mapping, astronomy, physics, meteorology, weather calculation, theory of flight, balloons, aerodynamics, aerostatics, aircraft mechanics, testing drawing, administration, chemistry, electricity, engineering principles, metal working, working design and construction, topography, wireless telephony and telegraphy, safety devices, uses of instruments, some commercial law and all there is or will be on aerial navigation laws, principles of law as it is or will be applied to the air, and aerial photography.

This will suffice in a measure to show what the future aeronautical engineer will have to know. Incidentally, the University of Detroit will have the only wind tunnel, a device for studying air currents, west of New York and Washington and east of California, with the one exception of McCook field at Dayton, O., which may not be in Dayton very long.

For surveying purposes aerial photography has proved to be highly valuable. If the Government approves the Great Lakes-St. Lawrence route to the sea project the work of surveying is likely to take two years, a large number of men and considerable expense, if done by the customary land and water surveying methods. Aerial photography, it is asserted, will accomplish better results in a few days, and it is likely that the job will be done by photography. Thus the aeronautical department of the University of Detroit will have right at home its greatest laboratory for photographic instruction and practice.

Apparently the confidence in Detroit's eventual awakening to its possibilities as a manufacturing center for aeronautical equipment and as a center for the operation of aircraft in commerce is shared by the Aerial League of the World, the Aerial League of America and the Pan-American Aeronautic Federation, for these organizations have decided to hold the annual aeronautic exposition and aerial touring contest in Detroit this coming September, probably right after the Pulitzer Trophy race, September 8, 9 and 10. This exposition and touring contest has been held at Atlantic City for the last two or three years and has been successful.

The 1920 meeting brought together 180 delegates from twenty-six countries and entertained 300,000 visitors at Atlantic City. The exposition provides opportunity for displaying aircraft and aircraft equipment from every country. The twenty touring contests during the ten days' meeting showed the progress that had been made up to that time in machines for passengers and freight, and the safety devices of every type so far perfected. This convention is not a "stunt" circus, but a serious and practical demonstration of the adaptability of aircraft for commercial purposes. The Army and Navy exhibits at the Atlantic City meeting were valued at more than a million dollars.

The Board of Commerce is back of this aerial meeting and appointments to the executive committee in charge so far made are: Mr. Dunn, chairman; John A. Russell, president of the Board of Commerce and editor of the Michigan Manufacturer and Financial Record; Mayor Couzens and Rev. William T. Doran, S. J., president of the University of Detroit.

An air route is laid out or charted between The committee has not been completed.

The Pulitzer Trophy race is more of a sporting proposition, although its value in the development of aeronautics should not be underestimated. This race meet is fostered by the Detroit Aviation Country Club, an organization of men and women interested in aeronautics from a sporting standpoint. Whether or not Detroit needs additional advertising as a possible aeronautical center of the future, the Pulitzer race and the exposition and touring contest of the aerial leagues will attract attention to the city and should awaken new interest in aeronautics as a fitting subject for commercial and industrial consideration by the city's transportation and industrial men.

In the wake of these major national events, the University of Detroit will proceed with its development of aeronautical educational facilities, and it would seem that in the face of such encouragement that Detroit should begin to lay the foundations of a new industry and prepare for commercial activities in the air.

Detroit's present position in the aeronautic world is to be regretted. Although eight major costal and trauscontinental airways and four air routes have been laid out over the United States, Detroit is not on an airway and is on only one air route. An airway is 80 miles wide, so established because an aviator can see the country beneath him for forty miles on either side of his machine on a clear day.

(Continued on Page 34)

Digitized by Google

America's Four Chief Problems

They Are Taxation, Railroads, Labor and Europe; Methods and Spirit to Be Applied to Their Solution

By OTTO H. KAHN

IT IS eighteen months now since America entered into the period of post-bellum reaction. Such a reaction was inevitable. But heretofore of the characteristics of this country has been its resiliency, its quick and vigorous rebound from periods of depression. Why is it that after eighteen months of liquidation and readjustment we are still in the throes of poor trade, tight money, restricted credit, diminished enterprise and employment and general discomfiture?

There are a number of reasons: A war of unprecedented scope and costliness, accompanied by corresponding inflation of currency and production. A peace equally unprecedented in its ill effects and in the deplorable discrepancy between professed aims and actual performance. Governmental incapacity, neglect and blundering. Excessive expansion, overtrading and lack of foresight on the part of a considerable portion of the business community. Exorbitant boosting of the cost of labor and stubborn insistence, in some instances, upon conditions not normally tolerable. Governmental and private extravagance.

But there is one element which more than any other single cause stands in the way of our economic recovery. That is the imprudent, disingenuous and mischievous system of taxation adopted in 1917. Leaving aside its appalling complexity, its irritating and obnoxious cumbersomeness, the unfairness of its incidence and its manifold actual and moral impediments to effort and enterprise, it has produced two effects of fundamental destructiveness: It has prevented the accumulation of new capital and its has violently interfered with the normal flow of existing capital.

Why are borrowers compelled to pay rates of interest without precedent and even at those rates are unable to obtain their requirements? Why are our banking facilities strained to the limit? Why has the process of liquidation, which has been going on more or less for eighteen months, not brought about a commensurate easing in the money situation?

Waylaying the Wayfarer

Why is there no money available for mortgages and building operations? Why has it occurred recently that cities of the highest credit did not receive bids sufficient to cover their offerings of bonds? Why are our Liberty bonds selling at a deplorable discount? Why does the whole machinery of credit and investment creak und groan and fail to work with its former automatic smoothness?

It is mainly because the clumsy hand of faulty taxation has been shoved into the delicately adjusted organization of our commerce and industry. Capital has been driven from the highways of trade because the governments lies in wait and exacts a huge toll going up to three-quarters of the wayfarer's income, hitherto unmindful, too, of the fact that there is no other way called "tax exempt securities" which is not only safer, smoother and less laborious to travel, but is entirely free from toll.

For this throttling of the supply of capital for constructive uses we have chosen the very time when we were most in need of ample supply of funds, because European capital on which we had largely drawn before the war is no longer available to us owing to the effects of the war—indeed, Europe, instead of being a provider of capital, has become an eager borrower here—and because the process of readjusting our industries to peace conditions and bringing our productive capacity in line with post-bellum requirements and opportunities involves a very heavy capital drain.

The underlying trouble with our whole scheme of taxation is that it is based upon and actuated by not plain business-like considerations of revenue-raising but social experimentation plus class and sectional animosity. The theory was to take it out of the rich and take it out of the East. The crudity of that theory was covered by the formula "taxation according to ability to pay." That is a formula to which every fair-minded and right-thinking man will give his adherence in principle, but it must be applied within the limitations of the rule of reason. It was, as a matter of fact, applied with vindictive unreason.

To what degree taxation stays where it is laid is a much debated point. Generally speaking, from considerations both practical and psychological, it may be said that direct taxes are shifted largely in proportion to their burdensomeness. When taxation becomes manifestly oppressive and excessive, whatever its method, it ceases to stay where it is laid, but is shifted and passed on in one way or another, if not avoided altogether.

That process involves trouble and complication and dislocation all along the line. It also involves higher costs and therefore diminished purchasing power, which is bad for everybody. Therefore there is damage done all round.

The attorney-general's department has calculated that the average increase in costs due to federal taxation in twenty-three per cent. To that burden, which is borne by everybody, rich or poor, there must be added the less precisely ascertainable ill-effect which results from the action of our tax laws in causing restraint of business, impediment to enterprise and diminished opportunity for employment.

It all means that errors in taxation are visited on everybody. It means that you cannot take it out of the rich and of the East without also taking it out of the poor and of the West and the South. It means that there is a limit beyond which taxation of income and profit cannot go without inevitable consequences seriously detrimental all round.

Steps to Be Taken

We have far surpassed that limit and there is no remedy for the resulting ills but to recognize the fact in which experience has demonstrated unmistakably, and to retrace our steps.

While continuing progressive income taxation of individuals and a flat tax on corporate earnings we must fix rates within the limits of moderation (the point to which income taxation can go without driving capital into tax exempt securities is indicated by the approximate difference in interest yield between tax exempt and taxable securities; that comparison would denote the "saturation point" to be reached at a tax rate of approximately thirty per cent); we must simplify the system; we must abolish the excess profits tax; we must eliminate minor irksome and invidious special taxes and to the extent that the needs of the government require the resulting reduction of revenue to be made good, we must broaden the basis of indirect taxation.

It requires no prophetic gift to foretell with assurance that by doing so we shall greatly reduce the burden of high costs and other evils resulting from the existing tax system, which now weighs upon the masses of the people, although they were meant and mistakenly calculated and expected to weigh upon a small minority.

I know of no measure which will better and more certainly attain that purpose and bring that relief than a sales tax in some form. Exactly what shape that tax should take—whether it should be on commodities only; whether foodstuffs should be exempted; whether it should be on commodities and services; whether it should follow the model of the Canadian sales tax, which relates only to wholesalers, manufacturers and jobbers; whether the rate should be one-third of one per cent, one-half of one per cent, or one per cent, are debatable questions. (It should not, however, in my opinion, be a tax on retail sales only, for several reasons, one of them being that a simple, practicable and workable definition of what constitutes a retail sale defies the resources of phraseology.).

So much has been written and said on the subject of the sales tax that I will confine myself to the following few observations on the subject:

(1) The often heard argument that large combinations controlling several or all phases of the manufacture of their product, from raw material to finished article, would be materially

HE SUCCEEDS MERRICK

Hugh A. McPherson, Howell, Banking Commissioner



HUGH A. McPHERSON

ALMOST immediately after accepting the resignation of Frank W. Merrick as commissioner of the state banking department, last week, Governor Grossbeck announced the appointment of Hugh A. McPherson, of Howell, as commissioner. Mr. McPherson, who has been cashier of the McPherson State bank, is regarded as one of the very able financiers of Michigan. He was a candidate for state treasurer at the Republican convention, a year or so ago, bnt will draw in favor of Frank E. Gorman.

Digitized by Google

benefited by a sales tax as against ordinary corporations or individuals handling only one process is much less true than it sounds.

To the extent that there is an element of advantage, as naturally there is, in large combinations as against ordinary businesses, it exists now and has always exited. In the face of it, "single process" concerns have successfully carried on business, and will doubtless continue to do so, in the measure that they serve a public convenience or fulfill an economic function.

A trifling sales tax will not affect that situation in any material degree. Moreover, it is quite possible to operate the tax in such a way as to make it applicable to the various principal stages of manufacture, where these processes are combined in or controlled by one corporation.

To the extent that taxation is a factor in intensifying the advantage of large combinations, it is a great deal more so under the present system with the loading of prices incident thereto, than it will be under the application of a small sales tax.

(2) I am satisfied that a sales tax cannot be pyramided to any approchable extent, if at all.

(3) I am satisfied that it is workable without difficulty or inequity and that the various practical objections brought forward by its opponents can all be met.

(4) I am satisfied that a one per cent sales tax imposed on all stages from original producer to final consumer would not aggregate an average of more than three and a half per cent to the ultimate purchaser. (As I have mentioned before, according to the investigation of the Department of Justice, the average increase in ultimate costs due to our existing federal taxes, is not less than twenty-three per cent.)

(5) I am satisfied that a sales tax is approved and demanded by the rank and file of business throughout the country.

The social and economic welfare of the country is inseparably connected with the welfare of its industries. The return to normal conditions of industrial activity is at the moment our most urgent national need. It cannot be accomplished without a wise and courageous revision of our tax laws.

I am convinced that tax revision contains a good deal less political dynamite than many timorous politicians appear to think. I believe that people do not greatly care by what methods or under what names relief is obtained from the present intolerable situation, provided they do get effective relief.

In approaching this subject, let us, at last, clear our minds of cant and refuse to be swayed by catchphrases or well sounding formulae. Let us apply the practical and somewhat painful lessons we have learned as against the preachments of iconoclasts and the doctrines of theorists. Above all, let us give one another credit for decency of motives and integrity of purpose and not indulge in rancorous abuse when we differ. Let us try and settle this thing in calm discussion and with due respect for the realities, whether or not they accord with our preconceptions and predilections. It cannot be truly settled on any other lines.

It is characteristic that the decline in the vigor, vitality and enterprise of railroading has kept steady pace with the enlargement of the powers of the Interstate Commerce Commission over the destinies and the management of the railways. And nothing is more natural.

In the days antedating the Taft administration, under which the functions of the Interstate Commerce Commission received their fundamental and radical enlargement, there were, it is true, certain abuses in railroad practices which called for redress, certain delinquencies which demanded safeguards against repetition, but there was also the American spirit of progress and daring enterprise, there was vision, there was incentive to venturing and risking.

Great pioneers like Huntington and Hill, men of constructive genius like Harriman, saw and found in the building, acquiring, consolidating and managing of railroads a vast field for their splendid capacities. They did mighty work. True, they reaped rich rewards, but the wealth they received was but a trifling fraction of the wealth their genius created for the people.

And now? Nine governmental appointees sitting in Washington hold almost absolute power, together with a wage board sitting in Chicago (not to mention numerous state commissions) over the railroads of the country. Practically nothing of any importance can be done without a hearing before them and without their approval. Initiative has been hindered, vision deadened, daring rendered impossible, decision removed, the qualities of leadership dispossessed, men of commanding ability discouraged from entering the railroad field.

A large part of the time the thoughts and the energies of the chief executives of railroads is given to appearing and arguing before commissions. The routine of bureaucracy and the trial court have been substituted for individual brain work, energy and action. A simply incredible mass of paper work and statistical data of all kinds has taken the place of the few small sheets of essential data which Hill and Harriman used to carry around in their pockets. As Mr. Slason Thompson, of Chicago, wrote recently: "The blank form for the annual report of Class I roads contains over 10,500 spaces for items. When it is considered that some of the items in this veritable wilderness of data run up as high as eleven figures, the colossal nature of what the commission requires of the railways can be vaguely visualized if not comprehended."

No wonder that, as Mr. Thompson calculates, the number of railway clerks has increased from 42,200 in 1895 to 223,830 in 1919, and their compensation has increased from $28,516,000 in 1895 to $307,376,000 in 1919.

I venture to hope—though I know it is to be a rather daring hope—that out of the investigation which will shortly be inaugurated by Senator Cummins' committee into the railroad situation there will come recognition that regulation and control have gone too far and that more scope must again be allowed to the old American method of personal initiative, enterprise and responsibility if the railroads are to be enabled to give the fullest and best measure of service to the people. Of course, the principle of supervision and regulation of the railroads in the public interest has come to stay.

The institution of the Interstate Commerce Commission is both an advantage and a necessity. But it should be entirely possible to attain both the things which I believe a great majority of our people desire to see preserved: namely, on the one hand, governmental surveillance and authority, so as to emphasize the semi-public character and duties of the railroads, protect the community's rights and just claims, and guard against those excesses of unrestrained individualism which experience has indicated; and, on the other hand, private initiative, resourcefulness, zest and responsibility.

It hardly needs affirmation that in the difficult process of bringing our affairs from an artificial and highly inflated basis to a true and normal one, labor cannot be left unscathed. On the whole the workers, unionized or otherwise, have come to recognize that fact, and it is to the credit of the responsible leaders in the camp of the employes, as well as the employers, that thus far the process of reviling the prevailing scale of wages has not led to serious and large-scale breaches of industrial peace.

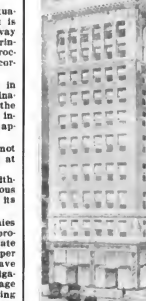
After all, in the last analysis, these matters all come down to the fair and foresighted use, or otherwise, of power temporarily residing with one party or the other. It is true there is no intoxicant, the "kady" effect of which humankind seems less able to resist than power. Capital had it for many years and failed to keep within the restraints of wisdom and equity; labor had it for the last six years of unlimited demand for workers and became inefficient, extravagant and grasping; the producer had it during the war and, with some conspicuous exceptions, gave pretty free rein to his covetings; the consumer has it now and is far from squeamish about using it.

Yet all experience has shown that abuse of power or even the unwise use of power reacts no less bunefully upon those who practice it than upon those who are subjected to it. It is greatly to be hoped that the bulk of employers will use the present emergency not to get even with labor but to set an example

(Continued on Page 37)

UNDOING FIRE'S WORK

Modern Business Block to Rise in Lansing on Razed Site



THE PRUDDEN BUILDING

WITHIN less than a year Lansing will be able to boast of one of the most modern and handsome mercantile and office buildings in the state, located in the heart of the business district, corner of Washington and Michigan avenues and one block from the state capitol grounds. This will be the 10-story Prudden building, which will occupy the site of the old Prudden block, destroyed by fire this winter. The ruins have been cleared away and the construction will start at once.

The first five floors will be occupied by the Dancer-Brogan department store and the upper stories by offices. The exterior of the first floor will be of green and white marble, the next six stories of gray-toned pressed brick and the remainder of terra cotta.

The contract for the steel has been awarded to the Jarvis Engineering Company, Lansing, at a cost of about $70,000.

Digitized by Google

The Michigan Legislature of 1921

A Resume of More Important Measures It Passed, Especially As Relating to Business and Industry

By H. BOND BLISS

[Staff Correspondent, Michigan Manufacturer and Financial Record]

LANSING, May 2—Michigan business breathes easier now. The fifty-first Michigan legislature has adjourned after nearly four months of work, and the people know what they face in the way of taxes and new laws. While there has been increased appropriations, the tax rate is not expected to be greatly changed. However, the corporations of the state will be hit by the new special corporation tax. A proposal to tax gasoline failed of enactment. Business and labor legislation played a rather important role during the sessions in the way of discussion, but few vital bills of this character were passed.

The biggest business proposition adopted was that reorganizing the administration of the state government. The numerous departments were combined in a few centralized boards. At the head of these departments in general control is the state administrative board composed of the elective officers of the state, thus furnishing the governor with an official cabinet. Other departments created were those of labor and industry, agriculture, conservation, welfare, and public safety. In each of these departments a commission is provided to take over the duties formerly conducted by the different departments.

Aside from this reformation in state government, probably the next most important action was the passage of the Vandenboom corporation tax bill. This bill levies an annual tax of three and a half mills on all paid-in capital and surplus of corporations in Michigan, with a minimum tax of $50 from any corporation and a maximum of $10,000. It is termed a license fee for the privilege of doing business in the state. It is estimated that $6,000,000 will be derived from this source in time to meet the urgent needs of this calendar year. The raising of money to help pay the bills of the state was the only excuse for the creation of this additional load upon the industry and commerce of Michigan.

The public utilities bills generally did not fare well in either the House or the Senate. The Osborn bill, which its opponents declared threatened to destroy the home rule rights of cities, failed to get out of the upper branch in time to be transmitted to the House for action. Its twin bill, the Dafoe measure, never reached the floor of the House. The bill of Rep. Andrew Giasple to confer upon the public utilities commission the power to fix interurban rates and stipulating what these rates should be according to the earnings per mile, was passed. Another measure that was adopted provided for notices from both parties in the case of contemplated track crossings, this bill growing out of the crossing of the D. U. R. tracks by the Detroit municipal lines.

Other important business legislation included the MacDonald workmen's compensation act; the Lord bill codifying the state's corporation laws; the Vandenboom Great Lakes-Atlantic waterway commission act; the Brewer vestibule cab act; the Penney motor vehicle bill; the Smith measure empowering counties to sell abstracts of title, and others. Automobile owners are largely interested in the passage of the Byrum bill providing for certificates of ownership, requiring every motor owner to possess an abstract of title. This was designed to prevent automobile thievery. The amended MacDonald bank bill was passed, providing that banks may act as administrators and executors of estates. The Welsh newspaper libel bill was finally killed in the Senate. This was aimed at Henry Ford's paper, the Dearborn Independent, and would have prohibited newspapers from attacking, misrepresenting or adversely commenting upon religious cults.

In the House 568 bills were introduced during long session, which ended early Saturday morning, April 30. Of these bills, 285 passed the lower branch and were transmitted to the Senate; 250 died in committee; twenty-three were tabled and ten were killed in committee of the whole or on roll call. Fourteen joint resolutions were offered and five of them passed the lower branch. In the Senate 311 bills were introduced, of which 220 were passed and transmitted to the House and 91 died either in committee or on roll call. Of seven joint resolutions, three passed and four failed. Among the bills stranded in committee were the Holland bill to repeal the act creating the state police; the Holland act for an eight-hour day and a long list of bills to regulate the operation of motor vehicles.

Two important measures, not of a business character, but in which widespread interest was taken, were the Hart capital punishment bill and motion picture censorship, both of which finally failed.

It is estimated that the total budget for the next biennial period will be only slightly above that for the last two years—$35,000,000. Consequently the tax levy is expected to continue about the same as heretofore. There will be $6,000,000 from the corporation tax and $3,000,000 from the usual fees. Efforts were made to provide for an income tax, and this was bitterly fought and defeated. Of great importance in the financial line was the resolution authorizing a constitutional amendment empowering the state to borrow $30,000,000 for the payment of bonus compensation to service men and women of the state.

A wave of economy swept over the admin-



WHY REDUCE? WE FEEL FINE! MUST BE NO FAKE ABOUT THIS TOO MUCH OF THIS!

Digitized by Google

istration and legislature and had some good effect in the slashing of appropriations for the various state institutions and conduct of the government. The fight on the University of Michigan request for $8,690,000 was a feature of the closing session, the University finally being allowed $4,800,000. In practically all other cases materiel reductions were made as follows:

Michigan State Normal, $872,423 (request, $2,031,197); Northern State Normal, $294,545 (request, $549,182); Western State Normal, $707,284 (request, $1,797,570); Central State Normal, $337,254 (request, $789,828); Kalamazoo State Hospital, $1,435,189 (request, $2,509,921); Pontiac State Hospital, $922,303 (request, $1,614,599); Ionia State Hospital, $516,899 (request, $815,337); Michigan School for Blind, $164,319 (request, $208,944); Michigan School for the Deaf, $338,029 (request, $563,895); Michigan Home and Training School, $805,012 (request, $2,018,096); Michigan State Prison, $1,477,900 (request, $6,072,298); Michigan Farm Colony for Epileptics, $401,233 (request, $670,898); State Public School, $184,489 (request, $254,089); Industrial School for Boys, $493,350 (request, $5,659,931); Industrial School for Girls, $377,455 (request, $513,832); Michigan Reformatory, $378,200 (request, $483,400); Marquette prison, $384,102 (request, $352,046); Michigan College of Mines, $299,375 (request, $379,024); Michigan Soldier's Home, $540,000 (request, $1,088,070); State Psychopathic Hospital, $133,513 (request, $194,723); State Department of Agriculture, $906,491 (no request); Conservation department, $666,518 (no request); National Guard, $525,000 (request, $1,514,048); Michigan Agricultural College, $990,000 (request, $2,295,000); department of public instruction, $215,210 (request, $682,965); Department of Public Safety, $700,000 (no request); Public Utilities Commission, $254,500 (request, $287,400).

Copies of the new Michigan automobile registration law and blanks will be sent all owners of motor vehicles by the Department of State. On and after October 1, 1921, no new motor vehicle may be purchased or used car sold without first obtaining from the Secretary of State a certificate of title. In the resale of a car the certificate must be transferred and returned to the Secretary of State so a new one may be issued. By July 1, 1922, every motor vehicle must be registered and a certificate of title issued.

After January 1, 1922, it will be unlawful for any person to engage in the business of dealing in motor automobiles without an annual license of $5. The fees for registering are $1 and the same for transfers. Penalties for driving a car without a certificate are fines of not less than $5 nor more than $50, with heavier penalties for false statements in applying for registration.

As a further step to eliminate the stealing of automobiles all sheriffs and police chiefs are to report stolen cars to the Secretary of State, and lists of these are to be published monthly together with those recovered.

Organizing the Farmer to Feed Detroit

IN LOVE, possibly, absence makes the heart fonder, but in business it usually stimulates suspicion. Because the farmer has been an absentee from the city, the consumer of farm products has given the problems of the farmer only scant attention, beginning and ending at the dinner table. On the other hand, the farmer, isolated from the city's inner life most of the time, has noted only the shorter working hours, the increased facilities for living at any rate from one to 100 horsepower, with the result he has been as biased as the city man in his judgment of the affairs of the city.

Through his agricultural organizations the farmer has gained little knowledge of city economics because his own organization is exclusively agricultural and distinctly class conscious. Some organization or economic unit that would bring the city and the agricultural thought together has ever been the missing link.

This situation has been patent to John A. Russell, president of the Detroit Board of Commerce, and from a systematic study of Mr. Russell has worked out what he believes will be the link needed. It is an agricultural division of the Board of Commerce, a department directed by men who know both farm and city problems, with perhaps enough leaning to the farm side of the fence to offset any tendency to magnify the city side to the exclusion of the agricultural view.

The board of Commerce has approved Mr. Russell's idea and such a division is now in the making. Charles A. Bingham, a farmer all his life engaged in agricultural work close to the city, and extremely popular with farmers throughout the state, has been made director of the division.

Mr. Bingham, after passing through the vicissitudes of the battle with the soil, conceived the idea of the Michigan Farm Bureau and "sold" it to the farmers of the state, with the result that the Bureau was organized with nearly 100,000 members and conducted successfully by him until other interests seized upon it and eliminated him. From the time Mr. Bingham began his organization work he had the assistance of James P. Powers, a newspaper man, whose first work was publicity, but who later became assistant secretary to Mr. Bingham as secretary. Mr. Powers will assume the position of assistant director of the Board of Commerce, agricultural division.

The initial work of this division will be confined to the counties of Wayne, Oakland, Monroe, Washtenaw, Macomb and parts of St Clair, Lapeer, Genesee and Livingston. In this territory nearly one-half of the total population of the state resides. At one time the Detroit district was supplied by a host of market gardens sending into the city tons of produce. While these gardens have diminished, the estimated number of food producers in this territory is about 15,000.

In a general way, the efforts of the new division of agriculture will be:

To remove the misconceptions that there are any real or just causes for a conflict of opinion and interest between the city and the farms.

To encourage the development of the largest proximate food supply, laid down in the city without the necessity of high priced short hauls by railroads, with less unloading and loading expense and less complex distribution.

To find the points of contact between the city and the farm and draw to and within these points all those present divergent thoughts and interests.

To extend to the farmers non-resident membership privileges in the Detroit Board of Commerce, giving them a common meeting place in the city, and the advantages of such membership.

To set to work such agencies as exist, or seek new agencies if needed, to drain and prepare present marsh and swamp land for farm uses and encourage more and better farming and fertilizing on these lands.

To work for the improvement of existing roads necessary to the distribution of farm products, and find where new, short-cut roads might be constructed so that the general inter-county system can be more useful to all the counties and marketing.

As the establishment of public markets has fallen far behind the increase in population so that well populated districts are not served at all, the new division of agriculture will seek the location of more of these markets.

Standardized seasonal credit for small as well as larger farmers at the periods of the year when farm finances are needed will be considered one of the advantages to be sought.

There are times of the year when there is a glut of fruit or vegetables, and because there has been no way of advertising to consumers the possibility and advisability of buying for home preservation, wastage occurs. It is believed that through this division of agriculture city consumers could be made aware of fruit and vegetable supplies and a demand created.

Along the same line some effort can be made to encourage closer and better grading with a view to holding out culls and poorer produce for animal food, thus increasing animal husbandry and bringing to the city fresh food instead of "canned" fruit and vegetables.

The division will foster meat animal clubs among children on the farms, such as pig, calf, sheep and chicken clubs.

The problem of adequate storage for farm produce will also be taken up so that in seasons of plenty, food supplies can be held for short seasons and off-seasons.

The division will work in the interest of farm colonization with a view to developing unused lands adjacent to the city and increasing the city's food supply as the population grows.

With the Detroit Board of Commerce as city headquarters and groups organized throughout the counties mentioned, it is believed that the new division of agriculture can create a spirit of co-operation and build up a mutual understanding which both the farmers and the city dwellers need and desire.

YEAR'S COAL OUTPUT REPORT

The Department of the Interior has compiled a chart showing the average production of bituminous coal per working day for each month for the coal year just closed—April 1, 1920, to March 31, 1921—and how this compared with the production during the pre-war years 1913 to 1917. It shows that while the output from last April to about the middle of January of this year averaged higher per month than during the years previous to the war, the decrease in production since the middle of January has been so large that at the close of the 1920-1921 year the average was below the 1914-1915 average, when, as we say in official announcement, a business rection was in progress.

The average daily output was about 1,100,000 tons when the coal year ended, compared with a high average of better than 2,100,000 tons at the end of last October. When the coal year began in April, 1920, the daily average was better than 1,400,000 tons.

For the first week of the new coal year, April 9, 1921, the output of bituminous was 6,059,000 tons, or 3,600,000 less than a year ago, but 200,000 tons better than during the week ended April 2. The output of anthracite for the week ended April 9 was about 1,865,000 tons, as compared with 1,157,000 for the previous week and 1,538,000 for the corresponding week in 1920.

Carload shipments made from the mines show a sizeable increase for the week of April 9, the total of anthracite shipped being 35,661, as compared with 22,120 for the week of April 2, while bituminous carloads shipped numbered 113,245 as compared against 108,154.

Digitized by Google

Motor Upgrade Evidenced By Orders in Lansing

Several Lansing concerns identified with the automotive industry report an increase of business, with good prospects for the future. The Auto Body Company is receiving releases from a number of automobile and truck manufacturers, including one from the Briscoe Motor Corporation, Jackson, for 1,000 bodies for May. Increased releases have also been made by the Scripps-Booth, Olds Motor Works, Auburn and General Motors Truck companies. The Auto Body company is now employing 350 men and will increase this force 150 within thirty days.

The payroll of the Motor Wheel Corporation is now larger than at any time since the first of the year. Four hundred more men are employed in the three units than were on the payroll 60 days ago. The Prudden plant in Lansing is turning out the largest volume of business. The Ford and other concerns with which Motor Wheel has contracts, are expanding their activities. Truck business, however, is reported to be light.

The Kirchen Machine Company is planning extensive additions to its plants to provide for increased orders for parts coming in from all parts of the state. The expansion move comes in connection with the new partnership between O. J. Kirchen, formerly sole proprietor of the plant, and W. G. Conway, Lansing. The second floor and basement of the plant will be opened, giving 5,200 additional feet of floor space. A new carbonizing unit is being installed, while a welding process will also be in operation. The company will manufacture Smith-Spencer piston rings, piston pins, bearings, bushings and primers, orders for these having been received from the Olds Motor Works and Howell Electric Motors Company, while business is also being done with Brighton and Grand Rapids concerns. New machines and stock are arriving daily.

The Lansing Company reports a growing business in road making products, including cement mixers and road scrapers.

LA FOLLETTE HEARING OPENS

A delegation of about 100 representatives of business enterprises in the states bordering the Great Lakes appeared this week before the merchant marine and fisheries committee of the national House of Representatives at the opening of the hearings on proposed changes in the LaFollette Seamen's Act. Detroit was represented by the following:

Shippers—Harvey B. Wallace, vice-president, Board of Commerce; R. J. MacLean, chairman, inland waterways committee, Board of Commerce; L. E. Williams, marine manager, United Fuel & Supply Company; J. G. Liddle, shipbuilder, Wyandotte; M. L. Miller, Detroit real estate operator and Put-in-Bay produce grower; Arthur T. Waterfall, vice-president and assistant general manager Dodge Brothers; Frederick Stockwell, Edson-Moore & Co.; Fred. Meyer, superintendent, Wabash Railway Company; Tom L. Munger, Board of Commerce; J. E. Maynard, Beecher, Peck & Lewis; Lewis W. Lindemann, St. Clair Flats Improvement Association, R. E. Johnson, traffic manager Burroughs Adding Machine Company; J. H. McBride, Penberthy Injector Company; also representatives of the Ford Motor Company and Paige-Detroit Motor Car Company.

Vessel owners and operators—A. A. Schantz, president, Detroit & Cleveland Navigation Company; C. L. Perkins, general superintendent, Detroit & Cleveland Navigation Company; Captain F. J. Simpson, Detroit & Cleveland Navigation Company; Captain A. E. Dustin, Ashley & Dustin lines; O. J. Dustin, Ashley & Dustin lines; C. F. Bielman, Jr., White Star lines.

EVERTON ENGRAVING CO. MOVES

The Everton Engraving Company, Detroit, has removed from the Marquette building, Congress street west and Wayne street, to the Kerr building, at Beaubien street and Fort street east, where it occupies the entire second floor. Its facilities at the new address have been increased.

STRAIGHT LINE METHODS

The Eyes of Business

Sound Methods of Cost Accounting Safeguard Your Profits

Business, without exact knowledge based on facts and figures, is blind business. Blind business is bad business. With material and labor costs changing over night, sales volume fluctuating, prices declining, profits must be safeguarded.

Sound Methods of Cost Accounting, applied by competent organization, are the watchful eyes of business, probing every department, establishing the actual sources of profits, detecting every loss. They furnish the executive *at all times* with comprehensive and dependable facts and figures—the rock basis of intelligent, progressive action.

Sound Cost Accounting is business insurance, as necessary as fire and liability, use and occupancy insurance. It guarantees the same security. The low expense of applying it is a premium to *insure* profits, as well as an investment to *increase* profits.

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT

304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK	CHICAGO	CLEVELAND	CINCINNATI	NEW ORLEANS
PHILADELPHIA	MINNEAPOLIS	BUFFALO	INDIANAPOLIS	DALLAS
BOSTON	ST. PAUL	PITTSBURGH	TOLEDO	FORT WORTH
PROVIDENCE	ST. LOUIS		ATLANTA	HOUSTON
WASHINGTON	KANSAS CITY		RICHMOND	DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

Marmon and Jordan Cut Prices

Former Reduces $600 to $900, Latter $1,015 to $1,400; Advance-Rumely Co. Scales Down Its Tractor List

BY MARC BRAUN

IMPORTANT price reductions have been announced during the last week by two of the best known makers of motor cars and one producer of tractors. The Jordan Motor Car Company, Cleveland, has slashed its list figures from $600 to $900, depending on the model, while the Nordyke & Marmon Company, Indianapolis, has taken time by the forelock and cut from $1,015 to $1,400 from the prices of its various models. The manufacturer reducing the price of its tractor is Advance-Rumely, of Laporte, Ind., and Battle Creek, Mich.

A statement by Edward S. Jordan, president of the Jordan company gives the reasons for the new price policy which took effect on May 1. The statement says:

"It has always been the desire and the ultimate purpose of the Jordan company to produce the best car we possibly could for the money.

"Last year at this period we began to approach for the first time since the inception of the company, a volume of production which meant a very marked decrease in our overhead.

"Previous to that time owing to war restrictions and the difficulty of getting materials, we had been unable to obtain a production sufficient to meet the normal demand for Jordan cars.

"Last June we made plans for a monthly production which would have made it possible for us to reduce the price of Jordan cars materially before the end of the year 1920.

"Business conditions began to change in July, by October sales conditions were such that our production began to fall off instead of increasing. Therefore it was impossible for us to realize our aim.

"During the past six months we have been successful in reducing our inventory to a point where we are now buying and taking delivery on all material necessary to production.

"Two months ago we did not anticipate that the spring demand would be sufficient to warrant a production which would make possible any change in price.

"The improvement in sales has been so marked during the last six weeks that by the first of May we were building more cars for sale at old prices than we had ever built before.

"We believe, therefore, that this is the opportune time for the Jordan company to place the car within the reach of a much larger number of people, to command the attention of dealers who desire a car in the new Jordan price class, and further extend our organization and production.

"The Jordan company, owing to the fact that we have liquidated our inventory, is in a strong financial position, and in spite of slow production during the winter months we have met all obligations in a satisfactory manner."

Following are the old and new Jordan prices:

	Old	New
5-Pass. Silhouette	$2,850	$2,250
Playboy	2,850	2,250
5-Pass. Sedan	3,950	3,300
Brougham	3,950	3,300
7-Pass. Silhouette	3,075	2,475
Custom Landaulet	4,200	3,300
7-Pass Sedan	4,200	3,700

A statement from the Nordyke & Marmon company says that the new prices are the 1922 figures and that the reductions are based on the revisions in prices the company expects it eventually will obtain in raw materials and lowered manufacturing costs.

"We have made this revision at the earliest opportunity—six months sooner than anticipated," says the statement. "We make one complete reduction, instead of several steps downward. Our new price is based on the anticipated lowered production costs of the next eighteen months."

The old and new Marmon prices are as follows:

	Old	New
4-Pass Touring	$5,000	$3,935
7-Pass Touring	5,000	3,935
4-Pass Roadster	5,000	3,935
Speedster	5,300	4,185
Coupe	6,150	4,875
Sedan	6,600	5,375
Limousine	6,600	5,400
Town Car	6,800	5,400

Persistent rumors that Dodge Brothers contemplated a price reduction have brought forth a statement from the corporation, signed by F. J. Haynes, president, that the reports are "absolutely false." Telegrams to this effect have been sent to Dodge distributors, with instructions to pass the word on to their dealers. Nevertheless, the rumors persist.

In the case of the three other Detroit concerns it has been learned that price reductions planned may be effective most any day, yet the officials deny any such plans have been formulated.

In announcing reductions of from $300 to $685 on its tractors, according to the model, the Advance-Rumely Company, says:

"The reduction of steel prices cannot affect our present costs because our materials are all in our yards bought at the old prices. It does, however, establish a lower replacement cost and justifies us in immediately taking our loss on the higher priced materials on hand and with this loss written off we are able to establish our costs on a lower basis.

"Our reductions are considerably greater than the reduction in steel prices, but we have in mind similar or even greater reductions made or yet to be made in other materials, besides reductions in wages already made in our shops.

"Moreover, we believe it sound business to get our prices down to a stable level for the remainder of this year, that our customers may have confidence in buying their seasonal requirements without the fear of further decline in our prices during the year."

NO RENT LAW FOR THE PRESENT

Governor Groesbeck has advised Prosecutor Paul W. Voorhies, of Wayne county, that he believes it would be inadvisable, "at least for the present," to put a rent law on the statute books of the state. The governor says any such legislation at this time would tend only to discourage building, and building is what is needed to take care of the rent situation.

GEAR MANUFACTURERS MEET

The following Detroit concerns were represented last week at the 1921 convention of the American Gear Manufacturers' Association, in Cincinnati: Detroit Gear & Machine Company, Gear Grinding Machine Company, John Lauer Machine Company, Timken-Detroit Axle Company, Western Gear Company, Cross Gear & Engine Company, and Michigan Gear & Engine Company.

LAHEY JOINS DURANT MOTORS

M. J. Lahey, formerly sales manager of the Chevrolet Motor Company, New York, has been made sales manager of the Durant Motors, New York.

Digitized by Google

Reduce Your Production Costs



The two leading features of

BARKER

Wrenchless

CHUCKS

Are



1st. Reducing to a minimum the lost time between cuts—just a movement of the lever opens or closes the chuck.

2nd. The gripping power is wonderful—no job in a Barker Chuck will slip.

For lathe, drill press, milling machine or shaper.

Let us demonstrate.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

Every Firestone Employe Now a Stockholder

THE TREND of American wage earners' thought and action toward new habits of thrift and investment is evidenced in the announcement of the Firestone Tire & Rubber Company, Akron, late last week, that every one of its several thousand employes had become stockholders in the company.

Within twelve hours after announcement by President H. S. Firestone of a new allotment of employes' stock, subscription records showed that every employe had become a stockholder, each subscriber taking at least two shares, while oversubscriptions on the allotment amounted to almost fifty per cent.

This places the Firestone company in a distinctive position among industrial concerns employing more than 10,000 persons, as it is the only organization of its rank on record having every man and woman on its payroll a shareholder in the company. It brings the total number of shares subscribed for by employes close to 45,000.

So quick was the response to the stock ownership privilege and so large the subscriptions that officials of the company are expected to consider alloting an additional amount of shares for purchase by employes.

In offering the stock to workers in the Firestone factories Mr. Firestone wrote to each employe:

"For most of us it is not easy to acquire the habit of saving. We need a special inducement and this common stock plan is an opportunity not only to create the habit of saving but to become a stockholder in the company."

In commenting upon the reception given the company's offer by the employes, Mr. Firestone said:

"Aside from the great personal gratification in the matter, there is, I believe, a far-reaching significance in this recent experience of our company. A year ago advice about thrift and savings was lost in the whirl of prosperity that carried extravagance and waste everywhere.

"It took the experience of the last eight or ten months to teach us that there is no short cut to permanent prosperity—that there is no substitute for work and thrift in the attainment of happiness and prosperity. How well that lesson has been learned is proved by the reception which our stock offer received.

"One of the main ideas behind this new stock allotment was to encourage the habit of thrift and saving among our organization and give all an opportunity to become stockholders. The company feels that its employes have not only shown their loyalty and faith in the future of the organization but have demonstrated to the country that there is a sound economic spirit abroad among the wage earners."

Two of the outstanding features of the Firestone plan have been to furnish employes with a six per cent savings account and at the same time give them the advantage of sharing in the prosperity and profits of the company through dividends and the increase in the market value of their stockholdings.

The company had made two previous offers of stock to employes, with special payment plans at a price below the market value. But not until the last stock purchase offer has the company been able to state that every one of the thousands of men and women on its payroll is part owner in the enterprise.

FIRE PREVENTION MEASURES

The fire prevention committee of the Detroit Board of Commerce is distributing to householders a special card bearing the inscription: "A Delayed Alarm Does the Harm," which will be affixed to a picture of a firm alarm box with general instructions for sending in fire alarms and fire prevention.

PONTIAC PLANTS OPERATING

The Wilson Foundry & Machine Company, Pontiac, will be on a 50 per cent production basis, according to officials, by May 15. The latest order is for the largest tire mold ever turned out in this plant. The plants of O. J. Beaudette Company and Michigan Drop Forge are increasing production.

ANSTEAD VISITS DETROIT

Frank B. Anstead, president of the Lexington Motor Car Company and the United States Automotive Corporation, Connersville, Ind., visited Detroit last week on the final lap of a 7,000-mile trip through the western part of the United States investigating business conditions. He says the country commercially is on "high ground" and the while business probably will continue variable for some time, he has no doubt of the outcome. Mr. Anstead was the Detroit guest of W. D. Block, of the W. D. Block Motor Company, Marmon and Lexington distributor.

SPARTA BUSINESS MEN ELECT

The annual banquet of the Sparta Business Men's Association a few days ago was attended by 130 persons. The election of officers resulted as follows: President, Erastus W. Smith; vice-president, J. H. Brace; secretary, William Rogers; treasurer, A. A. Johnson; trustees, Milo Bolender and S. C. Field.

Digitized by Google

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.



America's Headquarters for
Second Hand Electrical Machinery
Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Fort St., E. DETROIT

The Bellefontaine Bridge & Steel Co.
Engineers, Fabricators and Erectors
STEEL BUILDINGS AND BRIDGES
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6558.

Hughes
FACTORY EQUIPMENT
STRONG, DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE-ALLEGAN, MICH.

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

MAKING 2,000 TIRES DAILY

A. F. Osterloh, vice-president and general sales manager of the Goodyear Tire & Rubber Company of California, announced this week that the company was now turning out 2,000 tires daily, as against 700 on March 18. This is the fourth production increase notice issued by California Goodyear within a month.

FRANKLIN GAINS 10 PER CENT

A statement from the Franklin factory, at Syracuse, N. Y., is to the effect that the company's business for the first twenty days of April was ten per cent larger than for the similar period in March.

ACME PRICES TO STAND

C. J. Heim, secretary and sales manager of the Acme Motor Truck Company, Cadillac, announces that there will be no material change in prices of the company's product. He calls attention to the fact that during the war the concern did not materially advance its prices and that in consequence recessions of any importance are ont of the question now.

NAPOLEON MOTORS' ORDERS

It is reported from Traverse City that the Napoleon Motors Company has received orders in sufficient quantity to justify the belief that the plant will be operating at capacity within thirty days. Napoleon is concentrating on steel truck bodies for road construction work.

KEYSTONE PLANT BURNS

Fire late last week destroyed the factory of the Keystone Tire & Rubber Company, at Erie, Pa. The loss is estimated at $500,000. The plant had not been operating for five months but a crew had just started work on the interior, preparatory to a resumption of activities in the near future. The company employs 1,400 men when on a normal schedule.

O. R. COOK'S NEW CONNECTION

Otis R. Cook, for ten years vice-president and general sales manager of the Kelly-Springfield Tire Company, on May 1 became vice-president, director and sales manager of the Howe Rubber Company, Brunswick, N. J., in which he has purchased a substantial interest. His headquarters will be in Cleveland.

WHITE AT ONE-THIRD CAPACITY

It is reported that the White Motor Company, Cleveland, is turning out about 100 trucks daily. This is approximately one-third of capacity.

PIERCE-ARROW SHIPMENTS

It is stated that the Pierce-Arrow Motor Car Company, Buffalo, N. Y., is producing and shipping at the rate of 300 passenger cars a month, or 3,600 cars a year, in 1920 the company made a total of 3,172 passenger cars and 2,076 trucks. Truck output now is still somewhat below the 1920 average, it is said.

DOW-METAL DEMAND BRISK

The Dow Chemical Company, Midland, announces that its Dow-Metal division is now machining all its Dow-Metal products in the company's newly equipped special machine plant. The company has been making metallic magnesium for about six years and has specialized on pistons for motors and airplanes for the last three years.

Dow Metal is composed almost entirely of magnesium and is made from a natural salt brine pumped from the mineral wells near Midland. It is one-third lighter than aluminum and one-fourth the weight of cast iron. All processes from the taking of the metal from the salt brine to turning out the piston finished ready to go into the cylinder of an engine are performed at the Dow plant. Orders sufficient to keep the Dow Metal division at capacity indefinitely are on hand.

KEYSTONE TIRE & RUBBER CO.

A net loss of $317,704 for the year ended December 31, 1920, is reported by the Keystone Tire & Rubber Company. After deduction of expenses, interest and taxes, this loss was shown, and the deficit after establishing a reserve for inventory depreciation was $384,624.

CITY PATTERN WORKS PURCHASE

The City Pattern Works, Detroit, has purchased the factory and foundry building at Harper avenue and Rivard street, now occupied by the Utility Compressor Company and the Detroit Torch Company. The plant has been leased to the former owners until August, when the new owners expect to remodel the buildings into the largest and finest equipped pattern institution in the country. Wood and metal patterns and foundry equipment will be manufactured.

OLD TIMERS' PLANS

The second meeting of directors of the Old Timers Club was held in New York a few days ago at the office of Vice-President Gregory Flynn. Others present were Alfred Reeves, general manager of the National Automobile Chamber of Commerce; A. G. Batcheller, chairman of the executive committee of the American Automobile Association; Richard Kennerdell, chairman of the contest board of the Association; C. G. Sinsabaugh, editor of Motor Life; Albert Champion, president of the Old Timers Club, and F. Ed Spooner, secretary. It was decided that the club would hold annual reunions at the time of the annual automobile shows in New York and Chicago, and though local sections have get-together meeting during local shows.

MARTIN-PARRY PROFITS

The annual statement of the Martin Parry Corporation, Indianapolis, automobile body builder, shows that for 1920 net profits after charges and taxes were $311,300. Assets on December 31 totaled $3,408,963 and the net surplus was $1,245,823. Sales during the year totaled $3,725,406. President F. M. Small in his report to the stockholders says: "The year 1920 has seen the realization of plans for the manufacture of a standardized engineered line of commercial bodies, built sectionally. As this method of manufacture was a radical departure in commercial body construction, considerable revamping of both our plants was necessary. The result has been greatly to reduce manufacturing and transportation costs and substantially to increase production capacity."

KNAUSS TO SELL AIRCRAFT

The Stout Engineering Laboratories, Inc., Detroit, will begin production in the Beaubien street plant within a short time. Stanley E. Knauss, formerly sales and advertising manager of the Continental Aircraft, Inc., has been made sales manager.

Digitized by Google

Rice Succeeds Collins; Hannum Sent to Oakland

Two important personnel changes affecting Michigan plants of the organization have been announced during the last week by the General Motors Corporation. The first was that George H. Hannum, who has been manager of the Saginaw Products division, had been made general manager of the Oakland Motor Car Company, Pontiac, succeeding Fred W. Warner, resigned. The second was that H. H. Rice, formerly treasurer of the corporation and lately vice-president, had been appointed president and general manager of the Cadillac Motor Car Company, succeeding Richard H. Collins, resigned.

Mr. Hannum, who is one of the outstanding figures in Saginaw business and civic life, being president of the Board of Commerce, a director of the Bank of Saginaw, vice-president of the Saginaw Shipbuilding Company and a director of the Saginaw Financing Corporation, left the Detroit Lubricator Company in 1912 to accept the shop superintendency of the Wilcox Engineering Company. This was one of the first industries taken over by the General Motors in Saginaw.

Mr. Warner, who has managed the Oakland for seven years, will remain as a vice-president and director of GMC. Previous to joining the corporation he was identified with the farm implement industry.

The resignation of Mr. Collins, who is casting his lot with his old chief, William C. Durant, in Durant Motors, was announced exclusively in this paper on April 16. It has since been reported from New York that he will become the head of the Michigan Durant corporation.

Mr. Rice has been connected with General Motors a number of years.

REPORTS ON EUROPEAN SITUATION

The Lansing Auto Dealers' Association at its most recent meeting heard an address by Elijah Poxson, European representative of the Dort Motor Car Company, who has recently returned from an overseas tour. Mr. Poxson reported prospects for export trade as dark. He said foreign exchange rates must be adjusted before export trade in automobiles can become profitable. In Germany, Austria and Hungary he found the people spending all their money for food and necessities, and declared they will be for a long time to come. There is little manufacturing, and with the plants closed many are unemployed. He attended the London automobile show, where he saw European manufacturing conditions reflected. Many of the large English automobile concerns are turning out only 250 to 300 cars a year, he reported.

DUPLEX TRUCK'S NEW SALES PLAN

Frank B. Willis, sales manager of the Duplex Truck Company, Lansing, has outlined a new sales policy for his organization, the main principle of which is vocational selling—selling trucks for the job after a comprehensive survey of the character and needs of the job to be done. In a sense it is selling transportation rather than merely a truck unit, it being assumed that after the analysis of the prospect's problem has been made, the truck sold will provide the transportation he needs at the lowest initial cost and upkeep cost. Much of the work will be done by a sales research department, the findings of which will be sent to the prospect and to the dealers from the factory. The company now has 44 types of bodies and 22 classes of equipment listed. The country has been divided into 14 zones, and vocations into 21 classes.

GOODYEAR PROMOTES MORGAN

The Goodyear Tire & Rubber Company has promoted Fred L. Morgan, manager of the Cleveland branch, to the position of manager of the automobile tire sales division.

Better Service for Detroit and vicinity



A Warner & Swasey Service Station in Detroit
5928 Second Boulevard

A place in your vicinity where you can see the machine once or twice—
or as many times as you like—
to be sure it is what you need for your work.

A place to buy tools for your turret lathes—
in a hurry if you like—
All sizes in stock.

A real Service Station with competent men in charge—
Come and see us
or telephone us

C. S. STILWELL, District Manager
WM. B. POPE

The Warner & Swasey Company
5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.
Branch Offices: Detroit ..... 5928 Second Boulevard
Boston ..... Oliver Building
New York ..... Singer Building
Buffalo ..... Iroquois Building
Indianapolis ..... Lemcke Annex
Dayton ..... Mutual Home Building
Milwaukee ..... Sycamore Building
Chicago ..... 816-822 Washington Boulevard

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World
Continental Motors

WICKES BOILERS
Vertical Water Tube Type



Great Height of Steam Room Insures Dry Steam

Ask for Bulletins:
Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler Saving Coal in Steam Power Plants.

THE WICKES BOILER CO.
SAGINAW, MICHIGAN
Michigan Sales Offices
1116 Penobscot Bldg. - DETROIT, MICH.

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

COMMERCIAL HAULING

TRUCKS FARE WELL IN LEGISLATURE

Motor trucks fared well in the 1921 session of the Michigan legislature. Out of fourteen measures introduced, affecting the commercial hauling industry, most were defeated. Bills were passed requiring trucks exceeding one and one-half ton capacity to be equipped with mirrors; horse drawn vehicles were required to display lights at night, and the weight limit on trucks was revised downward slightly.

The legislation proposed covered everything from excessive licensing, with the idea of driving trucks off the highways altogether, to relief for certain sections of the state where seasons for operating are short, and there were several efforts to bring highway transport under the control of the public utilities commission. All of them died in committee or in the house where they originated. Here is a resume of the legislation:

Senate bill 88, by Senator Penney. Permitted increase of speed limit to thirty miles an hour from twenty-five miles and regulated glaring headlights. Passed Senate. House added provision for rear end signal device, which killed the measure.

House bill 341, by J. E. Warner. Limited weight of trucks to fourteen tons, using the manufacturers' rating as official. This replaced the former rating scale, based on tire sizes. Former limit, fifteen tons. Passed and signed by the governor.

Senate bill 279, by Senator Bryant, provided placing motor truck operation under the public utilities commission. Died in committee.

House bill 323, by Rep. Strauch. Placed trucks under control of public utilities commission, also provided five per cent tax on gross receipts of trucks operated for hire on state roads. Favorably reported out of committee on roads and bridges and placed on general orders. Recalled after public hearing and reported back with a clause added providing those affected by the law to be bonded. Second time from committee it was reported with recommendation and the House voted to table it, where it was when the session ended.

House bill 549, by Rep. Atwood, provided for a tax of one cent a gallon on gasoline. Died in committee.

House bill 105 and Senate bill 103, provided reducing license fees on automobiles when taken out after certain portions of the license year had elapsed. Defeated.

House bill 278, by Rep. Dafoe. This was the "home rule" act, and one of its provisions was to give the utilities commission control of trucking on state highways.

House bill 164, by Rep. Danz, and House bill 142, by Danz, both aimed to increase license fees approximately 200 per cent, with the idea of driving trucks off highways, on the ground that they were breaking down roads. Killed in Committee.

House bill 129, by Rep. Lennon, sought to attack a motor vehicle for damages. Killed in committee.

House bill 131, by Rep. Coleman, compelled drivers of horse-drawn vehicles on highways to equip vehicles with lights at night. Passed both houses and signed by the governor.

House bill 57, by Rep. DeWitt, provided for displaying of mirror on trucks of capacity exceeding one and one-half ton in small communities and over highways. Passed both houses and approved by governor.

House bill 25, by Rep. McDonald, sought to give Upper Peninsula automobile operators relief from licenses owing to shortness of operating season. Defeated.

Senate bill 305, sought to place motor buses under the public utilities commission. Defeated.

A LECTURE ON COSTS

E. A. Andrews, transportation engineer of the Packard Motor Company, truck division, delivered an illustrated lecture on the operating costs of 3½ and 5-ton stake body trucks and 5-ton dump trucks at the meeting of the Detroit Transportation Association in the new headquarters, 1038 Third avenue, recently. These costs were averages taken on actual truck operating experiences in Detroit hauling and are minimum costs:

INVESTMENT

	3½-ton Stake	5-ton Stake	5-ton Dump
Chassis	$4,450.00	$5,550.00	$5,550.00
Body (Estimated)	500.00	550.00	1,250.00
Cab (Weatherproof)	175.00	175.00	175.00
War Tax (Approximate)	155.00	195.00	265.00
Total	$5,280.00	$6,470.00	$6,970.00
Less Tire Value	354.00	452.00	452.00
Basis for sinking fund	$4,926.00	$6,057.00	$6,525.00

FIXED CHARGES PER DAY

Interest—Computed on total investment cost, at 6% on 5-yr. Book life.	.594	.721	.87
Insurance—Liability, Collisions, theft, fire, property damage	1.76	2.136	2.136
License	.122	.163	.163
Driver's Wages	6.00	6.00	6.00
Garage	.50	.50	.75
	$8.976	$9.530	$9.919

VARIABLE CHARGES PER MILE.

Fuel at .259	.0618	.0647	.074
Lubricants at .72	.0043	.005	.005
Maintenance—Tire repair and overhaul	.0343	.047	.047
Tires—10,000-mile life	.0356	.0453	.045
Sinking fund—300,000-mile life	.0092	.009	.009
Total variable charges per mile	$ .1709	$ .2960	$ .222

Total operating cost will be found by multiplying the cost per mile by the number of miles traveled plus the fixed charges per day.

During the discussion following the lecture two points were brought up. One was that the depreciation item should be larger on dump than on stake body trucks, and the other was the claim that the cost per mile increases when a truck is operating on hauls of more than 50 miles a day.

If a man is running a trucking business he must consider other charges besides operating costs, such as these:

Rent or office (if rented).
Rent of office (if owned), also interest on investment.
Telephone.
Light, heat and water.
Stationary and postage.
Advertising.
Claims for damages and losses and lost employment.
Compensation insurance, covering employes.
Idle time during which driver is paid.
Lay time. Time during which fixed charges continue.
Furniture and fixtures. Interest on, depreciation, taxes and insurance.
Interest on notes (other than those on truck) and bad accounts.
Expense of personal solicitation of business.
Expense of keeping books.
Allowance for supervision (Salary of owner of cartage business).

TUCKER RETURNS TO OMAHA

Charles A. Tucker, sales manager of the Olds Motor Works, Lansing, has resigned to return to Omaha to manage the Nebraska Oldsmobile Company, of which he is president.

HANCH GOES TO INDIANAPOLIS

One of the best known men in the automotive industry, Charles C. Hanch, has become associated with the Homer McKee Advertising Agency, Indianapolis. Up to recently Mr. Hanch was general manager of the Maxwell and Chalmers companies; previous to that he was for several ears treasurer of the Studebaker Corporation. For a period of nearly 20 years he was connected with the Nordyke & Marmon Company, of Indianapolis, as treasurer.

Digitized by Google

New Crop of Reports Out On Collins-Durant Plans

According to a New York dispatch to a Detroit newspaper, R. H. Collins, who recently resigned as president and general manager of the Cadillac Motor Car Company, will organize a motor car corporation to be known as the Collins Motor Car Company, with a plant in Detroit. The corporation, the reports say, will be capitalized at $10,000,000 under Michigan laws and will show a product by Janury 1, 1922. Mr. Collins is said to have told interviewers from New York papers that he intended forming such a company and that W. C. Durant, formerly head of the General Motors Corporation, would be a large stockholder. Another report is that Mr. Collins will organize a company in Cleveland.

Simultaneous with the Collins report rumors of a merger of the new Durant Motors, Studebaker and Pierce-Arrow Motor Car companies have set New York stockbrokers on edge. It was reported that a holding company would be formed, the stock of which would be exchanged for that of the three companies. No confirmation of this rumor has been made. It was reported some time ago that the above companies and the Continental Motors Corporation would be merged, but W. R. Angell, secretary of the Continental, denied that his company was concerned or interested in any such combine.

The relative values of the stock of the three companies are as follows: Durant Motors, $25 a share; Pierce-Arrow, $60 a share; Studebaker, $125 a share. Pierce-Arrow stock has been active on the exchange, where 57,600 shares changed hands, indicating to some brokers that a merger is in sight.

While Pierce-Arrow earnings have shown no marked improvement, those of Studebaker averaged $3.25 a share on common stock, nearly twice the dividend requirements, during the first three months of the year.

A month or so ago it was reported that Frederick S. Fish, chairman of the board of directors of the Studebaker Corporation; A. R. Erskine, president of the Corporation, and Mr. Durant has obtained control of the concern, but no confirmation of this report has been made. All these reports and rumors center about the expectation that Mr. Durant, having left the General Motors, will not be conient until he has organized another motor combine as great and powerful as the General Motors.

GOODRICH REDUCES PRICES

The B. F. Goodrich Rubber Company, Akron, in announcing a 20 per cent reduction in Goodrich tires, effective May 2, has made the following statement:

"We feel that our readjustment of prices is radical and that at one move it puts prices at the bottom. Undoubtedly there will be increases in the prices of many commodities before the summer is over, for the reason that the lack of buying is holding back production in many lines and this will naturally bring about a shortage of supplies.

"Putting business on a normal basis is not a job for one man or one concern. The public can do this better than any other force, and it will find both manufacturers and dealers more than ready to co-operate. Conditions in the automotive industry seem to be much better and the outlook much brighter, and, of course, this will be reflected in the tire industry.

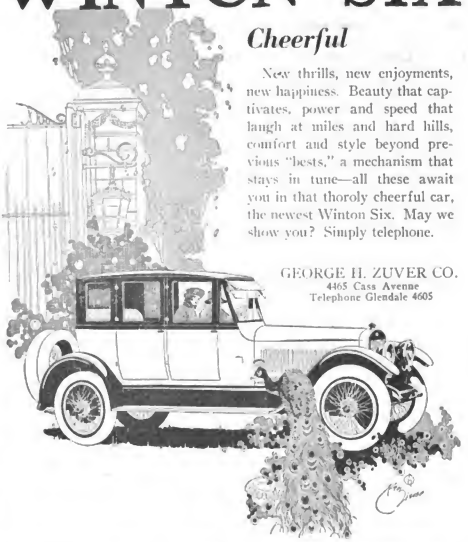
"Fair wages, honest products, right prices and a square deal all around are what will give producer, distributor and public real confidence. Recognizing this, we put our prices at the point we have announced."

WINTON SIX

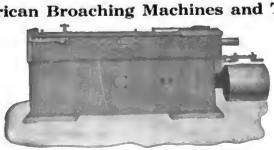
Cheerful

New thrills, new enjoyments, new happiness. Beauty that captivates, power and speed that laugh at miles and hard hills, comfort and style beyond previous "bests," a mechanism that stays in tune—all these await you in that thoroly cheerful car, the newest Winton Six. May we show you? Simply telephone.

GEORGE H. ZUVER CO.
4465 Cass Avenue
Telephone Glendale 4605



American Broaching Machines and Tools



American Broach and Machine Co., Ann Arbor, Michigan
F. J. LA POINTE, President
305 Scherer Building - DETROIT OFFICE - Phone Cadillac 5381

Digitized by Google

Detroit United Lines
(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 1:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

PLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 6:10 p. m. Sundays only, 11:00 p. m.

Purchasing Agents' Association of Detroit, is open to men with responsible buying authority, who want to keep posted on trend of commodities.

Publicity Office 10 Garfield Building Glendale 3010

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

MAIN 1491

SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

TRANSPORTATION NEWS

Rail :: :: *Water*

Washington—The railroads serving ports on Lake Erie have filed application with the Interstate Commerce Commission for permission to reduce the rate on hituminous coal from the fields in Pennsylvania, West Virginia, Kentucky, Tennessee and Ohio 25 cents a ton, in order to stimulate shipments by these routes, for trans-shipment by boat on Lakes Erie, Michigan and Superior. The proposed reduction does not affect the lower peninsula of Michigan.

Washington—Berry Bros., Detroit paint and varnish manufacturers, have lost their case against the Chicago & North Western Railway Company et al., before the Interstate Commerce Commission, which has decided that the rates applicable on wood alcohol, in tank-car loads, from Ashland, Wis., to Detroit, are not unreasonable. The complaint, No. 11445, submitted December 18, 1920, and decided April 11, 1921, has been dismissed.

Washington—In the case of the Climax Molybdenum Company vs. the director general of railroads, as agent, the Ann Arbor Railroad Company, et al., (Docket No. 10245, submitted June 6, 1919, and decided March 29, 1921), the Interstate Commerce Commission has decided that the rates assessed on complainant's shipments of molybdenum, in carloads, from Climax, Col., to destinations on and east of the Missouri river via Denver, are legally applicable and not unreasonable, unduly prejudicial or unlawful under Section 20 of the Interstate Commerce Act. The complaint has been dismissed.

Washington—The rates charged Earl C. Anthony, Inc., by the Michigan Central Railroad Company et al., on a mixed carload of freight and passenger automobile chassis from Detroit to San Francisco, were applicable and not unreasonable but were unjustly discriminatory and unduly prejudicial, according to a decision handed down by the Interstate Commerce Commission on March 26 and just made public. A non-discriminatory rate was prescribed for the future but reparation was denied. The case, No. 11322 on the Commission's docket, was submitted on January 3, 1921.

Washington—In the case of the traffic bureau of the Chamber of Commerce of LaCrosse, Wis., vs. the Ann Arbor Railroad et al., the Interstate Commerce Commission has decided that the class rates from eastern points to LaCrosse are unreasonable and unduly prejudicial and has prescribed reasonable and non-prejudicial rates. The case, which was No. 11325 on the Commission's docket, was submitted on November 18, 1920, and decided April 2, 1921.

Washington—Rates in green salted hides, in carloads, from Chicago, Ill., and Racine and Milwaukee, Wis., to Rockford, Mich., have been found unreasonable and unduly prejudicial by the Interstate Commerce Commission in the case of the Hirth-Krause Company, shoe manufacturer of Rockford, vs. the director general of railroads, as agent, the Chicago, Milwaukee & St. Paul Railway Company, et al. Reparation was awarded and the measure of reasonable maximum and non-prejudicial rates prescribed. The case, No. 11223 on the Commission's docket, was submitted on October 20, 1920, and decided March 3, 1921.

Washington—The interstate Commerce Commission has decided in the case of the Harlan County Coal Operators Association vs. the Louisville & Nashville Railroad Company et al., that the rate of $1.90 per net ton charged for the transportation of carloads of bituminous coal from mines in Groups 1, 3 and 4 on the L. & N., in Kentucky, to Toledo, for trans-shipment by lake, on and after May 6, 1920, and as increased rates pursuant to Increased Rates, 1920, 58 I. C. C., 220, were not unreasonable. Reparation was denied and the case dismissed. No. 11559, submitted February 24, 1921, and decided April 9, 1921.

Muskegon—Muskegon, Mason, Oceana, Manistee and Ottawa counties have joined forces in a drive to build the Lake Michigan shore connections necessary for a thorough road from Manistee to Chicago. These connections would make a direct line through to Petoskey. Former Lieutenant Governor John Q. Ross, of Muskegon, was named chairman of the permanent organization. Charles L. Churchill, of Ottawa county; H. W. Smith, of Manistee; Justus Stearns, of Mason, and William L. Loutit, of Ottawa, are the other members. This body will confer with the Pere Marquette officials at once.

D. & C. Navigation Co. Cuts Rates 15 Per Cent

A fifteen per cent reduction in all classes of freight rates, including automobiles and trucks, on all Detroit & Cleveland Navigation Company lines was announced last week by A. A. Schantz, president and general manager of the corporation. The Detroit & Cleveland is the first company on the Great Lakes to cut its freight rates. The new schedule went into effect Thursday, April 28.

"We are lowering our rates in line with the general movement of today to bring prices down," said Mr. Schantz. "Conditions will not return to normal until prices as a whole come down, and we are doing our part to bring them down. We believe, too, that in the long run it will bring greater prosperity to us. Business needs encouragement and stimulation. High freight rates block business. That is our thought in lowering our freight rates.

"If we can help the flow of freight business between Detroit and Cleveland and between Detroit and Buffalo, the three great industrial cities on Lake Erie, in just that degree are we helping to bring back normal conditions in these three cities.

"The reduced rates also offer to shippers economy and speed in shipping their merchandise between Detroit and Cleveland and Detroit and Buffalo, because the reduction more than offsets the cost of transporting the merchandise from factory and warehouse to D. & C. docks."

Steamers of the D. & C. Navigation Company are now operating daily between Detroit and Cleveland and will start operating daily between Detroit and Buffalo about the middle of May.

BLOOD WITH RAY BATTERY CO

Wallace Blood, vice-president of the Campbell, Blood & Trump Advertising agency, Detroit, has become director of sales of the Ray Battery Company, Ypsilanti. Mr. Blood will continue as vice-president of the agency, but his activities will be confined to advisory service.

M. U. R. DECLARES OPEN SHOP

The Michigan United Railway Company has declared for the open shop on all its lines, beginning June 1. Lines affected are, Jackson, Battle Creek, Kalamazoo, Grand Rapids and Owosso interurbans and Jackson, Lansing, Battle Creek and Kalamazoo city lines.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

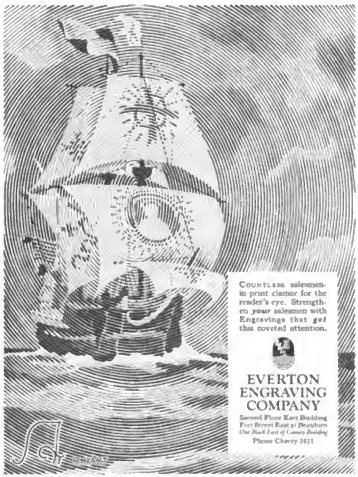
COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON	CLEVELAND		DETROIT	
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:	Atlanta		Denver	Portland
EUROPEAN:	Columbia Steel & Engineering Co., Ltd., London, Eng.			

Detroit Warehouse—1300 West Fort Street Cherry 6700



MOTCH AND MERRYWEATHER MACHINERY CO

THE METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

Digitized by Google

THE Biblical studies of many electrical contractors ceased at the passage alluding to the man of means and the needle's eye. They never reached the Golden Rule.

We are a bit unorthodox. The owner still has a bank balance after we complete our contract.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

MILLER YORK

MATTHEW FINN
High Grade Municipal and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

Motor Stocks
Wm. A. Neer & Co.
Members Detroit Stock Exchange

PHOTOGRAPHER
STUDIO BUILDING
4638 WOODWARD AVE
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—Work has been started on the construction of a $40,000 garage for W. H. Perry, in Kalamazoo street, opposite General park. The building will be one-story, 49½ by 132 feet, and will accommodate 150 automobiles, with a show room in connection. It will be of brick and plate glass construction and is to be completed before the end of summer.

Flint—Activities in Flint are increasing steadily, Building Inspector E. C. Shannon has announced that from March 1 to April 10, 381 permits were issued, aggregating in outlay about $407,000. Of 53 permits for houses, 25 were for structures to cost $3,500 or more each and 28 for buildings to cost less than $3,500. The chief permit was for a storage house to cost $125,000, the next largest item being for a roller coaster for an amusement park, involving $30,000.

Detroit—Contracts awarded by architects during the week ended April 28 consisted mostly of residences, stores and garages, according to the list issued by the Builders and Traders' Exchange. Among the new projects coming from the offices of architects, flats, residences and stores predominate. Generally speaking, there is no great activity so far as industrial construction work is concerned.

Lansing—Wages of Lansing plumbers, effective May 1, have been reduced from $1 an hour to 80 cents, while the plumbing contractors have reduced their charges from $1.50 to $1.25 an hour.

Detroit—During the week of April 30 the total number of building permits issued was 630, as compared with 306 for the week of April 23 and 486 issued during the corresponding week in 1920. The cost involved was $1,486,675, as compared with $989,335 for the previous week and $2,268,866 a year ago. Of the 630 permits, 275 were for new construction and 155 for alterations or additions.

Grand Rapids—Building activities are beginning to approach those of pre-war times. During the first three months of the year there have been taken out 78 permits for new residences, to cost $270,300; 122 permits for residential construction, $58,765; eleven for commercial construction, $89,500; seven for industrial construction, $242,000; ten for industrial reconstruction, $23,565, and 166 for house garages, $45,875.

Cheboygan—The Producers' & Consumers' Company, Cheboygan and Detroit, is reported to be planning to enlarge its local plant.

Grand Rapids—Seventy-eight permits were issued during the week ended April 22 and they involved an expenditure of $125,669, the second high week thus far this year. Of the total, sixteen were for new buildings to cost $103,600. The list included a church to cost $35,000; a three-story factory building, 70x90 feet, to cost $18,000, and a number of residences and garages.

Niles—The French Paper Company will erect a one-story office building and a power plant. Other improvements will be made during the year.

Grand Rapids—The school board has accepted the bids of John McNabb & Son for the new North Junior High School, to cost $416,400, and of $138,823 for the Lafayette School.

Detroit—Confirmed bids on city building materials follow: Truscon Steel Company, Youngstown, O., 30,000 steel plates for trunk sewers, $33,125; Barber Asphalt Paving Company, 1,500 tons asphalt in packages, $24.50 a ton; Atlantic Refining Company, Philadelphia, 1,500 tons asphalt in packages, $24.45 a ton; 2,000 tons in tank cars, $18.97.

Grand Rapids—A three-story addition, 60 by 110 feet, will be erected by the Gunn Furniture Company.

Cheboygan—The Michigan Central Railroad has begun the construction of a siding for the Cheboygan Tile & Brick Company. As soon as this work is completed the company will start the erection of its new factory.

Grand Rapids—Chicago manufacturers of common brick are quoting $14.32, delivered on the cars in Grand Rapids. The old price was $19.05. The reduction is about 25 per cent. Face brick is lower, but the reduction varies according to kind and color made.

Grand Rapids—The Jennings Manufacturing Company, which makes extracts, perfumery and toilet preparations, has purchased a factory site.

New Sand and Gravel Rates Delayed 10 Days

Following a hearing on the protest against existing switching rates in Detroit on sand and gravel, held in Lansing this week before the Michigan Public Utilities Commission, the Commission decided to postpone the application of the reduced traffic rates until May 20. Reductions of 25 per cent in rates in the Lower Peninsula zones and 22 per cent in the Upper Peninsula were to become effective May 10.

While the Commission was considering the line haul tariffs, the Material Dealers' Credit Bureau, Detroit, filed a petition for readjustment of the switching rates, claiming they were levied by the ton, whereas other commodities carried a per-car rate, also that the existing rates were discriminatory in that ex-river sand and gravel producers were paying as high a switching rate to move cars short distances as pit producers were for long haule, and the difference in rates for pit producers located considerable distance from the market were so much greater in proportion than those charged pits closer to the market that they were grossly discriminatory.

The Commission called a hearing on the protest and the bureau's case was presented by Thomas B. Moore, of Beaumont, Smith & Harris. The railroads entered objections to the claims of the materials dealers, but the Commission, at adjournment, decided that some readjustment in rates should be made, both in line hauls and switching. The Commission will continue its investigations and announce its new schedules before the rates heretofore decided become effective.

Detroit Tigers' Home Dates for 1921

May 10, 11, 12, 13	New York
May 14, 15, 16, 17	Washington
May 18, 19, 20, 21	Boston
May 22, 23, 24, 25	Philadelphia
May 26, 28, 29	Chicago
May 30 a.m., p.m., 31	Cleveland
June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a.m., p.m.	Chicago
October 1, 2	St. Louis

Digitized by Google

W. E. Metzger Distributor Of New Wills Sainte Claire

William E. Metzger, vice-president of the Columbia Motors Company, Detroit, and one of the best known men in the automotive industry, will be the Detroit distributor for the new Wills Sainte Claire car manufactured by C. H. Wills & Company, Marysville, according to reliable reports. Official announcement of Mr. Metzger's plans will be made later. It is understood that Mr. Metzger will have his salesroom in the former Ford sales and service building, Woodward avenue and Grand Boulevard. The Wills Sainte Claire car embodies several basic patents held by C. H. Wills, has a V-type motor, eight cylinders, set at an angle of 60 degrees. It has a 121-inch wheelbase and weighs about 3,000 pounds. Molybdenum steel is used. Magnetically controlled headlights and a rear light which illumines the back of the car when driven backwards, are features.

It was the construction of the new car that made necessary the establishment of a new industrial center at Marysville, and a large community has grown up around the plants of the C. H. Wills & Company. Mr. Wills announced the car several months ago, and deliveries have been made to key distributors.

Boat Manufacturer Seeks Site for Michigan Plant

A Detroit business man who has obtained the manufacturing rights for five states for the construction of a motor-driven small boat having numerous unique features, is seeking a plant site in some small Michigan town. Floor space of at least 15,000 to 20,000 square feet will be needed, as the manufacturer will produce at least 1,000 boats the first year. The plant must be located on or near a body of water sufficiently large to test boats of the rowing and small launch type, and also on or near a railroad. The rights have been obtained for Michigan, Wisconsin, Ohio, Illinois and Indiana.

The product is not entirely new in the market, but the boat is said to be a distinct innovation among motor craft. The three-horsepower, single cylinder marine motor weighs only forty pounds, is nearly silent in operation and drives an ordinary rowboat type of craft nine miles an hour with a gasoline consumption of twenty to twenty-three miles a gallon.

The principal patented feature of the boat is the disappearing propeller, which is so connected with the motor that it can be raised or lowered for any depth of water by the simple operation of a lever. Another patented feature is the automatic propeller protection, consisting of a skeg, which is a section of the keelson. The propeller is shipped amidships, just abaft the skeg. If the boat strikes an obstacle below water the skeg comes into contact first and automatically raises the propeller up into the housing and throttles down the engine.

The location of the propeller, shaft and skeg provides the same balancing medium as does the centerboard of a yacht. The engine is located in a housing between the forward quarters and can be entirely concealed by the second athwartship seat. Each boat has four seats—stern and stern and two athwartship. These are easily removable to make room for fishing or hunting paraphernalia. Besides the small model, two other types are made, one 16½ feet long, four feet 11 inches beam and one foot, eight inches draft. The weight is 400 pounds.

The boat has been on the market long enough to build up a good demand. It was exhibited at the New York Motor Boat Show and a large number of them were sold.

Smaller communities desirous of attracting a year-around industry may get into touch with the manufacturer by communicating with this paper.



Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building Telephone Cherry 6010

DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, MAY 7, 1921

Mr. Mellon's Taxation Ideas

WELL, WELL, Mr. Mellon has "gone and done it" too. In his letter this week to Congressman J. W. Fordney, chairman of the House ways and means committee, the Secretary of the Treasury says he doesn't see how we are going to get along without a federal tax on automobiles. We weren't so very much surprised when Mr. Houston suggested it when he was holding down Mellon's job, because Houston's regular business was secretarying agriculture; but the suggestion from a man of Mellon's training shocks us a little. We supposed he, of all people, understood thoroughly the fact that automotive vehicles are just as truly units of transportation as are railroad cars and locomotives, and, as such, should not be called upon to bear any greater share of the burden of taxation than the latter. But it appears that he does not.

His recommendation, if it ever reaches the floor of the House in the shape of a bill, is going to cause the automotive industry a lot of bother, but it probably won't do much more harm than that. The men responsible for the industry's welfare will be put to the trouble of trotting down to Washington once more and producing all the figures again, after which the framers of the new tax bill will gently but firmly table the automobile levy and substitute something else.

Mr. Mellon wants the luxury taxes, which he characterizes as "nuisance taxes," repealed. Well, luxury taxes may be a "nuisance," but of all the levies we are called upon to pay, we can best pay these. The woman who insists on painting herself up to resemble nothing so much as a futurist landscape should be made to pay the Government for the privilege of doing so, even if the revenue stamp attached to the package of rouge costs a dollar and a half. Those of us who have the hardihood to sit for three hours in the theater and listen to some of the drivel that "gets by" in these latter days in the name of drama are gluttons enough for punishment to pay another dollar to the Government as a ticket tax. Those who guzzle some of the brands of patent medicine because they're cheaper than the bootlegger's stuff should be willing to pay the revenue bureau more than the two cents charged for the stamp on the bottle. And those of us who consider it an insult to our manly figures to drape them in anything less than a nineteen-dollar silk shirt or thrust our dainty "dogs" into anything less expensive than a seven-dollar pair of silk socks, should be good sports enough to "divvy" with the Government for the blessed privilege of humoring ourselves. Yes, there are a lot of things more unjust than the luxury taxes, even if the latter are a "nuisance," and now is a pretty good time to admit it, when we are trying to get back to the place where washboards take precedence over ouija boards.

Nobody will quarrel with Mr. Mellon's recommendation that the excess profits tax be done away with. The conviction that this form of impost has outlived its usefulness is too nearly unanimous. It is only to be hoped that the substitute proposed—an additional flat tax upon the earnings of corporations—will be so levied as not to work in effect the same evil charged to the excess profits tax—the driving of capital out of productive enterprise and into tax-free investments. The flat tax probably will be enacted, no matter what organized business says about it, for Congress understands politics, and it would never do to make the levies directly on the public pocketbook, when the corporations can be made to pay. The people at the moment do not remember that they foot the bill in the end. If it costs more to produce a commodity, whether the higher costs represent materials, labor or taxes, the selling price must go up just that much.

The Secretary touches a responsive chord when he calls for real economy in government. "The last Congress," he says, "made a creditable record in reducing appropriations," but the expenditures for the current fiscal year are running at the rate of $5,000,000,000. "The Government cannot continue spending at this shocking rate." After all, if the present administration wishes to get down to brass tacks it must realize that its job consists as much in seeking to close avenues of expenditure as in opening new avenues for the inflow of funds. The proposition is two-fold, and especially so in view of the fact that we have changed over from war conditions to peace conditions. When we were fighting for our lives it was a question of getting the materials, no matter what the cost. Today no such need exists. The cost becomes the paramount consideration.

Incidentally Mr. Mellon touches on another proposition which will meet with the approval of all sound economists, and that has to do with tax-exempt securities being floated with such lavish hand by state and municipal governments. The Secretary estimates that there is in existence more than $10,000,000,000 of such paper, constituting "an economic evil of the first magnitude," in that it not only contributes to the volume of public debt, but deprives productive enterprise of capital. The federal government, having set an example, he says, should take action to put a stop to the tax-exempt security issuing habit of local and state governments. It may well be doubted whether the federal authority can be made to extend this far, but frowning on the practice may be an influence in the right direction.

A Good Man Out of His Element

DR. FRANK CRANE as a power for good in the world is no inconsiderable factor. He lifts up thousands from inertia and complacency to a keener realization of man's duty to his brother. But when he starts talking economics and finance he gets sadly beyond his depth.

There is nothing in the discussion of economics which will ever command big headlines. Hundreds of years have demonstrated certain truths about finance which men pass on to succeeding generations through textbooks and lectures. But none of it is food for oratory, for it is the soberest kind of discussion. Instead of appealing to the imagination, finance appeals to reflection. It is a question merely of "What happened last time this was tried?" And the continued stability of the whole financial structure of this country depends on hewing close to those precepts which have been wrought out of years of experience.

Not long ago our venerable friend Dr. Crane espoused the

Digitized by Google

cause of currency issues secured by real estate and now he comes out as a supporter of Prof. Irving Fisher's adjustable gold dollar. Among his statements with reference to this subject he says: "Chaos in the world of business is the result of the rise and fall of prices. It is the ups and downs of prices that cause the fluctuation in wages and foment industrial trouble. Few thinkers have gone to the bottom of things and inquired for the fundamental cause of this fluctuation. One of these few, however, is Prof. Irving Fisher, of Yale University. His answer to the question is that the prices of commodities go up and down not because their values alter, but because the value of the gold dollar alters in which they must ultimately be paid."

Now let us consider for a moment the latter statement—that prices go up and down not because their values alter but because the value of the gold dollar alters. Apply this rule, if you will, to the action of the price of potatoes when the farmers bring in more potatoes than the public can consume. Is it the variation in the basic value of the gold dollar or is it oversupply that makes the values drop? We submit that the housewife is thinking very little about the value of a gold dollar when the crop is either short or abundant. If space permitted, one could furnish thousands of similar illustrations.

Going further, "Prof. Fisher's solution is to vary the weight of the gold dollar in accordance with the 'index number' or average price of standard commodities." What we should like to know is this: If index numbers are based on the gold dollar as a standard of measurement of values, what happens when we use the index numbers to vary the value of the dollar? In other words, if we measure length, height and width of an article by a yardstick and then change the yardstick according as the length, height and width may vary from time to time, what do we gain? We submit that there would result merely more confusion and uneasiness in the minds of everyone.

One of the greatest pests of the day are the people who continually keep the country "in a stew" over things that can't be helped. Let a man preach methods demonstrated by hundreds of years of experience and he gets an apathetic audience, but let another man propose turning something upside down, and the applause is quick. But we see signs of improvement, nevertheless. The time is not far off when the people will take counsel of the more conservative preachers amongst us. With all the defects, all the profiteers, all the labor union bosses, all the graft, all the high taxes and other scourges too numerous to mention, this United States of America is still by far the best place in the world to live in.

Governor Allen, of Kansas, has figured it out that organized labor officials in this country draw salaries of $60,000,000 a year "out of the slender pockets of union men." Imagine a group of capitalists spending $60,000,000 a year for propaganda—what a rumpus union labor would set up!

"Hitting the Dirt"

THE APRIL NUMBER of Printers' Ink Monthly features a story that ought to be an inspiration to every manufacturing or merchandising organization in these days of slack business. It is the story of a Dodge Brothers dealer drive in New York city, in which thirty-six salesmen covered the metropolis "with a fine tooth comb" in just nine weeks, working days, nights and Sundays, on foot and in motor cars, and in that time pushed the agency's record 2,000 above the previous year's mark, gathered a list of 100,000 real prospects to follow up on and increased the February, 1921, business over that of February, 1919, which, as everybody knows, was one of the banner months of a banner year for motor vehicle sales.

The city was divided into zones, each in charge of a trained salesman as director of operations therein, and with three assistants who worked for and reported to him. The assistants were young men, inexperienced in the automobile business, but they WORKED. They worked in daylight and after dark, seven days a week, and averaged twenty-eight successful calls a day. The zone directors WORKED two days on the dealers' floors, two days in their respective territories on foot and two days with a car. They made no first calls, but confined themselves to following up their assistants, trying to close sales. Live prospects were those who might buy a car in thirty days, while deferred prospects were those likely to buy in sixty days. All with whom it was impossible to close were listed on cards, and will receive another call from an experienced salesman on the day they themselves have specified.

Probably the most surprising thing about the drive is that sales were made where the salesmen and sales directors—and probably the purchasers themselves—least expected it. The Dodge dealers have proved to their own satisfaction that there is a good deal more business to be had than most people suppose, if only you go after it. Can any one estimate the stimulating effect of such knowledge? In addition to that, they have the name of every Dodge prospect in the metropolis, and know just when each prospect can be closed.

That's what comes of "hitting the dirt." "pounding the pavement"—whatever you choose to call it—in these dull times.

It must be terribly trying to be a union labor leader. They're raising the devil now with Gompers because while on his recent honeymoon he was so thoughtless as to stop at a "scab" hotel.

"Workers in Russia fix their own wages," reads a newspaper headline. That would be very nice indeed if only they could collect them.

Short Measure Stuff

NAIL AND FAREWELL.

Now is the legislature homeward bound,
And Lansing sees them go with gladsome cries,
To trade and barter or to till the ground
And pester all their friends with allbis;
The lobbyists must all return to work.
Gone are the fat expense accounts and clover,
No longer honest labor can they shirk.
By bragging how they're going to put it over.
Three cheers for peace, no politics awhile,
Emerge, ye yokels, from your deep depression;
We're free from squabbles, please dust off a smile,
And keep it on until the special session.

Nobody lost, none got it in the neck,
Except the guy who has to pay the check.

* * *

Says a headline in the Detroit Times:

Husband Finds Wife in Better Health After Paperhanger's Visit

Oh, how I love you, Dear Old Kaiso mine.

* * *

It beats all how hard the Tigers have to fight to lose some of their games.

* * *

ECO.

There's a tenor lives above me,
Conceited as can be:
His only song
The whole day long,
Is mi, mi, mi, mi, mi.
—R. M. T.

There's a baritone I know,
Gee, you ought to hear him blow
That he lives for Art—not Money;
But I think it's very funny
All his songs begin with do.
—L. R. G. in New York Evening Mail.

Their duets will slam your ear drums.
Knock them backward for a goal;
And when you cry out for mercy,
They'll insist you have no sol.
—A. F.

Digitized by Google

FINANCIAL

Financial Advertisers' Program About Complete

The program for the departmental meetings of the Financial Advertisers' Association, in connection with the Associated Advertising Clubs' convention, at Atlanta, June 12-16, is practically complete. The program committee of the Association has taken "Inside Stuff" as its keynote in outlining topics and selecting speakers. It has planned a discussion of the actual problems which face the men or women responsible for the expenditure of a bank's advertising appropriation. The speakers selected are men and women who have been and are in daily contact with those problems.

Only two of the speakers who will appear at the three sessions are people not actually on the firing line of bank advertising management. One of these is Thomas B. McAdam, president of the Merchants' National Bank, Richmond, Va., and first vice-president of the American Bankers' Association, and the other is Herbert S. Houston, publisher of World's Work.

Mr. McAdam will have for his topic, "The Salable Bank," and will show what the head of a financial institution can do to make his goods worth advertising and how he can obtain co-operation with the advertising men, directors, officials and employes. Mr. Houston is expected to conduct a sort of clinical discussion, with himself as the subject. He will discuss "Financial Advertising From the Reader's Angle," and tell the Association just how its work is impressing the people for whom it is published.

Among other speakers, with their subjects, are the following: A. E. Bryson, of Halsey, Stuart & Company, Chicago and Detroit, "Popularizing Bonds;" L. A. Mershon, secretary, committee on publicity, trust division, American Bankers' Association, "Selling Trust Department Service;" W. Frank McClure, Fort Dearborn National Bank, Chicago, "The Bank House Organ;" J. A. Abernathy, First National Bank, Fordyce, Kas., "Financial Advertising From the County Seat," and Minnie A. Bubbee, American Bank of Commerce & Trust Company, Little Rock, Ark., "Increasing the Per Capita Savings Balance."

GEDDES TO ADDRESS BANKERS

Sir Eric Geddes has been engaged by Secretary Charles H. Ayres to address the spring meeting of the Bankers Club of Detroit, May 9, at the D. A. C.

AN UNIQUE FINANCING PLAN

A study of the financing plan by which the Northern Assurance Company, Detroit, has purchased the American Life Insurance Company, Des Moines, Iowa, reveals something new and unique in methods of financing.

The Northern Assurance Company through its directors formed the Northern Company for the purpose of effecting the merger. It then used its paid-in capital of $240,000 and borrowed $360,000 additional to buy the American Life Insurance Company. The interesting part of the scheme is the method by which the Northern Company borrowed $360,000; which is as follows: The purchase contract between the "Northern" and "American" companies was assigned to a trustee as collateral, thus securing the loan of $360,000 by the purchase contract (which has since been reduced to other having a value of $600,000. The loan is further secured by the guaranty of the Northern Assurance Company, which has assumed a direct obligation to pay these bonds by consenting and agreeing to the trust indenture given by the Northern Company to the Detroit Trust Company, trustee. There is a further safeguard of a sinking fund consisting of five per cent of the entire premium income of the Northern Assurance Company, which has been approved by the Insurance Commission at Lansing; and the merger has been approved by the insurance commissioners of both Iowa and Michigan.

The originators of this financing are John Langley, of Langley, Hildner & Company, Grand Rapids and Ann Arbor; Baker Simonds & Company, and A. E. Kusterer, Grand Rapids.

A RECORD LIFE POLICY

The Pontiac Employees Mutual Benefit Association, an organization which includes 5,000 employes of twenty of the most important industrial institutions of the city, has concluded a contract with the Detroit Life Insurance Company for $1,500,000 life insurance on all the members of its organization. This is the largest contract ever placed in the United States through an association.

The Pontiac organization started business two years ago. It provides sick and health benefits for its members and has met its obligations regularly in addition to accumulating substantial surplus. Within 90 days, in the opinion of the secretary and manager, S. S. Skelton, the number of employes will be increased to 6,000, and the total amount of insurance will reach $3,000,000.

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.		
American Box Board, pfd.		
Bardeen	18	13½
Bryant	18¾	18¾
Eddy, com.	3	4
Eddy, pfd		10
Hawthorne	10	12½
Kalamazoo, new	18	20
King	15	19
Lee, units	125	150
Mac Sim Bar		12½
Michigan	18¾	19¼
Monarch	12½	13½
Ttex	16	18
Northern Michigan Pulp	100	125
Standard	28	30
Sutherland	9¾	10½
Watervliet	19¾	20½
Western Board		30¼
Banks		
First National	225	
Home Savings	170	
Kalamazoo City Savings	150	162
Kalamazoo National	150	152
Miscellaneous		
Barley Motor, com.	25	50
Barley Motor, pfd	45	65
Hayes Wheel		
Kaloo Loose Leaf	13½	14½
Kalamazoo Vegetable		10¾
Utah-Idaho Sugar		
Wisconsin Sanitary Mfg.		
Limousine Body		

Quotes by O'Mstead & Muthall, May 3.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric		
Economy Baler Co., com.		
King Trailer Co., pfd		
Hoover Steel Ball, com.	15	18
Mich. Milling Co., com.	7½	
Motor Products Co., com.		
Pearl Foundries, com.	7¼	
C. A. Sauer Co.	3	

Quotes by Langley, Hildner & Co., May 3.

Current Investment Offerings

HALSEY, STUART & CO., DETROIT

	Rate	Maturity	Price	Yield
Empire Dis. Elect. Co., 1st Lien & Mtge.	6.00	11-1-49	100.00	6.00
Humble Oil & Ref. Notes	7.00	3-1-23	Mkt.	8.50
S.W. Bell Tel. Notes	7.00	4-1-25	96.50	8.00
No. Pac.-Gt. No. Ry. 15-yr. Conv. Bonds	6.50	7-1-36	96.50	6.87
British Columbia	6.00	3-21-26	93.38	7.50
So. Isle Rural Credit	5.50	1-15-41	100.00	5.50

BOLGER, MOSSER & WILLIAMAN, DETROIT

Casper, Wyo., Water, Sewer, etc.	6.00	29-49	....	6.00
Cook Co., Ill., School Dist. 100	5.00	24-38	....	5.75
Plainwell, Mich., Sch. Dist. 2	6.00	28-33	....	5.85
Three Rivers, Mich., School Dist. 1	5.50	26	....	5.75
Montgomery Co., O., rd.	6.00	22-29	....	6.00
Morrison Hotel, Chi., 1st & Ref. Mtge.	6.00	22-30	....	7.00

AMERICAN LOAN & TRUST CO., DETROIT

Clayton & Lambert Mfg. Co.	6.00	24-26	....	7.00
Hmb-Robinson Co.	6.00	26-27	....	6.00
Kunz Realty Co.	5.00	24	....	6.00
Oakman Blvd. Theatre Co.	5.00	24	....	6.00
Burkhardt Bldg. Co.	5.00	21-24	....	6.00

FENTON, DAVIS & BOYLE, DETROIT

No. Pac.-Gt. No.	6.50	7-1-36	96.50	6.87
Muskegon, Mich. Sch.	5.50	32-36	100.00	5.50
Packard Motor Car Co.	6.00	4-15-31	100.00	6.00
Wayne Co., Mich., Bridge	5.50	4-29-33	....	5.50
British Columbia	6.00	4-25-26	93.84	7.50
Puget Sound Pwr. & Lt. Co.	7.50	6-1-41	97.50	7.75

AMERICAN CAN EARNINGS

Net earnings of the American Can Company for the year 1920 totaled $4,830,918, as compared with $5,080,225 in 1919. At present it is said that the company is operating at about 65 per cent of normal.

BRASS WORKS INCORPORATES

Incorporation papers have been filed in Lansing by the Attwood Brass Works, Grand Rapids. Capital stock is $75,000. Those interested are Charles F., Charles E., Lillian E., and Hazel Attwood.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	10¾	10¾
Commonwealth Power	13	13¾
Lufkin Rule, pfd.	10	10½
Michigan Sugar, com.	7¼	7¾
Michigan Sugar, com.	7¼	7¾
National Grocer, com.	7¾	8¼
National Grocer, pfd.	61	63
Saginaw Shipbuilding Co.	3¼	10
Symons Bros.	11¼	12
Valley Home Tel. Co., pfd.		45

BANK STOCKS

Second National	205	215
American State Bank	200	210
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	205	225

Quotes by Phipps, Williams & Benson, May 3.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co.	23	28
Auto Body, com.		7
Auto Body, pfd.		3
Bates & Edmonds Motor Co.		15
Federal Drop Forge Co.	8½	10
First Bond & Mortgage Co., Lansing Company	33	42
Michigan Mortgage Co.	8¾	9½
Michigan Screw Co.	19	29
Motor Wheel Corporation	9¾	10¾
Novo Engine Co.	22	35
Reo Motor Car Co.	23	31¾
Lansing Stamp & Tool		17

Quotes by G. M. Murchey & Co., May 3.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	145	145
Columbia National Fire	15	17
Commerce Fin.	18	20
Detroit Mortgage, com.	2½	2¾
Detroit Mortgage, pfd	5¾	6¼
Detroit Copper & Brass	18½	21
Detroit National Fire	25	26
Detroit Life	64	68
Eureka Croesus	72	73
Federal Bakeries Co.	27	30
Federal Discount Co	8	8½
Fisher Body	84	86
General Necessities Corp.	10¾	13
Gladys-Belle Oil, com.	30	32
Gladys-Belle Oil, pfd.	42	...
Great Lakes Engineering, new	11	14
Great Lakes Engineering, old	58	65
Hoover Steel Ball	12	16
Hayes Wheel Co.	13½	14½
Interstate Fire	25	26
Invader Oil	...	126
Invader Oil (new)	65	65
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com.	6½	7¾
Kelsey Wheel	58	58½
Little Wonder Stove	1¾	1¾
Monroe Binder Board	39	41
Detroit Motor Bus.	8	8
McCord Manufacturing, com.	10¾	10¾
McCord Manufacturing, pfd.	46	50
Michigan Copper & Brass	15	16
Mich. Fire & Marine	76	80
Noble Oil, com.	42	48
Petoskey Portland Cement	38	14
Peninsular Fire Ins.	21	21
River Raisin Paper	13	13
Trippensee Mfg. Co	6¾	7¼
Union Mtge., 100% com.	8¼	8¾
Union Mtge., 50% com.	8	11

Motor Stocks	Bid	Asked
Briscoe Motors	15	17
Columbia Motors	4¾	5¼
Chalmers	5	7
Chevrolet	150	400
Cleveland	42	45
Curtis Aeroplane	3	5
Durant Motors	20½	21½
Elgin Motors	5	6
Haynes	150	175
Hupp	15½	15¾
LaFayette Motors	30	60
Liberty Motors	5½	6
Liberty Motors, pfd.	40	60
Lee Tire	23½	28¾
Maxwell Motor	5¼	6
Mercer	4	5
Mitchell Motor	6	8
Motorbus	8	8
Nash	300	325
Pierce-Arrow Truck	41	41½
Republic Truck	21¼	21¾
Saxon Motors	6	6¾
Scripps Booth	25	28
Stearns	28	28¼
Stromberg Carburetor	44½	44¾
Studebaker	88½	89¾
Willys-Overland	10¾	10¾
Wilson Truck	2¾	3¾
Grant Motor	3½	5
Jordan Motor	70	125
Peerless Motor	30	30½
White Motor	43¼	43½

Cleveland Stocks

	Bid	Asked
American Multigraph	17	20
Bow Chemical	...	300
Firestone Tire & Rubber,	75	85
Do, preferred	85	90
Fisher Ohio Body	17	19
Do, preferred	60	70
Goodyear Tire & Rubber	10¾	11
Do, preferred	82	93½
Miller Rubber	...	75
Murray Ohio	...	6
National Acme	32	33
Paragon Refining	19	20½
Pfeil & Refin. Corp	4½	4¾
Do, preferred	8	9
Portage Rubber	18	24
Do, preferred	84	...
Standard Parts	1	1½
Do, preferred	2½	3¼
Victor Rubber	25	35
Youngstown Sheet & Tube	58	...
Do, preferred	...	103

Quotes by Otis & Co., May 3.

Business Meets New Conditions

American business has been clearing decks. Budgets have been revised. Every buying, selling and production unit has been overhauled and made ready for intensive service. Economy has been the test—economy of time and effort.

In any study of functions and readjusting of methods, the work done by your bank balance should not be overlooked. Has it been merely a checking account and a basis for commercial credit? Or has it brought to the aid of your organization other constructive services? Are you making use now of all the help it should provide?

Many business men who carry deposits with the Irving or with Irving correspondents have discovered broader service possibilities in their banking connections The Irving investigates markets as well as credits, expedites deliveries of merchandise as well as collections, supplements the information resources of its customers both in domestic and foreign fields. Every transaction it undertakes, either at home or over-seas, is handled with a clear understanding of business essentials as well as careful attention to banking requirements.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

1851-1921: SEVENTY YEARS A BUSINESS BANK

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. E. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

Digitized by Google

Make No Mistake!

Did you ever know anyone who expected to live forever? A Will should exist for every man. The forehanded man has already made his, and need concern himself no further.

We urge that Wills be made, because we know the advantages gained to all concerned. Your lawyer should draw it.

Our greatest service is to carry out its provisions. There is great variety in the Wills under which this Company is now acting. If we can aid you with suggestions from experience, feel at perfect liberty to call upon us.

OLDEST Trust Company in Michigan

THE MICHIGAN TRUST COMPANY

Grand Rapids, Michigan

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%

Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

RESOURCES

	Apr. 27, 1921	Apr. 22, 1921	Apr. 30, 1920
Gold and gold certificates	347,946	339,488	174,561
Gold settlement fund—Federal Reserve Board	483,219	477,329	376,003
Gold with foreign agencies	.....	.....	112,781
Total gold held by banks	886,185	816,881	833,245
Gold with Federal Reserve agents	1,317,960	1,321,816	1,137,928
Gold redemption fund	163,544	159,594	135,447
Total gold reserves	2,317,689	2,398,071	1,936,720
Legal tender notes, silver, etc.	187,194	194,733	134,045
Total reserves	2,504,763	2,492,804	2,070,765
Bills discounted			
Sec. by U. S. Government obligations	920,527	942,665	1,465,220
All other	1,148,802	1,171,193	1,069,751
Bills bought in open market	103,809	104,452	407,747
Total bills on hand	2,187,848	2,218,308	2,942,218
U. S. Government bonds	25,690	25,691	28,797
U. S. Victory notes	19	19	66
U. S. certificates of Indebtedness—			
One-year certificates (Pittman Act)	239,375	240,375	259,375
All other	2,709	5,887	7,274
Total earning assets	2,455,140	2,490,730	3,236,822
Bank premises	31,832	31,782	12,369
5% Redemption fund against F. R. bank notes	11,339	11,562	12,093
Uncollected items	819,328	850,950	712,240
All other resources	31,578	32,310	7,170
Total resources	5,504,480	5,530,128	6,050,467

LIABILITIES

Capital paid in	101,235	101,231	91,639
Surplus	202,036	202,036	120,120
Deposits—			
Government deposits	35,873	67,488	37,592
Due to members—reserve account	1,356,718	1,348,858	1,859,844
Other deposits, including foreign government credits	32,209	32,010	98,794
Total deposits	1,725,399	1,749,351	1,996,230
F. R. notes in actual circulation	2,880,118	2,856,700	3,074,550
F. R. bank notes in circulation—net liability	156,749	159,590	177,193
Deferred availability items	430,709	454,233	529,855
All other liabilities	58,343	56,928	80,120
Total liabilities	5,504,480	5,530,128	6,050,467
Ratio of total reserves to deposit and F. R. note liabilities combined	55.0%	54.1%	*42.4%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35% against deposit liabilities	67.2%	65.8%	*48.7%

*Calculated on basis of net deposits and F. R. notes in circulation.

Michigan Bond Items

The special election held in Saginaw recently on the issuance of $950,000 of school bonds resulted in the indorsement of the project, 1,033 to 124.

Taxpayers of the Flint union school district have voted to increase the interest rate on $2,500,000 of school bonds from 5 to 6 per cent, the paper having failed thus far to find a taker. The proceeds of the issue will be devoted to the erection of a high school building, two grade buildings and additions to two others.

Authority to issue $3,231,000 of first mortgage gold bonds to defray cost of improvements and purchase of equipment has been asked of the Interstate Commerce Commission by the Pere Marquette Railway.

Announcement is made that the state administrative board has authorized the issuance of a $3,000,000 highway bond issue to be dated June 1 to provide for construction work this summer. It is reported that the bankers of the state have agreed to place the issue.

At a special election on May 24 the voters of Ironwood will pass on proposals to increase the rate of taxation from one and a half to two per cent of the assessed valuation, raise the bonding limit from four to five per cent and increase the rate of interest payable on bonding issues.

A special election will be held in Allegan, May 16, to decide the question of issuing $12,000 of bonds for the purpose of sinking another well for the water works and installing necessary pumping machinery.

An election scheduled for May 16 is to decide whether Algonac is to extend its water mains. The proposed bond issue calls for $12,000.

Permission to issue $2,000,000 of 6 per cent improvement and extension bonds, in lieu of similar 5 per cent bonds, and to retire $590,000 of its outstanding $2,500,000 of 5 per cent bonds has been asked of the Interstate Commerce Commission by the Ann Arbor Railroad Company.

The Detroit United Railway was to take up on May 1 $855,000 of Detroit & Northwestern Railway first mortgage 4½ per cent bonds.

INTERNATIONAL HARVESTER

The detailed statement of the International Harvester Company for 1920 shows that profits totalled $16,655,353, as compared with $12,608,726 in 1919 and $14,985,325 in 1918. This was before deducting dividends. The net profit and loss surplus, December 31, 1920, was $68,350,741, while in 1919 it was $71,645,388 and in 1918 $68,036,662. The company's total assets were $289,609,401, as against $266,668,416 in 1919 and $283,218,991 in 1918.

Digitized by Google

Detroit Stock Exchange

Following is a tabulated list of high and low sales prices, with total sales, on the Detroit Stock Exchange for the period from March 30 to April 28, inclusive:

LISTED STOCKS

	Total shares	High	Low
American Light & Traction, com.	3,899	102	88½
*Auto Body, com.	1,610	8⅜	7½
Charcoal Iron Co. of America, com.	770	2½	1⅜
Charcoal Iron of America, pfd.	680	2⅜	2⅜
Columbia Sugar	549	12	11½
Commonwealth, Power, Ry. & Lt., pfd.	25	29½	29
Continental Motor, com.	41,116	7⅜	6¾
Detroit & Cleveland Navigation	30	72	72
Detroit Creamery	370	21⅜	20⅜
Detroit Edison	1,588	98	94⅜
Edmunds & Jones, pfd.	10	70	70
Federal Truck	415	23	20½
Ford Motor of Canada	1,006	286	272
General Aluminum & Brass, com.	172	10½	10⅛
General Motors, com.	494	13⅜	12⅝
Hall Lamp Co.	100	13	12
Hayes Mfg.	1,845	3½	3⅜
S. S. Kresge, com.	2	141	141
Lincoln Motor	2,296	19	18
Michigan Sugar, com.	3,450	8⅜	7½
Miles-Detroit Theater	150	16⅜	16
Motor Products	30	52	46
Motor Wheel, com.	846	10½	9½
Murray Mfg.			
Michigan Stamping, com.	220	17⅜	17½
National Grocer, com.	575	7	7
Chas. F. Noble Oil & Gas, pfd	6,750	1.15	.65
Packard Motor Car, com.	22,655	12½	10½
Packard Motor Car, pfd.	613	75½	71
Paige-Detroit Motor Car, com.	844	22½	20⅝
Parke, Davis	90	88¼	87½
Reo Motor	7,440	22	20⅞
Scotten-Dillon	100	18	18
Timken-Detroit Axle, com.	1,540	29⅞	29
Trus-Con Steel, com.	210	19⅝	19
Trus-Con Steel, pfd.	4	99¾	99¾
Wolverine-Portland Cement	45	8	2⅝
Total	102,562		

*Removed from Board April 18th, 1923.

BANKS AND TRUST COMPANIES

American State Bank	10	218	218
First and Old Detroit	48	271	271
Merchants National	30	151	151
Peninsular State	10	220	220
United Savings	70	223	221
Detroit Trust	4	275	275
Total	172		

BONDS

Detroit Edison Deb. 1940	10,000	89¼	88⅝
Detroit Edison Deb. 1930	8,500	96	95⅝
Detroit Edison Deb. 1931	14,900	102⅝	101¼
Detroit City Gas, G. M.	4,000	90	90
Total	37,400		

UNLISTED STOCKS

Columbia Motor	2,172	5⅜	4½
Detroit Copper & Brass	150	19½	19½
Detroit Mortgage, com.	6,851	3½	2¾
Detroit Mortgage, pfd.	1,958	6	5⅜
Eureka Cresaus	219,962	1.00	.53
Gladys-Belle Oil, com.	33,750	.38	.30
Gladys-Belle Oil, pfd.	53,697	.82	.40
Harroun Motor	24	.85	.85
Invader Oil	400	1.40	1.30
Liberty Motors	100	7	7
Michigan Copper & Brass	50	17¼	17¼
McCord Manufacturing	5,975	10⅞	8¾
Chas. F. Noble, com.	296,270	.56	.31
Chas. F. Noble, pfd.	13,000	1.15	.65
La Salle Garden	10	10	10
Petoskey-Cement	100	13⅝	13⅝
Total	709,167		
Total shares	849,302		

IN ARREARS ON U. S. TAXES

According to M. A. Sullivan, representative of the Bureau of Internal Revenue, who reached Detroit last week to check up on payments of federal capital stock tax by corporations, many concerns have failed to pay these taxes in two years. The tax is $1 per $1,000 on a fair valuation of the stock. A penalty of $1,000 may be imposed for failure to make a return.

WABASH RAILWAY

For the year ended December 31, last, the Wabash Railway reports income of $1,983,942, after deduction of taxes and charges, this being equal to $2.69 a share on the $64,184,000 of preferred stock A, comparing with $3.81 a share on $62,187,100 of similar stock a year ago.

THE COST OF ACCIDENTS

Many employers of labor believe the premium they pay for compensation insurance represents the entire cost of industrial accidents in their plant.

This is a serious mistake, for in addition to the compensation and medical costs paid by the insurance company under their policy, there is a substantial additional cost in the loss of services of experienced men, in the idle time of machines, and in additional spoilage caused by inexperienced men taking the place of those disabled by accident.

There is no insurance policy which covers this loss. It can be prevented only by eliminating the accidents which cause it.

Seventy-five per cent of industrial accidents are preventable and though its Safety Engineering Department, comprising a corps of experts in accident prevention work, the Michigan Mutual will actively aid you in removing this economic waste from YOUR business.

This added service costs no more—in fact it usually costs much *less*—than the mere financial protection against PART of your accident loss provided by compensation insurance in most companies.

Let us show you how to put your insurance on a THRIFT basis—how to make your premium an *investment* instead of an unproductive *expense*.

Write today—NOW. A postal will do.

Michigan Mutual Liability Company

Real Estate Exchange Building
Detroit — Michigan
Home Office-Cherry 2829 — Grand Rapids, Lansing and Saginaw — Hospital-Cadillac 2670

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MAY 4th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Dividend Cash	Annual Dividend Payable	Last Dividend When Paid	Last Dividend Cash	Last Dividend Stock	New Dividend Payable	New Dividend Ex.-Div. Date	New Dividend Amount Cash	New Dividend Amount Stock	Dividends Total This Year Cash	Dividends Total This Year Stock	Capitalization Outstanding
American Chicle, pfd.			100			6%	Quar.	4- 1-21	1½%				3%				$3,000,000
Am. Ld. & Trac. Co., com. XD.	82½	83½	100	114 - 69	204 - 55	**4%	Quar.	8- 2-21	1%				2%	2%			$23,271,000
Do., pfd. XD.			100			6%	Quar.	9- 2-21	1½%				3%				$14,526,200
Bower Roller Bearing Co.			10	17¼ - 17	29¾ - 16		Varies	7- 1-20	5%								$600,000
Chnr. Iron Co. of America, com.		2¼	10	3½ - 1½	5½ - 1¾		Varies	1-15-19	2%								$2,839,350
Do., pfd.	2½	2¾	10	3½ - 2¼	5½ - 2¾		Varies	7- 1-19	3%								$5,217,250
Cities Service Co., com. XD.			100		355 - 350½	12%	Mon.	6- 2-21	1½%	1½%	6- 1-21	5-15-21	1½%	1½%	2½%	0¾%	$43,440,587
Do., pfd. XD.			100		70 - 65	6%	Mon.	4- 1-21							2%		$76,719,373
Consulta Lead & Zinc Co.	5	20	1	16 - 6	50 - 10		Varies	11-25-17	20%								$300,000
Columbia Sugar	10¾	10¾	10	14½ - 10½	20½ - 11½	12%	Quar.	1- 2-21	2%					5%			$3,000,000
Consumers Motor Car Co.	7	10	10	7⅝ - 6½	18½ - 6½		Varies	7- 1-20	3%								$500,000
Com. P. R. & L. Co., com.	9¾	10¾	100	16 - 10½	19½ - 10½		Varies	12- 1-19	3%								$18,586,900
Do., pfd.	29	30½	100	34 - 29	45½ - 23	10%	Quar.	2- 1-21	1½%					1½%			$17,953,000
Continental Motor Co., com.	7	7¾	10	7⅝ - 5¾	15¾ - 6¾		Varies	12-20-20	1½%								$4,627,350
Do., pfd.	81	84	100		100½ - 93	7%	Quar.	4-15-21	1¾%					3½%			$2,151,700
Det. Br. & Milkside Wks. XD.	90	93	50	98 - 94	96 - 85	8%	Mon.	2- 2-21	2%		6- 1-21	5-26-21	2%	2%			$1,472,100
D. & C. Navigation Co.			50	75½ - 71	100 - 67	8%	Quar.	4- 1-21	2%					4½%			$6,038,000
Detroit Creamery Co.	20	22	100	25½ - 20¾	32½ - 20	8%	Quar.	4- 1-21	2½%					5%			$5,187,700
Detroit Edison Co.	97¾	97½	100	98 - 92¾	114 - 92¾	8%	Quar.	4- 1-21	2%					4%			$27,655,200
Detroit United			100			8%	Quar.	4- 1-21	2%		6- 1-21	5-16-21	2½%	2%			$15,000,000
Edmund & Jones, com.	12	14½	None	14½ - 9½	34 - 14½		Varies	1- 1-21	50c					50c			$40,000 sh.
Do., pfd.			100	70 - 70	78 - 78	7%	Quar.	4- 1-21	1¾%					7%			$600,000
Federal Truck	20	21½	10	23 - 18	82 - 10½		Varies	1- 1-21	1%								$2,000,000
Ford Motor Co. of Canada	290	296	100	328½ - 217	400 - 210		Varies	11-15-20	15%								$2,000,000
Gen. Al. & Br. Mfg. Co., com.			10	13¼ - 10½	28 - 11		Varies	10- 1-20						5%			$1,188,850
General Motors, XD.			None	16 - 12½	39¾ - 12½	$1.00	Quar.	5- 2-21	25c				50c		25c		20,317,659 shs.
Gedehaus Sugar, com.	25		None		50½ - 30½		Varies										$70,000 shs.
Do., pfd.			100			7%	Quar.	4- 2-21	1¾%					3½%			$3,000,000
Hanna Furnace, com.		27	None	26 - 25			Varies										$1,995,000
Do., pfd.			100			8%	Quar.	3-15-21	2%					2%			$750,000
Hall Lamp Co.	13	14	10	15 - 13	32½ - 16		Varies	12-24-20	3%								$1,500,000
Hayes Mfg. Co., com.	2½	3	10	3½ - 2½	8½ - 2½		Varies	2- 1-20	1½								$1,500,000
Holland-St. Louis Sugar Co			10	10 - 7	19½ - 7		Varies	10-15-19	60c								$2,500,000
Iron Silver Mining Co		60	20		52 - 42		Varies	7- 1-19	10c								$2,500,000
K. & Kreaps, com.	134	140	100	141 - 141	151 - 125	6%	Semi-Ann	2-21-21	3%					3%			$10,000,000
Do., pfd.			100	96¾ - 96¾	100 - 100	7%	Quar.	4- 1-21	1¾%					3½%			$2,000,000
Lincoln Motor, Class A	18	19	50	21¾ - 17½	30¾ - 15½		Varies	12-31-20	$1.25								$8,000,000
Landerman Steel, Com			10		21 - 21	12½%	Quar.	1- 1-21	30c					60c			$1,088,000
Menasse Crude Rubber Co.			10	6½ - 6¼	11½ - 6¼		Varies	12-14-14	3%								$750,000
Mexican Drop Forge, com. XD			None		50 - 38½	$3.00	Mon.	5- 2-21	25c		6- 1-21	5-15-21	25c	$1.25			$12,500 shs.
Do., pfd.			100		90 - 90	7%	Quar.	1-21-21	1¾%					3½%			$250,000
Michigan Stamping Co., com.			10	18½ - 17½	20 - 16½	9%	Mon.	4-25-21	1½%		5-25-21	5-15-21	1½%	3%			$1,300,000
Michigan Sugar Co., com.	2¼	2¾	10	3 - 2¼	13½ - 2¼		Varies	1- 1-21	1%					1%			$7,471,100
Do., pfd.	8	8¾	10	8½ - 8	9¾ - 8	6%	Quar.	3-15-20	1½%								$3,704,500
Mules-Detroit Theater Co	16½	18	10	19½ - 10	21 - 15½		Varies	1-10-21									$350,000
Motor Products XD	60	65	None	52 - 37	67½ - 40		Varies	12-31-20	25%					$2.50			$2,585,000
Motor Wheel, com	10	10¾	10	11½ - 8½	13½ - 6¾		Varies	1-21-21	2%					2%			$4,500,000
Murray Mfg.			100				Varies	10- 1-20									$7,53,450
National Grocer Co		7½	100	9¼ - 7	156 - 156		Varies	12-31-20	2%								$2,000,000
Do., pfd.			100		95 - 95	6%	Semi-Ann	12-30-20	3%					3%			$1,500,000
Packard Motor Co., com.	10¾	11	10	13 - 9¾	28¾ - 9¾		Varies	10-30-20	2½%								$11,585,100
Do., pfd.	75½	77	100	79 - 68½	90¾ - 67	7%	Quar.	2-15-21	1¾%					3½%			$15,225,700
Page-Detroit Motor Car, com.	21½	22	10	25½ - 12	45½ - 12½		Varies	12-10-20	1%								$2,000,000
Parke, Davis Co.	258	263	25	268 - 175	268 - 175	20%	Quar.	4- 1-21	5%					20%			$11,538,850
Penberthy Injector, pfd.	90	94	100			8%	Quar.	4- 1-21	2%					8%			$500,000
Rex Motor Co.	20½	20¾	10	23 - 17½	29¼ - 16½	10%	Quar.	4- 1-21	2½%					10%			$8,937,250
Scotten-Dillon Co.			10	21 - 18	29 - 25½	8%	Quar.	4-10-21	2%					4%	50%		$2,250,000
Timken Axle, com	28¾	29¼	10	34½ - 26¾	63¾ - 26¾		Varies	12-23-20	2%					4%			$5,000,000
Do., pfd.			100		93 - 84	7%	Quar.	3- 1-21	1¾%					1¾%			$5,000,000
Trus-Con Steel Co., com	19	20	10	29¼ - 19	29½ - 10	10%	Quar.	4-15-21	2½%					5%	50%		$2,000,000
Do., pfd.			10	9¾ - 9¾	9¾ - 9¾	7%	Quar.	3- 1-21	1¾%					1¾%			$2,500,000
U. S. Radiator, com			100		110 - 70		Varies										$4,000,000
Do., pfd.	80	85	100	87 - 87	93¾ - 80	7%	Annually	1-25-21	7%					7%			$2,500,000
Waring Hat Co., com			None				Varies										$1,000,000
Do., pfd.			100			8%	Quar.	4- 1-21	2%					4%			$1,000,000
Western Knitting Mills	13	14½	None	11 - 8½	21¼ - 6¾		Varies	11-25-20	50c								$1,000,000 sh.
White Star Line		20½	50		50 - 50½		Ann'ly Nov	5-28-20	3½%								$750,000
Wolverine Port. Cement Co	2½	3½	10	3 - 2	5½ - 2¾		Varies	12-15-15	1%								$1,000,000

*Bid 500-570; new 63½-26. †2% in 1911, 7% in 1920, 7% in 1921, no Common dividends since organized. **1% Extra dividend. ‡Book value, $1,016,997. Ed. & J. §Book value, $3,219,327, Godchaux. ||Scrip. Book value, $2,622,795.00, Western Knitting Mills. ¶Book value $5,084,450, Motor Products. ††Also 4% stock. ‡‡With Extras. §§New. ||||4½% monthly stock dividend.

Foreign Exchange

Country	Par	Jan. 5, 1922	Feb. 3, 1922	May 3, 1921
Canada				8949
London	4.8665	4.8276	4.8500	3.8750
Switzerland	.1930	.1829	.1602	.1776
Paris	.1930	.0559	.0706	.0794
Belgium	.1930	.0628	.0745	.0795
Holland	.40196	.3162	.3575	.3857
Italy	.1930	.03465	.0266	.0458
Greece	.1930	.0763	.0736	.0615
Spain	.1930	.1378	.1393	.1495
Vienna		.00263	.0023	.0205
Berlin		.00145	.0015	.0183
Denmark	.26799	.1895	.1940	.1822
Norway	.2682	.1895	.1960	.1845
Sweden	.2680	.2045	.1950	.2760

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS (Closing New York Bid Prices)	May 3 1921	Jan. 5, 1921	D ec. 27, 1920	July 1, 1920	Jan. 3, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
U. S. Liberty 3½s	88.56	92.50	90.00	91.03	93.70	97.75	98.53	98.62
U. S. Liberty 1st 4s	87.50	85.50	85.32	85.60	88.00	94.20	92.00	94.12
U. S. Liberty 2nd 4s	87.18	83.50	81.10	85.00	91.58	92.84	93.04	94.10
U. S. Liberty 1st 4½s	97.30	96.95	95.50	95.18	98.46	98.14	96.50	
U. S. Liberty 2nd 4½s	87.28	86.30	84.84	85.00	93.20	94.03	96.70	
U. S. Liberty 3rd 4½s	90.48	90.04	87.80	88.22	94.10	94.10	94.44	
U. S. Liberty 4th 4¼s	87.46	86.46	84.86	85.56	93.75	100.10		
Victory Bonds 4¾s	97.33	93.48	94.10	95.55	94.00	95.03	95.32	92.22

Digitized by Google

Detroit Bank Statements

Both national and state banks published statements of conditions as of April 28, this week. In the detailed comparative statement below it will be noted that the net liquidation of loans and investments was $12,511,154, while net loss in deposits was $8,787,177. Net decrease in the borrowed money item was $470,253.

	Loans and Investments	Deposits	Borrowed Money
American State—			
February 21	$15,961,051	$12,264,766	$ 1,468,480
April 28	15,586,620	14,491,109	1,265,385
	— 375,431	— 1,099,357	+ 466,205
Detroit Savings—			
February 21	24,826,238	28,152,828	300,000
April 28	24,846,387	22,870,151	1,600,000
	+ 21,401	— 582,478	+ 700,000
Dime Savings—			
February 21	35,585,260	32,794,122	2,705,000
April 28	34,755,476	31,654,277	2,992,200
	— 789,784	— 1,139,845	+ 637,200
First and Old Detroit National—			
February 21	79,209,790	57,365,542	21,171,424
April 28	76,691,981	60,832,032	17,379,204
	— 2,508,829	+ 3,466,495	— 3,792,220
Central Savings—			
February 21	12,379,948	16,688,911	582,000
April 28	16,250,717	16,648,587	1,122,200
	— 92,826	— 690,974	+ 238,599
First State—			
February 21	19,117,497	11,605,285	1,514,000
April 28	12,228,987	11,731,567	1,967,589
	— 888,430	— 186,818	+ 413,589
Highland Park State—			
February 21	12,569,297	12,790,118	1,826,982
April 28	14,458,889	13,824,307	1,764,600
	— 1,104,488	— 965,211	— 62,382
Merchants National—			
February 21	14,420,788	10,006,285	2,655,000
April 28	15,158,036	10,938,798	2,154,140
	+ 737,247	+ 885,498	+ 599,140
National Bank of Commerce—			
February 21	26,909,475	23,882,716	5,091,800
April 28	26,298,982	24,837,142	5,023,055
	— 510,558	+ 1,954,426	+ 976,255
Peninsular State—			
February 21	32,398,125	29,446,648	4,071,021
April 28	32,083,676	28,878,156	5,064,232
	— 314,448	— 1,070,488	+ 993,627
Peoples State—			
February 21	108,647,105	92,806,236	17,020,000
April 28	105,647,988	86,917,590	19,127,211
	— 3,099,017	— 5,888,732	+ 2,507,211
United Savings—			
February 21	6,552,064	6,968,505	.....
April 28	6,819,084	6,989,586	.....
	+ 260,870	+ 20,881	.....
Wayne County—			
February 21	73,876,697	71,393,857	2,100,000
April 28	69,854,905	23,929,255	.....
	— 4,021,792	— 2,364,602	— 2,100,000
Bank of Detroit—			
February 21	18,182,099	13,632,380	1,877,000
April 28	15,920,322	17,760,015	802,000
	— 214,569	+ 137,755	— 1,375,000

Pontiac Stocks

	Bid	Ask
Airlite Baking Co.	11	15
American Forge & Socket	4	6
Michigan Drop Forge	..	12
Pontiac Mortgage & Investment Co.	95	100
Van Auken Top	..	10
BONDS		
Detroit & Pontiac Ry. 5s, 1922	96	99
Detroit & Pontiac Ry. 4½s, 1926	..	84
BANK STOCKS		
Pontiac Commercial Savings	155	170
Oakland County Savings	150	159
American Savings Bank	145	150
National Bank of Pontiac	130	140

Quotes by Hughes, Burke & Co., May 2.

Grand Rapids Stocks

American Public Utilities, Common	7	12
American Public Utilities, pfd	19	21
Commonwealth P. R. & L., com	9	11
Commonwealth P. R. & L., pfd	10	91
Citizens Telephone Company	4¼	4½
United Light & Railways, com	24	25½
United Light & Railways, pfd	60	62
Cities Service, Bankers' Shares	89¾	90¼
Cities Service, com	240	248
Cities Service, pfd	66¾	67¼
Cities Service, Debenture "B"	123	130
Cities Service, Debenture "C"	93	95
Cities Service, Debenture "D"	94	96

Quotes by Howe, Snow, Corrigan & Bertles, May 2.

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd	90	100
Austin Machinery Corp., com	2½	9
Brunswick-Balke-Collender Co. com. A	30	..
Brunswick-Balke-Collender Co. com. B	..	68
Brunswick-Balke-Collender Co. pfd	87	97
Continental Motors Corp., com	6¾	7¼
Continental Motors Corp., pfd	22	35
Linderman Steel & Machine Co. com.	11¼	12½
Muskegon Finance Co., pfd., with 100% bonus of common	9	10
Occidental Hotel Co., pfd	20	90
Shaw-Walker Co., pfd	9½	10
United Home Telephone Co., com	4	6
United Home Telephone Co., pfd	6	9

Quotes by Allen G. Thurman & Co., May 2.

Detroit Listed Bonds

Sales Week Ended May 3

Sales	Bank Stock
Detroit Edison 8s, 1931, 1,000 @ 101¼.	
Detroit Edison 7s, 1930, 9,000 @ 95¾.	
Detroit Edison 6s, 1931, 7,000 @ 101.	
Detroit Edison 7s, 1940, 1,000 @ 92.	
5 First and Old @ 372.	
60 Merchants @ 150.	

Listed stocks, 52,602.00 shares.
Unlisted stocks, 159,118.00 shares.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,662,994	$121,492,204
January 12	90,172,447	120,667,009
January 19	101,895,982	191,841,067
January 26	79,018,607	87,641,652
February 2	87,995,926	91,772,632
February 9	76,606,482	101,049,306
February 16	70,021,988	101,292,779
February 23	67,711,031	88,529,787
March 2	98,925,592	127,099,854
March 9	73,762,982	103,011,688
March 15	94,896,499	133,175,052
March 23	90,162,493	148,987,388
March 29	89,091,971	116,421,956
April 6	79,182,971	104,905,221
April 13	91,621,267	126,881,967
April 20	89,777,686	121,686,146
April 28	80,328,860	112,256,575
May 2	91,044,099	114,796,767
Month of		
January	389,430,232	457,221,870
February	408,841,688	436,268,856
March	277,276,240	670,685,886
April		540,270,260
May		484,293,988
June		555,702,867
July		532,624,146
August		532,888,086
September		581,588,840
October		513,425,780
November		482,023,440
December		482,851,245
Yearly totals, 1920		$6,102,322,908
Yearly totals, 1919		$4,604,885,155

Wanted: Experienced Bond Salesman, by an important investment house, territory Detroit. Answer Box N. C., Michigan Manufacturer and Financial Record, 611 Free Press Bldg., Detroit, Mich.

ROAD BONDS FOR SALE.

The undersigned will receive sealed bids at their office Ionia Michigan, up to one o'clock p. m., Eastern time, Tuesday, May 10, A. D. 1921, for the sale of approximately sixty-seven thousand dollars ($67,000.00) worth of serial bonds for Assessment District Road No. 8.

Said bonds are being issued under the provisions of Act 59, Public Acts of 1915 as amended and are the obligation of the townships of Portland and Danby in Ionia county and assessment district No. 8.

Said bonds will mature from 1 to 10 years, interest being payable semi-annually and bonds payable at maturity.

Each bidder is requested to name the rate of interest required (not exceeding 6 per cent) and premium he will pay, in his bid.

Denomination of the bonds will be made to suit the purchaser.

For information regarding the nature of bonds and copies of the act under which they are issued, address the undersigned.

A certified check in the sum of 2 per cent of the amount of the bonds, payable to the order of the Board of County Road Commissioners will be required with each bid.

The right is hereby reserved to reject any or all bids.

FRED W. GREEN,
FRED H. KNOX,
R. H. HALL,
Board of Ionia County Road Commissioners.

Digitized by Google

ROAD BONDS FOR SALE.

The undersigned will receive sealed bids at their office, Ionia, Michigan, up to one o'clock p. m., Eastern time, Tuesday, May 10, A. D. 1921, for the sale of approximately fourteen thousand dollars ($14,000.00) worth of serial bonds for Assessment District Road No. 5.

Said bonds are being issued under the provisions of Act 59, Public Acts of 1915 as amended and are the obligation of the township of Portland in Ionia county, and assessment district No. 5.

Said bonds will mature from 1 to 5 years, interest being payable semi-annually and bonds payable at maturity.

Each bidder is requested to name the rate of interest required (not exceeding 6 per cent) and premium he will pay, in his bid.

Denomination of the bonds will be made to suit the purchaser.

For information regarding the nature of bonds and copies of the act under which they are issued, address the undersigned.

A certified check in the sum of 2 per cent of the amount of the bonds, payable to the order of the Board of County Road Commissioners will be required with each bid.

The right is hereby reserved to reject any or all bids.

FRED W. GREEN,
FRED H. KNOX,
R. H. HALL,

Board of Ionia County Road Commissioners.

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg. — Phones Cherry 8640

We solicit your inquiries

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

School Savings "Teller" Is Gaining a Wide Vogue

A notable increase in interest and sales during the last few months is reported by the American Banking Machine Corporation, Saginaw, which makes the "Automatic Receiving Teller," a device installed by banks in public schools to receive penny, nickel, dime and quarter deposits from children. The device has been given favorable mention by the Savings Bank Section of the American Bankers' Association.



When a pupil makes a deposit of a coin in the Automatic Receiving Teller, the machine discharges a stamp for the amount deposited, which the pupil pastes in a folder resembling the folders supplied by the Government for War Savings Stamps. When $1 worth of stamps have been placed in the booklet, the latter is taken to the bank under whose auspices the machines are installed, and credit given on a regular savings deposit book. One of the attractive features thus is that the teacher is relieved of the responsibility of looking after the deposits.

Among the cities in which banks are using the machines in the schools are Saginaw; Cambridge and Lawrence, Mass; New Orleans, La.; Highland Park, Mich.; New Haven and New London, Conn.; Oak Park, Ill., and Bloomfield, N. J.

The main office and plant of the American Banking Machine Corporation is at Saginaw, while branch offices are in New York and Chicago.

ALLIS-CHALMERS STATEMENT

The annual statement of the Allis-Chalmers Manufacturing Company, Milwaukee, for the year 1920, shows net profits of $3,564,248, as compared with $3,599,714 in 1919; $4,625,866 in 1918 and $4,010,490 in 1917. Total surplus after taking care of dividends was $1,647,207, as against $1,819,540 the year before and $3,006,444 in 1918. Total assets at the end of 1920 were $64,020,650. In 1919 the total was $61,000,417; in 1918, $63,791,930 and in 1917, $54,893,595. In his report to the stockholders, President Otto H. Falk says: "The value of unfilled orders on hand at the close of the year, including all customers' contracts unbilled and in various stages of completion, was $17,046,724. The total bookings for 1920 were $32,696,566.

HARRIMAN'S NEW LOCATION

Harriman & Company, members of the New York Stock Exchange, have moved their Detroit offices from the Dime Bank building to 123 Fort street west, ground floor of the Moffat building.

P. R. R. DIVIDEND CUT

The Pennsylvania Railroad Company has reduced its annual dividend rate from six to four per cent. This is the lowest rate paid in twenty-nine years. Cash dividends paid by the company from May, 1856, to February, 1921, inclusive, total 408 per cent, and amount to approximately $652,954,752. This is exclusive of twenty-two per cent dividends paid in scrip, the larger part of which were redeemable in stock. Cash dividends since 1847 have averaged 6.01 per cent on par value of the stock. The company has paid a return in every year since incorporation. The highest rate in any year was ten per cent, and the lowest two per cent.

GRAND RAPIDS' TAX RATE

There will be a decrease of twelve cents a thousand in the Grand Rapids city tax rate this year, compared with last year. It was announced that the rate will be $19.89, while in 1920 it was $20.01. The budget calls for a total of $4,158,878, of which $1,849,748 is for city expenses; $1,898,932, school fund; $209,094, mill tax; $121,977, sinking fund, and $79,126, library fund.

HOWELL BUSINESS CONDITIONS

Howell manufacturing plants are transacting a large business in the automotive trade lines. The Spencer-Smith Machine Company is on a 100 per cent basis, with men and space being added. All employes are doing piece work on an eight-hour day basis. The company is making 81 different kinds of automobile pistons. Sizeable orders are coming in from the Reo, Ford, Essex, Dort and Olds companies.

The Howell Electric Motor Company reports a steady gain and is now on a 50 per cent basis, with 150 men on full time. There is a strong demand for the company's polyphase motor and export trade is improving.

Operations will also soon be under way with the Howell Electric Washing Machine Company.

Recent Dividends

Company	Rate	Payable	Stock of Record
American Radiator, com	$1.50 Q	June 30	June 15
American Radiator, pfd	1¾% Q	May 16	May 2
Cities Service,			
com. pfd. "B"	½ of 1% M cash	June 1	May 16
Cities Service, pfd	½ of 1% M cash	June 1	May 16
Cities Service, com	1¼% M com	June 1	May 15
Fisher Body, pfd	1¾ Q	May 2	April 21
Fisher Body, com	$2.50 Q	May 2	April 21
H. H. Franklin Mfg.	1¾% Q	May 1	April 30
Hood Rubber, pfd	1¾% Q	May 2	April 30
Michigan Employers Casualty	3% Q		May 1
Michigan Employers Casualty	2% cash		May 1
National Carbon, pfd	1¾% Q	May 1	April 20
National Lead, pfd	1¾% Q	June 15	May 20
Scotten-Dillon	2% cash	April 15	April 15
Sapulpa Refining	5% cash	May 15	April 22
Stewart-Warner, com	50 cts Q	May 15	April 30
Tonopah Mining	3 cts per sh	April 25	March 31
Vacuum Oil	3% a n.	May 31	May 2
Wickwire-Spencer Steel, 1st pfd	2½ Q	May 2	April 5

The Nipissing Mines Company has reduced its quarterly dividend rate from 5 per cent to 2 per cent. The former figure has been maintained since 1914.

The American-La France Fire Engine Company has declared an extra dividend of 15 per cent on common stock, payable in 7 per cent cumulative preferred, June 1, to stock of record May 17.

The B. F. Goodrich Rubber Company has decided to pass the payment of the common stock dividend of $1.50 a share, usually payable May 15.

The American Railway Express Company has declared dividends of $2 a share for the last four months of 1920 and $1.50 a share for the first quarter of 1921.

MICH.-COLORADO HEARING MAY 10

Judge Leland W. Carr, of the Ingham circuit court, has fixed May 10 as the date of hearing of the case of the Michigan-Colorado Copper Company against the Michigan Securities Commission to prevent the latter from carrying out an order to show cause why the company's license should not be revoked for selling stock alleged to have been unauthorized for sale. The trial court was set on application of an assistant attorney general. Judge Howard Wiest issued a temporary restraining order against the securities commission last July. Since that time the matter has lain dormant.

NEW UTAH COPPER DIRECTORS

The Utah Copper Company has increased the personnel of its board of directors from fifteen to seventeen by the election of Murray Guggenheim and J. V. Jenkins.

Digitized by Google

MOTOR PRODUCTS REPORT

President D. B. Lee in his annual report to stockholders of the Motor Products Corporation, says in part:

"The period of readjustment began with us much later than it did with many others, and its full effects were not really felt until November and December, and therefore our operations were on a very satisfactory basis throughout virtually all of the year 1920. Operations during the year 1921 will be greatly curtailed and therefore profits will be correspondingly smaller, but it is felt that the results during the year will show a satisfactory return to the stockholders.

"It was decided in December to pay a dividend of $1.25 a share on the stock on February 21, and at the regular meeting of the board in March a dividend of $1.25 was declared to stockholders of record April 20, 1921, the dividend to be paid on May 1. It is the hope of the board that a dividend of $1.25 a share may be continued quarterly.

"Final adjustment with the Government for taxes due for 1918 and 1919 has not as yet been made. The Government presented a claim for the two years of $439,762.04, but a claim in abatement was filed with the Treasury Department and it is the hope of not only the directors but our auditors as well that the sum is excessive and therefore cannot be sustained, and that it will be greatly reduced, although no positive assurance can be given as to this."

The statement is noteworthy in that there are no current liabilities except $464,785.55. Accounts payable and quick assets total almost $6,000,000, included in which is $2,800,000 U. S. certificates of indebtedness and $411,340.39 cash. The comparative balance sheet below also shows the extraordinarily secure position of the stockholders and the improvements over the condition of the corporation at the close of business on December 31, 1919, a year previous.

MOTOR PRODUCTS STATEMENT

ASSETS	Dec. 31, 1920	Dec. 31, 1919
Land, buildings, machinery, equipment, etc., less reserves	$2,282,889.80	$2,196,114.34
Inventories	1,696,155.25	1,539,796.74
Accounts receivable and acceptances	845,550.53	1,412,301.32
Miscellaneous Investments, liberty bonds, etc.	84,407.62	36,819.75
U. S. certificates	2,800,000.00	.....
Cash	411,340.39	1,697,664.68
Total current	$6,839,453.79	$4,686,282.49
Deferred charges	63,398.16	40,660.79
Total assets	$8,185,724.75	$6,923,059.62
LIABILITIES		
First mortgage bonds	$ 200,000.00	$ 500,000.00
Accounts payable	464,785.55	861,371.42
Reserve for contingencies	200,000.00	1,205,479.91
*Capital, $6,000 shares, no par	2,685,000.00	
*Surplus	4,335,939.20	4,256,208.29
	$8,185,724.75	$6,923,059.62
Profits, 1920		
Surplus, January 1, 1920	$2,612,879.71	
Net for year 1920	2,192,143.29	
	$4,804,723.00	
Federal tax deductions	$243,783.80	
Contingencies reserves	200,000.00	
	443,783.80	
Surplus December 31, 1920	$4,335,939.20	

*Capital and surplus equivalent to $90.26 per share.

CLAYTON & LAMBERT

Stockholders of the Clayton & Lambert Manufacturing Company, Detroit, meeting in special session late last week, authorized the officers and directors to take the necessary steps to increase the capital stock from $1,000,000 to $1,500,000 to provide for the company's expanding business. It has been necessary to increase the capital twice during the last year. A larger factory recently has been completed at Knodell avenue and the Detroit Terminal Railroad.

THE OLDEST HOUSE IN MICHIGAN

THERE is a reason for the present widespread interest in FOREIGN GOVERNMENT BONDS—many investors are realizing that it is an exceptional opportunity to buy safety together with high income and good possibility of profit. We suggest that you investigate their suitability to your requirements.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

China

"The great and remarkable antiquity of this nation, which, while other nations came and went, has continued through the ages, is a tribute to the stability and good character of this people and its institutions."

We have brought over from England and are offering at 55c on the dollar,

CHINESE 5% STERLING BONDS
Issued in 1913.
For Loans from England.

These pay 8.6% cash income from coupons.
They should give 72% appreciation on the principal in addition.

Send for Circular

HOWE, SNOW, CORRIGAN & BERTLES
Investment Bankers

Grand Rapids Savings Bldg. Grand Rapids, Mich.
872 Penobscot Bldg. Detroit, Mich.

The above statements, while not guaranteed, are taken from sources we believe to be reliable

G. E. CAPITAL INCREASE

Stockholders of the General Electric Company, meeting May 10, will vote, it is reported, on a proposal to increase the capital stock from $175,000,000 to $185,000,000.

WEATHERPROOF BODY RECEIVERSHIP

Judge Arthur J. Tuttle, of the United States District Court at Detroit, has appointed the Security Trust Company, Detroit, receiver for the Detroit Weatherproof Body Company, Pontiac. The action was taken on application of the Michigan Steel & Metal Company, in which petition the body company joined. The petition set up that the body concern was indebted to the petitioner in the sum of $600,000, and that while its assets exceeded that amount considerably, they could not be realized on except at a loss.

Digitized by Google

Public Utilities

Grand Rapids—On May 1 a reduced wage scale for employes of the Grand Rapids Railway Company went into effect, the reduction being 10 per cent. The new scale is as follows: Motormen, conductors and motor inspectors, 46 cents an hour for the first three months; 48 cents for the next nine months, and for the second year and thereafter, 50 cents an hour. Five cents an hour will be added for operators of one-man cars. The schedule will be in effect for six months. The old pay schedule called for 56, 58 and 60 cents pay an hour.

Ann Arbor—Appraisal of the properties of the Detroit United Railway has been made by Prof. Henry T. Adams, of the Engineering Department of the University of Michigan. It places the value at $61,203,987. The physical value of all properties is scheduled at $56,757,875, of which $33,296,144 is credited to the Detroit properties. The value of the D. U. R. franchise in Detroit is set at $81,051 and the outside franchise values at $4,446,112. The appraisal was based on a total mileage of 718.69 miles, of which 307.76 miles are in Detroit.

Owosso—Seth J. Pulvar and C. D. Bell, Owosso, and Walter M. Bush, Corunna, have purchased the stock of the Owosso Gas Company from the Dean family, Ann Arbor.

Ravenna—The Ravenna-Conklin Light & Power Company has been organized here to provide electric power and light for this village and Conklin. A dam in Crockery creek will be constructed and a power house erected.

Owosso—Stockholders of the Union Telephone Company, meeting here a few days ago, re-elected the board of directors. W. J. Melchers was named to succeed the late E. O. Dewey.

Detroit—The Detroit City Gas Company has filed with the city controller a statement showing a deficit of $101,965.01 for the month of March and a shortage of $338,372.24 for the first quarter of the year. The statements are being filed in pursuance of the agreement reached when the recent rate increase was allowed.

New Publications

"C-H IRON-CLAD SOLENOIDS"

"C-H Iron-Clad Solenoids" is the title of a new four-page, 8½ by 11 leaflet being distributed by the Cutler-Hammer Manufacturing Company, Milwaukee, Wis., and describing electric solenoids for operating brakes, clutches, valves and similar devices where a straight line motion is desired.

These solenoids, it is stated, are weather proof and the usual hammer blow and noise accompanying the operation are largely eliminated by the use of a floating plug, which the plunger engages at the end of its stroke. The plug also provides a high pull and a fixed position for the plunger when sealed. An equaliser bushing prevents excessive side pull on the plunger. The solenoids are furnished in four sizes, the maximum gross pull of the largest size being 400 pounds.

FOUNDRY PRACTICE HANDBOOK

The Farrell-Cheek Steel Foundry Company, Sandusky, Ohio, has just issued one of the most complete handbooks on foundry practice that has come to our attention. It not only describes but illustrates profusely each operation required in making of a casting, the same casting or pattern being used throughout.

The booklet is printed in four colors.

U. of D. Takes Lead In Aero Education

(*Continued from Page 8*)

airways and is forty miles wide and all cities and communities within the belt are considered on the air route. The same applies to airways. Detroit is between the Wilson and Chanute and Bell airways, but touched by neither, and is on the Detroit-Montreal air route. The airways and their terminals are as follows:

Transcontinental-Wilson Airway, New York to San Francisco; Wright Brothers Airway, Washington to San Diego; Langley Airway, Philadelphia to Santa Barbara; Chanute and Bell Airway, Boston to Seattle, Wash., and Portland, Ore.; Rodgers Airway, Newport News and Norfolk, Va., to Los Angeles.

Costal-Atlantic Airway, Bangor, Me., to Key West, Fla.; Gulf Airway, Key West to the mouth of the Rio Grande; Pacific Airway, San Diego to Puget Sound.

The air routes so far established are from Chicago to New Orleans; New York to New Orleans; Louisville-Charleston-Washington; Charlotte-Raleigh-Norfolk; St. Louis-Southwestern; Galveston to Dallas; Winnipeg to Louisiana; Key West to Havana.

If one point of a pair of compasses were set at Detroit and the distance from Detroit to New York (six hours' flying time) were used as the radius and a complete circle drawn on a map of the United States, the circle would entirely include or touch nineteen states and, roughly speaking, more than seventy-five of the best known commercial and industrial cities in

7% and Dynamic Detroit

Detroit investors have outgrown the 6% idea. 7% is now demanded—and with it the same safety as in the days of 6%. To meet this demand we offer our 6% First Mortgage Bonds on a basis to net 7%. You cannot buy a safer bond. Our booklet, "Dynamic Detroit," explains in detail the issues we offer on a 7% basis. Send for it. It shows how you can obtain the most liberal interest rate ever offered by a local Mortgage Corporation of our magnitude.

Resources Over $7,000,000

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

Smith, Hinchman and Grylls

Architects and Engineers

Detroit, Mich.

Digitized by Google

the country. In other words, no city in the United States is so advantageously located for aeronautical development as Detroit. The same circle described on any other part of the map would not show anywhere nearly the same number of cities of equal importance.

Detroit as the Center

Probably Dayton, more than any other one city, can be said to be the present aeronautical center of the United States because of the location there of McCook field, the Government's major aviation and aeronautical post. It is understood, however, that this station is to be moved elsewhere, the location to be decided this summer.

If some city is due to be the future aeronautical center, as Detroit was destined to be the automotive center, then Detroit has as good a chance as any other city, and many advantages other cities cannot show.

Detroit has been accused of being the least progressive in the most progressive science in the world. What interest there has been in aeronautics has been of a social and sporting nature. Dean Dunn of the University of Detroit points out that the city has no aerial mail service, which, for a city of a million people, is "incomprehensible." Cleveland has such service, with the result that mail is from ten to twenty hours later in Detroit than in Cleveland. Dean Dunn says:

"The speed with which mail is carried and the celerity with which it is delivered often means a great deal to competitive industrial and commercial organizations. The success of a big business deal may rest upon a few ticks of the clock. In dealing with foreign countries the speed of the mail service cannot be underestimated in importance. Detroit, and Michigan for that matter, with its great industrial organizations doing business in millions, should have air mail service of the best.

"The location of present landing fields—the Packard field and the proposed Russel field out Grand River—constitutes a drawback to aerial navigation. Both are too far from the center of the city. The time saving made by air travel is lost by the travel time necessary after the ship has landed. The ideal location for a municipal aviation field is Memorial Park, East Jefferson avenue, opposite Belle Isle. Undoubtedly the future commercial planes and airships will be amphibian. This field is on the bank of the Detroit river, and a body of water is the best and safest landing place.

"Aerial transportation to be really valuable must be unlimited by seasons. That means that field facilities must be suitable for all seasons. In the winter months the ice on the river, assuming it freezes hard enough, provides an ideal take-off and landing place.

Civic Interest Lacking

"A third element lacking in Detroit is civic interest in flying from the standpoint of its value in the development of the city. Less pardonable is the failure of the industrial and commercial interests to see wherein aeronautics holds much in store for them. The use of aircraft means the manufacture of aircraft and equipment. Why should Detroit look to other cities and even other countries for such equipment. I sometimes think Detroit is automobile-blind. It is an automotive city, but the disadvantage of being a one-industry town must be patent to all after this depressing period. Just as automotive manufacture has contributed its experience and brains to aeronautical science, so will this science, as it progresses, contribute to automotive development.

"There are any number of principles embodied in the construction of aircraft that can be applied to the improvement of motor vehicles. Take just one factor—weight. The effort has been to make aircraft as light as possible without the sacrifice of strength. This is essential in a machine traveling the air, but it is likewise important in the construction of land vehicles.

"While it may be necessary to mix the bitter

THE DIME SAVINGS BANK

United States Depository—Member of Federal Reserve System
Detroit, Michigan.

Statement of Condition at the Close of Business
April 28, 1921

RESOURCES

Real Estate Mortgages and Bonds	$17,583,730.41
Collateral Loans	4,167,326.99
Other Loans and Discounts	9,176,729.04
U. S. Liberty Bonds and Certificates of Indebtedness	3,827,689.90
Stock in Federal Reserve Bank	112,500.00
Other Real Estate	13,745.29
Banking Houses and Fixtures, including Safe Deposit Vaults	951,931.69
Cash on Hand and in Banks	4,381,964.91
Customers' Liability Account of Acceptances	50,000.00
Customers' Liability under Letters of Credit	5,500.00
	$40,271,118.23

LIABILITIES

Capital Stock Paid in	$ 1,500,000.00
Surplus	2,250,000.00
Undivided Profits, Net	260,556.93
Bills Payable, Federal Reserve Bank Secured by U. S. Certificates and Bonds	2,407,350.00
Bills Rediscounted with Federal Reserve Bank	924,850.00
Commercial Deposits	12,658,014.65
Savings Deposits	18,996,262.53
Bond Account	1,159,100.00
Reserve for Interest and Taxes	59,484.12
Acceptances Executed for Customers	50,000.00
Customers' Letters of Credit	5,500.00
	$40,271,118.23

BRANCH OFFICES:

Woodward Avenue, Corner of Milwaukee Avenue
Jefferson Avenue, Corner of Beaufait Avenue
Gratiot Avenue, Corner of Russell Street
Grand River Avenue, Corner of Lawton Avenue
Woodward Avenue, Corner of Willis Avenue
Michigan Avenue, Corner of Eighth Street
Fourteenth Avenue, Corner of Ferry Park Avenue
Broadway, Corner of Witherell Street
Oakland Avenue, Corner of Holbrook Avenue
Grand River Avenue, Corner of Highfield Avenue
Harper Avenue, Corner of Frontenac Avenue
Mt. Elliott Avenue, Corner of Davison Avenue
Chene Street, Corner of Sherman Street
Dix Avenue, Corner of Artillery Avenue
Michigan Avenue, Corner of Military Avenue

Digitized by Google

Condensed Statement of

Merchants National Bank of Detroit

At the Close of Business April 28, 1921

RESOURCES:

Loans and Discounts		$13,566,992.82
Bonds, Securities, etc		664,431.50
U. S. Liberty Bonds and Certificates of Indebtedness		926,662.50
Overdrafts		2,101.54
Interest earned but not collected		19,579.65
Customers' Liability under Letters of Credit		10,000.00
Customers' and Bankers' Liability Acct. Acceptances executed by the bank		457,500.00
Premiums paid in advance		2,784.91
Cash Resources:		
Cash on hand and checks for Clearing House	$ 464,525.60	
Due from Federal Reserve Bank	1,011,208.45	
Due from Banks and Bankers	699,619.91	
	$ 2,175,353.96	
		$17,825,406.88

LIABILITIES

Capital Stock	$ 2,000,000.00
Surplus	1,000,000.00
Undivided Profits	351,982.36
Interest and Discount Collected but not earned	91,117.66
Reserved for Interest	20,769.02
Reserved for Taxes, Dividends, etc	86,891.71
Customers' and Bankers' Acceptances Acct	457,500.00
Bills Payable	484,140.00
Notes and Bills Rediscounted	2,670,000.00
Bonds Borrowed	314,212.50
Letters of Credit	10,000.00
Deposits	10,338,793.63
	$17,825,406.88

OFFICERS

JOHN BALLANTYNE.....President
DAVID GRAY.....Vice-President
JOHN P. HEMMETER..Vice-President
B. G. VERNOR, Vice-Pres. and Cashier
A. T. LERCHEN.....Vice-President
WALTER R. JOY....Assistant Cashier
CHAS. K. BARTOW..Assistant Cashier
FRANK A. DUWE...Assistant Cashier
R. W. SCHWEITZER Assistant Cashier

DIRECTORS

JOHN BALLANTYNE
WALTER O. BRIGGS
JOHN ENDICOTT
LUMAN W. GOODENOUGH
DAVID GRAY
OREN S. HAWES
JOHN HEMMETER
ALBERT E. SLEEPER
FREDERICK W. STEVENS
EMIL STROH

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

with the sweet, I prefer to talk about what Detroit has that can make her a great aeronautical center. Looking over her industrial plants we find facilities for making wheels, carburetors, magnetoes, wire, metal products, propellers, motors, instruments and other equipment for air machines. Further, Detroit knows how to produce in quantity. The Packard company made engines and aircraft. The Fisher Body Corporation made aircraft. The Lincoln Motor made engines. The Flotorp Company, Grand Rapids, makes propellers. William B. Stout is making aircraft.

"All this is recognized and is very well, some will say, but why organize for an industry still undeveloped? That is where the nut should be cracked. Before you can establish an industry you must create a demand for product, and this creation presumes expressing an interest and indicating a confidence in the practicability of a product.

"What more proof do we need than the accomplishments of the war, the air mail service now in operation, the freight and passenger-carrying enterprises established in various parts of this country, and the strides made by Europe? Europe is ahead of us just now, but Europe has neither the facilities nor the finances to keep ahead of us once we get started. I believe that aeronautics have made faster progress in the last five years than the automotive business has in twenty-five years. Industrially and commercially aeronautics will keep on traveling at that rate."

Bearing out Mr. Dunn's contention is the report from England that a new type of air-water-land-submarine vehicle has been successfully tested. It is called the "Tessaurian." This remarkable machine flies in the air, travels on land and sails on and under the water. Its double planes telescope for under-water travel. Its motive power is gasoline and electricity. It has a keel like a boat, which is that draw up into the body, a periscope, air chambers and machine gun pit. This machine, it is claimed, can be made large enough to carry torpedoes. It is a war machine, of course, but what machine has been developed in the automotive world that can equal it?

Uniform U. S. Laws Needed

"To give aeronautics an impetus we need uniform federal laws," said Mr. Dunn. "Existings laws, particularly those passed by states, should be federalized. When the proper regulation has been accomplished then both the commercial fliers and air transportation companies will know how to proceed with their work. Bills are pending now; in fact the University of Detroit has been entrusted with the responsibility of preparing and presenting such legislative measures as seem to be called for, and we are at work upon them now."

In the daily papers last week there was an account of a $50,000,000 airship corporation being organized in Washington to construct and operate rigid type airships for transcontinental and trans-oceanic passenger travel. The article reported that the first ships for this company were being built in Europe. The inference to be drawn is that these ships could not be built in the United States or if they could be built here, the cost would be greater than in Europe. Europe has not beaten Detroit in the construction of automobiles and there is little likelihood that Europe ever will. The first ship ordered by the corporation is to be 752 feet long, 96 feet in diameter, have a gas capacity of 3,355,000 cubic feet of gas, 2,000 horse-power engines, speed of 80 to 100 miles an hour, 50-ton lifting capacity, 52-passenger capacity and 10,000-mile cruising radius.

The company's announcement of its plans includes the statement that inasmuch as airships will be of prime importance in future wars and countries must continue to develop them, therefore the best way to develop aircraft is to put them to peace-time uses. In other words, why not derive a peace-time benefit from war-time preparations.

Digitized by Google

Four Chief Problems Confronting America

(*Continued from Page 10*)

of fair and considerate and broad-gauged dealing.

We are all beneficiaries of one another's prosperity, and it hardly needs arguing to prove that it is in the best interest of the employer, even from the merely selfish point of view, not to pay the lowest wages to which labor can be squeezed down, but rather the highest wages compatible with the successful conduct of his business and with keeping his product at reasonable cost.

By the same token it is in the interest of the worker to be an efficient producer and not to slacken on the job. As the distinguished economist, Mr. Hartley Withers, in his book, "The Case of Capitalism," has well said: "The wage earner is most likely to earn good wages when there are as many capitalists as possible putting new capital into industry and competing for the services of the wage earner as a worker and for his custom as a consumer. If labor prefers to frighten and threaten the capitalist, the latter will be scarce and shy and his capital will be scarce and dear."

In the same book the author proves interestingly, in contradiction to the widely prevalent belief among employes that an undue share of the fruit of their labor is appropriated by the employer, that, as a matter of fact, labor gets the whole value of its actual product and, indeed, more. He adds: "If it wants to get also the share of the capitalist and the adventurer it can do so by saving capital for itself and risking it in industry, thus becoming its own employer and provider. A few shillings per head from the working class would quickly raise the necessary capital to make a trial of democratic management in any industry."

The labor unions in this country claim a membership of 4,500,000. If every member laid aside $1 each week, the available sum at the end of one year would amount to $234,000,000. That is a pretty tidy fund to start business with, in various lines. Personally, I should be glad to see the experiment tried and should welcome its success. The more workingmen come into direct contact with, and acquire direct knowledge of, the realities, the complexities, cares and risks of business conduct, the better it will be for all concerned.

I will refer in only a few words to the gratifying and reassuring fact that, notwithstanding insistent urgings on the part of agitators, American workmen do not carry class consciousness into politics. A conspicuous demonstration of this truth was given in the last presidential election when, although the leading spokesmen of organized labor took active and vigorous part in opposing the Republican candidate and party, every industrial state in the Union gave very large Republican majorities, which of course would have been impossible if there had been such a thing as a compact labor vote.

The American workman votes as a citizen, not as a member of a separate class, a fact too often forgotten by politicians. Perhaps it is too often forgotten also by employers. If we want the workman to continue to vote from the broad point of view of a citizen, we must be regardful of his self-respect and strengthen his faith in, and adherence to, our social and governmental system, and treat him as a fellow-citizen always, and not merely during electoral campaigns.

The Situation in Europe

Our position as regards Europe reminds me very much of a story told during the war: A small patrol had been sent forward, and after a few minutes those left behind heard a voice calling back, "Sergeant, I have made a prisoner!" The sergeant shouted, "Well, bring of him in!" and the voice came back, "But he won't let go!"

Europe "won't let go." Even if President Wilson had not committed the fatal mistake of walking personally into Europe's parlor in Paris, even if the peace treaty had not been so framed with deliberate cunning as to make complete disentanglement for us a matter of

(*No. 7 of a Series of Examples*)

Is a Corporation Liable, If its Officers, Though Innocently Deceived, Transfer Stock Upon a Forged Power of Attorney?

Yes. The rule has been stated as follows: ". . . A corporation whose officers, although innocently deceived by a forged power of attorney, permit shares of stock to be transferred on the books without authority from the shareholder, may be compelled to replace them or pay him the value of them. Upon the stock so issued by wrong or mistake the corporation is liable to a bona fide holder thereof.

Our Transfer Department realizes the necessity of constant vigilance in the transfer of stock, with the purpose of assisting in the correction of an innocent mistake or irregularity to expedite the transfer or to prevent the transfer if any question of apparent fraud is involved.

We will be glad to discuss with you the character and details of the service we render our customers in this department.

Security Trust Company

Fort and Griswold St. Detroit

Capital and Surplus, $1,000,000.00

C. C. GREY. COAL COKE

1304-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google

Wayne County and Home Savings Bank

Detroit, Mich.

STATEMENT

April 28, 1921

RESOURCES

Real Estate Mortgages (All in Wayne County)	$24,944,030.40
Bonds	8,425,880.76
Collateral Loans	9,267,271.10
Loans and Discounts	14,135,421.99
U. S. Government Certificates	6,389,500.00
United States Liberty Bonds	6,692,801.73
Customers' Liability, Letters of Credit	12,555.00
Banking House and Branches	1,924,043.16
Stock of Federal Reserve Bank	270,000.00
Cash on Hand and in Banks	7,219,456.18
Total	$79,280,960.32

LIABILITIES

Capital Stock	$ 4,000,000.00
Surplus Fund	5,000,000.00
Undivided Profits	1,439,149.84
Letters of Credit	12,555.00
Bills Payable with Federal Reserve Bank	None
Savings Deposits	53,134,131.15
Postal Savings Deposits	83,370.68
Commercial Deposits	15,611,753.65
Total	$79,280,960.32

THE NATIONAL PARK BANK OF NEW YORK

214 Broadway

A BANK that shares with its friends the information and experience gained from 65 years of close contact with the commercial, industrial and financial life of the nation.



Established 1856

Safe Deposit Vaults

practical impossibility, we still could not wash our hands of Europe.

As one who from the very first has stood with the "irreconcilables" on the subject of that ill-designed and insincere contrivance, the miscalled and misshapen League of Nations, and who considers the Versailles treaty as unique among instruments of its kind for faultiness and harmful consequences, I am yet bound to submit to the compelling logic of existing facts. The European situation at present is a major element in our own affairs.

Whatever stimulates Europe's consuming capacity, whatever tends to re-establish order, normal conditions of trade and productivity, is of interest and advantage to us. Whatever is calculated to retard Europe's recovery is of distinct detriment to us and reacts upon our own prosperity.

Whether we like it or not, we must take part in world economics. We must join in efforts to bring about genuine settlement and appeasement of the world, lamentably and culpably delayed hitherto. Not seeking any exclusive advantage for ourselves, and therefore unhindred by selfishness, deriving our compensation out of the results flowing from the enhanced well-being of all nations, we are peculiarly qualified to illumine the murky gloom of post-bellum and post-treaty Europe with the clear rays of well-meant, judicious counsel.

We cannot avoid taking within our purview that sinister legacy of the Versailles treaty, the reparation question.

There is no limit to the amount which justice and the moral sentiment of the world would exact from Germany by way of reparation for the devil's visitation which she unbosomed upon the earth. But there is a limit, of course, as the Allies have recognized, to the amount which it is possible to collect from Germany in gold marks or their equivalent; and still more, as has not perhaps been sufficiently recognized, there exists a very distinct limitation as to the kind of economic values in which the Allied nations would be willing and could afford to accept payment.

What, then, is the answer to the problem? Is Germany to escape adequate atonement? Is France to be left to carry the staggering economic burden resulting from a war wickedly and wantonly forced upon her, in addition to the appalling suffering, sorrows and sacrifices which she has borne with such sublime heroism in defense of her soil and of liberty, justice and humanity? That is unthinkable and revolting to every instinct of right.

The Answer

It is difficult to make a categorical answer, fully covering the question, but it seems to me that part of the answer is:

Germany must go, or must be made to go, to the limit of her capacity and of hearable conditions to make reparation in a way acceptable to the Allies. A considerable amount of economic values can be obtained from her in ways which her creditors can afford to take. A very large additional amount can be secured through the enforced or voluntary imposition of export or import duties, and similar devices, but it must be borne in mind that that method involves one of two consequences: Either the foreign buyers of German goods bear part of that burden through enhanced prices (and I feel that the Allies, especially France, have a morally warranted right to expect from the rest of the world that it will, within reason, acquiesce in that) or there will result a gradual shrinking of German trade, which means that the security of the Allied creditors becomes decreased in value and productivity.

Another part of the answer should be, I believe, recognition on our part that we cannot afford to refrain from playing a practically helpful part in the settlement. We cannot afford to refrain, because we cannot be callously heedless to the call of justice and of sentiment toward France and also because our material interest is directly involved. Our export trade requires the restoration of normal conditions in Europe, and that consummation is impossible of attainment so long as the reparation question remains an open sore between France and Germany. The repercussions of that condition are bound to be felt throughout continental Europe, and more especially and acutely throughout Europe east of the Rhine.

The conclusion seems to me unescapable that we must enter into the situation both with counsel and with that financial co-operation which only we are in a position to give and which we can give with perfect safety.

More or less related to that subject is the matter of the indebtedness of the Allied nations to our government, arising out of the war and amounting to $10,000,000,000.

I am not one of those who approach the matter of that debt with a feeling of apologetic diffidence. It is justly due us. It is not a justified contention that our loans should naturally be considered and treated as a contribution to the common expense of the war. The circumstances and motives of our entrance into the war are essentially different from those which affected most of the Allied nations when they unsheathed the sword. They were compelled to fight either in self-defense or to protect momentous national interests which would have been vitally jeopardized in case of a German victory.

America, on the other hand, went into the war wholly of her own free will. Neither any fear of the intention or actions toward us of a Germany emerging from the war unwhipped, nor any hope of or desire for gain actuated our decision to throw the American sword into the scale on the side of the Allies.

America was uninfluenced by any material or political consideration. She fought because

Digitized by Google

her dignity had been flouted, her flag defied and her government treated with contumely, but above all—consciously, deliberately, with a full realization of the cost involved in lives and treasure—because her many-rooted people had become finally (even though tardily) convinced that the cause of the Allies was that of right and liberty struggling against the brutal might of a lawbreaking, treaty-defying international bully, and because they felt that in such a cause her place was not in the camp of safe and profitable neutrality, but on the battlefields by the side of the champions of freedom and justice. As Prof. Pani L. White, of Yale University has well expressed it: "Our declaration of war marked the triumph of justice over expediency."

Furthermore, there is this essential point of differentiation between us and the Allies, that each of them took material compensation from the vanquished, to the extent that there were assets to distribute (not to mention advantage of a less tangible but none the less real nature) while America asked nothing and received nothing of the material spoils of war nor obtained any other benefits. We are carrying the immense burden of our war expenditures without compensating tangible return. Indeed, in certain respects, the status resulting from the post-helium settlement may be said to be rather unsubservient to our interests than otherwise.

These are perfectly valid considerations and their assertion is entirely compatible with the warmest admiration for the heroism of the Allied nations, with the sincerest friendship for them and with the altruistic motives which actuated us in entering the war.

But it remains equally true, on the other hand, that we are unquestionably called upon to take fully into account the circumstances under, and the purposes for which these loans were contracted, the existing abnormal state of the exchanges and the difficulties of the economic problems which confront our Allied friends.

I do not mean to put Germany's debt to the Allies and especially to France on the same footing as the Allied debts to us. There enters into the claim of France against Germany a moral element which far supasses any merely legal right. The conscience of the world will not be satisfied until Germany will have made to France at least that degree of material reparation, inadequate though it must be at best, which by her utmost practicable efforts she is able to produce.

Yet, to an extent, all these problems of debts arising from the war are inter-related. Situated as we are, it is our duty, as it is our self-interest, to deal with them on broad, far-sighted and liberally constructive lines.

The debts of the Allied nations to us are no ordinary commercial debts, and they cannot be treated as if they were. To the extent that we use them, or part of them, to aid effectively in hastening the re-establishment of economic equilibrium and political settlement in Europe, they will have proved a good investment, both actually and morally. And we shall be all the more justified in insisting that in the treatment and settlement of various questions which are now pending or will come up for discussion, as to matters arising from the world-adjustment following the war, our rights shall be respected and the spirit of large-minded fairness shall be dominant.

NASH OUTPUT GROWING

The April production schedule of Nash Motors was 3,211 automobiles, as against 2,081 for March, according to a statement issued by Charles H. Voorhis, vice-president and sales manager.

MORE COPPER FOR GERMANY

Another 2,000,000 pounds of copper have been sold to Germany by the Calumet & Hecla Mining Company. This makes 4,000,000 pounds purchased by Germany within the last month.

METALLURGISTS—



Rotary Continuous Heat-Treating Furnaces Used in Quantity Production of Pressed Steel Parts.

The following advantages are secured by the Continuous Method of Heat-Treatment:

Bringing material up gradually to the final temperature.

Utilizing heat in spent gases to pre-heat material.

Exposing each piece to heat in same manner, to same temperature, for same length of time.

Uniformity not only of the individual piece but of the sections thereof as compared with the corresponding sections of other pieces.

Do these advantages appeal to you?

Write nearest branch for Bulletin 237-B and learn whether the continuous method is adaptable to your product and manufacturing conditions.

W. S. ROCKWELL COMPANY

Furnace Engineers and Contractors

50 Church St. (Hudson Terminal Bldg.), New York.

We Make Industrial Heating Furnaces for Every Requirement.

"COAL—OIL—GAS—ELECTRICITY"

"FURNACE AND FUEL TO SUIT CONDITIONS"

Brances: **Chicago** Ellsworth Bldg. **Cleveland** Engineers' Building **Detroit** Majestic Bldg

W. S. ROCKWELL CO. INDUSTRIAL HEATING ENGINEERS FURNACES



The Luxeberry Painter Says:

"Specify Berry Brothers Varnishes—be certain of the utmost in satisfaction. For every varnish need — home or industrial — whether you want a can or a carload—you get the best there is when you ask for Berry's."

BERRY BROTHERS

World's Largest Makers Varnishes and Paint Specialties

Detroit, Michigan. Walkerville, Ontario.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Digitized by Google

A Letter From a Banker

To the Financial Editor:

We are confronted with a condition that is far from satisfactory and are taking the liberty of writing you for some good advice, knowing that you are familiar with banking conditions both from the standpoint of city and country.

For the last ten or twelve years this bank has had as its active Detroit correspondent a certain bank, sending and receiving the daily cash letters, etc., but notice of late that they have discontinued this and are apparently handling all our items through the Federal Reserve Bank. We are not members of the system and the other bank of this village is, therefore it is securing about 80 per cent of the items. We are writing the Detroit bank for an explanation and would like your advice as to whether or not it is advisable for us to become members of the Federal Reserve System, stay with our Detroit bank or make a new Detroit connection. H.

The situation in which your bank finds itself is one which many other banks of recent years have encountered. It brings to mind first this thought which is often overlooked: State banks in a sense are "orphans" so far as any connection with the currency issuing powers of the Government are concerned, and we often wonder if many people think much about the position state banks would be in if national banks and Federal Reserve Banks ever refused currency to state banks. Manifestly all states would have to go back to that condition of affairs preceding the national bank act, when each issued its own currency and when there were as many different values of currency as there were issuing banks. But of course no one entertains any such reversal of progress.

When the national banking act was created state bank notes were taken out of existence and since then many states have passed laws prohibiting state bank currency. When the Federal Reserve Act was adopted there became two sources of currency issue, namely the national bank statute providing for national bank notes, and the Federal Reserve currency. But the biggest change the Federal Reserve Act achieved was to provide that state banks through membership in the System could obtain currency from the issuing source, i. e., the Government. Since state banks are not permitted to issue currency hearing the name of the issuing bank, they were enabled by joining the system to obtain government money to all practical purposes in much the same way as national banks.

It was found in 1883 and 1907 that the currency issuing machinery of the national banks was not elastic enough to provide for the needs of the country, and without going into details, in the main, the Federal Reserve System was erected to overcome this glaring weakness and to provide a storehouse in which the banks of the country could deposit their "reserves" and know that such fund would always be available. So no doubt realize that if you now keep, say, $30,000 on deposit with your correspondent which you look upon as your "reserve," that less than five per cent of that sum is held in money in the correspondent's vault and probably not more than ten per cent of it is kept in form of bank deposits, so, that, all told, there is really only $1,500 in money and $3,000 in other banks behind your $30,000.

Now contrast this with the actual reserve behind $30,000 deposited in the Federal Reserve Bank in this case there Is not less than 35 per cent of gold behind your reserve and there is the power and the machinery to loan the remaining 65 per cent to you in currency if the emergency requires it. In fact there is much similarity between the state bank that stays out of the System and the farmer who does not plant his own potatoes. There may be a long period of years when he can purchase the surplus potatoes of his neighbor, but should there be a serious shortage he would be up against it. Thus non-member banks very probably will get along for a considerable time, but a crisis is bound to come eventually which will put them at a serious disadvantage.

We have constantly held to the opinion that every eligible state bank would profit in the long run by membership. The par collection matter is somewhat like the prohibition question. There is a vigorous minority in favor, another equally vigorous and outraged minority against, but the large bulk are apathetic. And neither question will be permanently settled until the large bulk take action one way or another.

Looking at it another way, we feel that loss of exchange profits is a small price for the security which membership affords state banks, and if there were space we could go into the pros and cons and find some very interesting light on this whole subject of membership. But the big distinguishing advantage to our mind is that membership gives the small country bank the same degree of protection, the same degree of currency and rediscount privileges and the same prestige that it gives the big city bank. And there is one price to all.

You may, furthermore, we believe, have every confidence in your present correspondent. P. S. H.

UTAH COPPER EARNS $3.03

Utah Copper Company reports earnings of $4,924,498 for 1920 after deduction of charges and ordinary taxes, this being equal to $3.03 a share on the $16,244,900 of capital stock, par value, $10, as compared with $5.08 a share in 1919.

DURANT'S TRANSFER AGENT

Durant Motors, Inc., announces the appointment of the Guaranty Trust Company of New York as transfer agent of the company's stock

NEW MICHIGAN CORPORATIONS

New forms of blanks for articles of incorporation are now required in Michigan as a result of the passage of the Lord bill which codifies and revises corporation laws. The new blanks may be obtained at the state department, Lansing. Offices with the old forms are advised to destroy them.

FOR WEEK ENDING APRIL 30, 1921

Hassett Storage Co., Detroit; conducting and operating a general storage warehouse and storage business; Robert H. Hassett, 1015 Penobscot Building Park; Floyd E. Bowen, Carl C. Clarke, Detroit $6,000

Fair Creamery Co., Detroit; to sell, wholesale and retail, pasteurized milk, cream, butter, buttermilk, milk and other by-products; Andrew Pantos, 754 E. Hanover st., James Papajohn, Thomas G. Reomo, Detroit 6,000

Person-Cooke, Inc., Lansing; conducting a general commercial advertising, illustrating and art business; Edward G. Cooke, James A. Cooke, Fred G. Hopkins, Lansing 5,000

Warrick Bros., Flint; to carry on general department store to buy, sell dry goods and other goods; William A. Warrick, Wm. Warrick, Jr., Maud E. Warrick, Flint 200,000

Bafle Manufacturing Co., Detroit; manufacturing, selling, buying and distributing automobile parts and mechanical devices; John E. Desmond, 5025 Mitchell ave., George P. Ball, Detroit; Edward S. Bafiaty, South Orange, N. J. 10,000

Delta Milk Producers Assn., Escanaba; to purchase, sell, manufacture, handle and market milk, cream, butter, cheese, etc.; John K. Olsen, Stoningston; Asa Secord, Escanaba; Alex Wilson, Bark River 30,000

B-J Generator Co., Lowell; manufacture and sale of B-J motor generators, lubricants, tire pumps, speedometers, etc.; Sherman E. Bullis, 832 Ottawa st., John E. and O'Neill Best, Grand Rapids 2,000

Beckwith Gravel Co., Grand Rapids; to buy, sell, lease and deal in sand and gravel and all kinds of building and construction material; Guy A. and Grace Jarrell Beckwith, Grand Rapids; Ethel Watson, Chicago 2,000

H. E. Jones Sand Co., Sault Ste. Marie; manufacture, buying and selling of all kinds of handles, lumber and other wood products; H. E. Jones, Sault Ste. Marie; Joseph W. Anderson, William Gershuba, Cheboygan 25,000

Person Laboratories, Mount Clemens; manufacture and sale of chemicals and pharmaceutical products, etc.; Gustaf A. Person, Mount Clemens; John H. Collins, Detroit; William T. Kelly, Mount Clemens 5,000

Keystone Steel Co., Detroit; to buy, sell and deal in steel, iron and other metals, bullet and Harold Transky, 30 Simpson Place, Carl M. Cohn, Detroit 5,000

Port Huron-Sarnia Baseball Club, Port Huron; maintaining, conducting and operating of baseball club or company; Charles Stewart, Louis C. Bergman, D. McTaggart, Port Huron 30,000

Marquette City Railway, Marquette; to purchase or acquire street railway in city and township of Marquette; Edward E. Bissell, B. S. Gallup, Albert E. Miller, Marquette 200,000

Jackson Boosters' Corp., Jackson; to encourage and promote game of baseball; Frank T. Bennet, A. L. Lockwood, C. C. Bates, Jackson 10,000

Deford Co., Deford; maintaining building for recreation and amusement, social and educational purposes, etc.; A. S. Webster, Mrs. H. E. Johnson, R. C. Jacobs, Deford 2,000

Baldwin Piano of Indiana (F.), Fred C. Baldwin, 809-819 Moffat bldg., Detroit 525,000

Tennyson Cigar Co., Chicago, Ill., Meyer Golden, Grand Rapids 25,000

Mutual Petroleum Corp., Adrian; to buy, sell or lease real estate; buy and sell crude or refined mineral oils and other products; William E. Shieran, Charles A. Shieran, Richland C. Rothfuss, Adrian 25,000

Auto Court Apartment & Hotel Co., Detroit; Clarence Ralph and Mildred McKinney, 2800 W. Grand blvd., Paul Kern, Galena, Ill. 100,000

Wolf Tire & Rubber Co., Benton Harbor; manufacture, rebuilding and sale of automobile tires; Earl T. Wolf, N. Klock, B. C. Eisley, Benton Harbor 10,000

Heavy Haulage Co., Detroit; to engage in general hauling, excavating, excavating and engineering business; Henry C. Sachs, Samuel Sachs, Joseph C. Sachs, Clifford S. Peterson, Detroit 175,000

Star Beef Co., Detroit; purchase and sale at wholesale of all kinds of meats and provisions; Isaac Thorpe, 5728 Robins ave., Charles J. Peppard, Daniel J. Kelly, Detroit 10,000

Capital News Publishing Co., Lansing; publishing of books, pamphlets and other periodicals, job printing, bookbinding, etc.; Arthur L. Frances, Edward M. Lacks, Benjamin Brogan, Lansing 75,000

American Outfitting Co., Detroit; to buy, sell, store, manufacture, import and export and otherwise acquire, dispose of and deal in carded hair, etc.; Amos Bolle, Edward Bolle, 2663 Hatfield, Walter Bischala, Detroit 7,000

Reliance Engineering Co., Lansing; to manufacture and sell gasoline engines and parts; repairs and general machine work; L. A. Wilson, E. C. Shields, Henry Fisher, Lansing 25,000

Shabel Co., Lansing; to sell footwear and accessories; Karl P. and Kathleen Shabel, John M. Metcalfe, Lansing 50,000

(Continued on Page 42)

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

WHEN IT'S ABOUT BUSINESS

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

PUBLISHES IT FIRST

Five Dollars a Year — Issued Weekly

STEWART
INBUILT OVEN FURNACES



Embody the latest and best in this class of equipment. Ask for Special Bulletin No. 75 describing not only the above but also the entire Stewart line of *Heat Treating Equipment.*

McMULLEN MACHINERY COMPANY
"Everything in Shop Equipment"
66 Ionia Avenue S. W.
GRAND RAPIDS - - MICHIGAN

Digitized by Google

Machinery and Power Equipment

Our Aim is to Render Service

COMPLETE EQUIPMENT

FOR

Tool Room, Production Shops, Sheet Metal Shops, Pattern Shops, Body Plants, Automobile Plants, Wood-working Plants, Repair Shops, Heat Treating Iron and Metal Foundries.

MACHINERY EQUIPMENT—WORTH WHILE

A few tools picked at random from our stock of over one thousand tools:

2—No. 24 New Britain Automatics
1—No. 23 Baxter Whitney Cylinder Grinder
1—Blanchard 25" Vertical Grinder
2—No. 55 Cleveland S. S. Presses
30—New O. B. I. Presses
25—Lathes of all sizes
12—Shapers from 16 to 25"
1—No. 3 Cincinnati Plain H. P. Milling Machine
1—No. 4 LaBlond Plain Milling Machine
Any amount of Pulleys, both wood and iron, Hangers, Shafting and Belting.
New and Used Equipment for both iron and wood working.

Send for our stock list.

Riverside Machinery Depot

251 ST. AUBIN AVE. *Phone Edgewood* 1581-82-83-84

(Continued from Page 40)

Shubel's Arcade Bootery, Lansing; to sell footwear and accessories; Karl P. and Kathleen Shubel, all of Detroit, Lansing ..... $ 400

H. G. Vogel Co. (F.), New York; S. B. Henry, Detroit, Michigan agent; 250,000

Union Smelting & Refining Co., Inc. (F.), New York; Ross McMillan, 812 Wyandotte st., Detroit, Michigan agent 1,000

Rapid Sales Corp., Grand Rapids; to manufacture and sell automobile accessories and other general merchandise; A. J. Seys, Lloyd L. Hook, James A. Whittemore, Grant Landis

Jig Bushing Co., Pontiac; to manufacture and sell jig bushings, contract general machine shop and general manufacturing business; Otto R. Brixey, Lawrence M. Richards, Cleveland; Emmanual B. Rummins, Pontiac 19,500

DeMase & Kogelschatz, Detroit; to make, buy and deal in clothes and wearing apparel; Orrin R. DeMase, 559 Elmhurst; Fred W. and Annie Kogelschatz, Detroit 5,000

Risley Peterson Co., Detroit; general contracting business; Harry S. Peterson, 1166 Collingwood ave., Charles R. Risley, Ralph B. Lacey, Detroit 6,000

McKinnie & Hetzel Co., Inc., Detroit; manufacturing, buying, selling and dealing in automobile accessories; Malcolm L. McKinnon, 3550 Woodward ave., Frank L. Metzel, Grosse Ile, Detroit 10,000

Mohammed Furniture Corp., Highland Park; manufacturing and selling furniture, specialties; Ibe Mohamed, 85 Edith ave., Mohamed Abraham and Mohammed Matcley, Highland Park 10,000

Porter Drug Co., Detroit; to operate general drug and mercantile business, wholesale and retail; Thomas McKillop, Blanchard vale, Wm. Henry R. Porter, C. I. Hazelhurst, Detroit 10,000

Oscar J. Lilly Works, Detroit; to manufacture, buy, sell, repair, rebuild, service and otherwise deal in auto, trade and mechanical equipment; E. M. Sigard, 225 Avis ave., E. L. and H. K. Dyson, Detroit 25,000

Henley Stock Farm Co., Wetmore; stock raising, fruit growing and general farming, buying and selling land as incidental thereto; M. S. Felton, Green Bay, Wis.; T. F. Bomkin, Peshtigo, Wis.; D. W. Platte, Seymour, Wis.; Payson-Smith Lumber Co. (F.), Minneapolis; H. L. Mund, Battle Creek, Michigan agent 1,000

A. H. Andrews Co. (F.), Chicago, Ill.; Albert E. Sherman, Dime Bank bldg., Detroit, Michigan agent 1,000

Consolidated Paper Co., Monroe; to buy, sell and manufacture all kinds of paper stock and by-products; etc.; John Clark Bulis, Irving Albert Newcomer, Albert H. Lockwood, Monroe. 19,500

I. Gierson & Sons Co. (F.), Toledo, O.; Seymour H. Franklin, Detroit, Michigan agent 500,000

Buffalo House Wrecking & Salvaging Co. (F.), Buffalo; I. Nathan Jacobs, Camp Custer, Michigan agent 750,000

Home Development Co., Detroit; real estate; Claude W. Harrington, 1756 Euclid w., William C. Fliess, Harry C. Bedner, Detroit 250,000

Peerless Oil Corp., Detroit; buying, selling and dealing in all kinds of oils and petroleums; R. H. Carson, J. C. Wonder, Birmingham; R. D. Colline, Chicago, Ill. 5,000

CHANGES OF NAME

Baker-Fisk-Hunill Co. (name changed to Baker-Hunill Co.), Detroit ..... -

Floyd W. Bolden Co. (name changed to Cofer Research Co.), Detroit ..... -

Splitdorf Service & Sales Co. (F.) (name changed to Splitdorf Electrical Company of Canada), Chicago, Ill., Detroit ..... -

Charles W. Kohler, Inc., of Detroit (name changed to National Novelle Corporation), Detroit ..... -

Crowell-Lindroff Little Co. (name changed to Lindroff-Bickell Company), Cleveland, O., Port Huron ..... -

INCREASES

Bay City Plumbing & Heating Co., Bay City, from $2,000 to 10,000

Messenger-Irons Auto Sales Co. (name changed to Messenger-Irons Co.), Grand Rapids, from $5,000 to ..... -

G. & R. Motor Sales Company, Detroit, from $ 7,500 to ..... -

Webb Ice & Coal Co., Detroit, from $20,000 to 25,000

Detroit Accessories Corporation, Detroit, from $200,000 to 350,000

Jackson & Church Co., Saginaw, from $100,000 to 200,000

Rex Machine & Tool Co., of Jackson, Mich., Jackson, from $10,000 to 275,000

Grand Traverse Resort Ass'n, Traverse City, from $75,000 to 20,000

C. A. Handyside Construction Co., Detroit, from $25,000 to 500,000

Montie-Compeau Realty Co., Ecorse, from $50,000 to 50,000

Glenholtt-Linn Motor Co., Detroit, from $100,000 to 258,000

Owosso Paper & Twine Co., Owosso, from $10,000 to 150,000

Seemann & Peters, Saginaw, from $135,000 to 1,000

Buch Lyons & Co., Lansing, from $150,000 to 200,000

K. & K. Ice and Coal Company, Monroe, from $10,000 to 500,000

Carrom Co., Ludington, from $125,000 to 760,000

Butt Welding & Mfg. Co., Detroit, from $6,000 to 50,000

Capital City Products Co. (F.) Del., Columbus, O.-Detroit, from $500,000 to 20,000

Industrial Development Co. of Monroe, Monroe, from $25,000 to 250,000

NOTICES OF CHANGE OF ATTITUDE

International Trunk & Bag Co., Detroit 5,000

Jones-Hamilton Corp., Detroit 50,000

Brown & Sharpe, Flint 30,000

Potter & Alsbaugh, Inc., Ann Arbor 30,000

Stratton Grocery Co., Croswell 10,000

H. A. Williams, Yale 10,000

Holly Mortgage Investment Company, Holly 25,000

The Kinnebrun, Detroit 100,000

Cadmus Realty Co., Ann Arbor 163,000

Central Axle Co., Detroit 25,000

Central Motor Co., Detroit 10,000

Central Gear Co., Detroit 10,000

Central Forge Co., Detroit 10,000

NOTICES OF DISSOLUTION

Churchill Lumber Co., Alpena 50,000

Reliance Engineering Co., Lansing 6,200

NOTICES OF WITHDRAWAL

American Steam Conveyor Corp. (F.), N. Y. & New York City, Detroit 1,250,000

Bergen Paper House, Inc. (F.), Ill., Chicago, Ill.-Detroit 50,000

F. W. Dassow Co. (F.), Del., Wilmington, Del.-Detroit 325,000

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



LIBRARY
1921
OF MICH.

Fifteen Cents a Copy

Five Dollars a Year

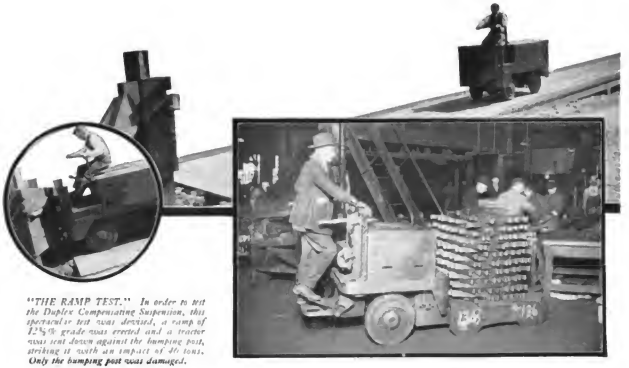
A Symposium on Foreign Trade
Realizing Profits on Purchases
New Rate Adjustment Sought
Washington the 1921 Wonderland

(Financial Section Starts on Page 22)

DETROIT, MAY 14, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 20*

Digitized by Google



"THE RAMP TEST." In order to test the Duplex Compensating Suspension, this spectacular test was devised, a ramp of 12½% grade was erected and a tractor was sent down against the bumping post, striking it with an impact of 4½ tons. Only the bumping post was damaged.

Tons-per-man-per-hour

MANUFACTURING in a highly competitive market is a continuous fight to prevent unproductive costs from swallowing up profits. The mere handling and re-handling of raw materials, parts and finished products may be a hidden leak which is actually draining either sales or profits from your company.

The unit in measuring material-handling is tons-per-man-per-hour.

It is the job and responsibility of a Baker material-handling engineer to investigate the possibilities and processes in your plant and report frankly and thoroughly what savings in tons-per-man-per-hour can be effected by the new Series C Baker Electric Tractors and Trucks to show what handlings can be eliminated by the right equipment and how your material-handling can best be organized and standardized. If the Baker method won't fit your particular plant, he will frankly tell you so. The request for a visit does not place you under any later obligation.

The New Series C with its exclusive new Duplex Compensating Suspension — results in seven specific improvements —which set wholly new standards in adaptability, ease of operation, economy of operation and lasting value.

New bulletins now ready—yours on request.

Baker Industrial Division of
THE BAKER R & L COMPANY
CLEVELAND

ELECTRIC TRACTORS AND TRUCKS

TRADE-MARK

Baker

Wm F·V·Neumann & Sons
QUALITY MOTOR CARS
8000-8040 WOODWARD AVENUE
DETROIT

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

A Symposium on World Trade

A Digest of the Discussions at Eighth Convention of National Foreign Trade Council, in Cleveland

IT SEEMS TO BE the general opinion in financial and industrial circles that when the German reparations have been definitely agreed upon by the nations concerned the whole world will settle down seriously to commerce and industry with some idea of what its tasks are and how best to proceed with their accomplishment. Germany has sought by all her well known wiles and subleties to evade the payment of as large a portion of the claims against her as possible, but France has clung tenaciously to what she conceives to be her rights. It is as important to the United States that these reparations be decided upon as expeditiously as possible as it is to the nations directly concerned. Therefore it is not surprising that President Harding has decided to take an active part in the reparation deliberations, and this action promises a speedy settlement of the differences and the removal of this obstructional problem from the pathway of world progress.

When these reparations have been agreed upon, the nations engaged in world trade prior to the war will proceed energetically to recover lost ground. Even though the sporadic quarrels in Europe and the refusal of Germany to meet her obligations have kept the atmosphere surcharged with uncertainty, Germany, France, England, Belgium, Japan, Spain, Portugal and other nations with goods to sell have been working diligently and untiringly to establish their trade connections against the day that the aftermaths of war are disposed of and actual or imaginary restrictions cancelled.

Convention at an Opportune Time

Since long before she entered the war the United States has had the trade lanes of the world pretty much to herself and the ever-existent problems of foreign trade have mattered little one way or the other. The take-it-or-leave-it rules, which obtained in domestic commerce, likewise held sway in foreign trade. Hereafter, the United States will face competition with a capital C. Germany will be struggling to pay her debts; England will be strengthening her position as mistress of the seas; France will be rebuilding her shattered domains and her overworked credit, and the rest of the world will be seeking a better seat in the orchestra pit of world recognition.

All these facts were recognized when the manufacturers, exporters, financiers and business men of this country when the eighth annual convention of the National Foreign Trade Council was convened in Cleveland, May 4, 5, 6, and 7. The convention could not have been called at a more opportune time, nor could a more difficult task have been set before any national body than that of mapping out a foreign trade program pertinent to the situation and this important period in world's history.

By F. W. HERSEY

No man in this country, nor from other nations, was too big to take his part in this meeting, and the best commercial, industrial and financial minds were among the 2,000 delegates. From the greatest financier in the United States down to the humblest wage worker, this convention was of the utmost importance to every American. The weaknesses in our foreign trade policy and machinery have been recognized and they are causing no small concern. Also, manufacturers who in the past have not considered export in their scheme of things are thinking of it today as the one possible chance for advancement in business progress where all other opportunities seem to have been used up.

The convention had before it the problems of taxation, shipping, Government aid, markets, credits, financing, shipping laws, education in foreign trade, trade balance and economy. Out of the mass of material produced in the four days of speaking and conferences the convention was duly bound to build a program to meet the new conditions.

The Findings

The first and important finding of the convention was that the unstable financial condition of the world was the cause of the business depression in the United States, and that the desired relief must come from an improvement in overseas trade, which, from $928,000,000 in June, 1920, had dropped to $384,000,000 in March, 1921.

The United States must, it was declared, continue to import raw materials and merchandise to an extent just removed from a degree that would be detrimental to domestic industry; in other words, imports must reach a maximum, but not cross the dead line at which our own industrial genius would be menaced. This must be done to make it possible to promote the liquidation of the debts of competing nations, on the one hand, and keep home labor employed on the other.

To accomplish this it will be necessary to provide facilities for long term credits and to draw upon surplus American investment funds to make these credits possible. Europe cannot buy in gold or merchandise but it needs raw materials.

The convention urged the creation of financial institutions under the Edge Law to promote a free exchange of imports and exports and provide the long-term credits. The purchase of debentures issued by such institutions against approved foreign securities was urged, so that eventually every community would serve its own vital interests by furthering foreign commerce.

It was declared that the reduction of loans and the accumulation of banking reserves permitted, and the lower prices of many commodities justified extension of credits, which, it was believed, would thaw frozen credits and end the present stagnation. The danger of a financial panic was over, the convention decided, and was aided in reaching this decision by W. P. G. Harding, governor of the Federal Reserve Board, who covered the general financial situation completely and clearly.

The special committee reporting the findings of the convention at the closing session, Saturday, urged against hasty or ill-advised expansion of industrial facilities for the reason that the final liquidation would take months and must continue to be a gradual process borne with patience and studied carefully. It was asserted that the cost of production of many manufactured products was too high to permit of successful competition in foreign markets, and, inasmuch as the cost of living had receded, there should be economies in production to the end that the balance of values of all commodities might be stabilized. A reduction in the cost of railroad transportation, both in domestic and foreign commerce, was regarded as essential before any marked decrease in production costs could be achieved.

While Congress has declared for private ownership of the merchant marine, the convention considered it unwise and impracticable to dispose of any considerable proportion of the present government-owned fleet to private owners at fair prices. Those boats not chartered on bare boat basis or under charter to private operators should be laid up pending renewal of world commerce, thereby providing a naval auxiliary. The convention opposed the allocation of ships to be loaded at ports or for trade routes irrespective of tonnage of cargo offering or of the losses to the Government resulting from this policy.

Training for Foreign Service

It was asserted that the present shipping laws requiring larger crews subjected American vessels to a disadvantage estimated at five per cent on the capital invested, and the compulsory advance of half the wages in any foreign port of call added further costs through excessive delays. The convention urged American producers and exporters to require the employment of American ships as far as they could exercise preference or control, and to object to discrimination against American ships. Combined passenger and freight service between the United States and its possessions, and other ports, was declared to be imperative.

The multi-conformity of state and federal laws and excessive taxation were considered evils which placed American insurance at a disadvantage with the foreign insurance market in which they must compete. As regards taxation, the stand taken was that there must be economy in government expenditures so that the multiplication of taxation would not continue to oppress business.

Because of the many violations of awards through commercial arbitration and the viola-

Digitized by Google

tion of contracts, the convention went on record as favoring the establishment of international machinery for the enforcement of awards and contracts. Along the same line the convention took due note of the complaints against the present foreign service organization and declared that reorganization of this service under unified supervision was highly desirable. Better trained men and higher salaries were considered essential, and to the end that such men might be attracted to this service as a career the Government was urged to establish a national training academy for foreign trade officials and attaches.

Congress was requested to act with celerity on increases in the appropriations for the Bureau of Foreign and Domestic Commerce and the Bureau of Standards. The enactment into law of the China Trade Act, which will permit the formation of American companies in trade in China on a plane of tax equity with competitors, was urged.

Regarding the ship situation Senator Walter E. Edge, New Jersey, author of the Edge Law, said that the United States would do well to save thirty-five per cent of the billions of dollars spent on ships. A large proportion of them were valueless even as barges. Another shot was fired at the United States Shipping Board's policy by James A. Farrell, head of the United States Steel Corporation and chairman of the convention, when he said that the Government lost $800,000,000 in selling the merchant marine when the Armistice was signed. He said that the idle tonnage would not be absorbed under three years. Of the 60,000,000 tons of world shipping, 7,000,000 tons is now laid up and 5,000,000 tons are under construction, he explained. The policy of the shipping board in attempting to establish trade routes from every Atlantic, Pacific and Gulf port to every port in the world was too expensive and impracticable.

Other Matters Discussed

Edward N. Hurley, formerly the head of the United States Shipping Board, was on the program. He said that Congress would render the country a great service it if caused to be made a survey of jobbers and dealers through out the United States. He declared the costs to distribution to be entirely too high and advocated the federal incorporation of American firms in business in foreign countries.

William C. Redfield, former Secretary of Commerce, regretted the slow progress made in financing the United States Foreign Trade Financing Corporation, which, he said, should be operating now in view of the fact that $20,000,000 worth of orders from foreign countries could be closed immediately.

In connection with the convention the announcement from Washington that applications for loans totaling $11,035,000 for financing exports have been approved by the War Finance Corporation, will be of interest. Of this amount $2,306,798 has been advanced and $8,500,000 has been asked to finance the export of milk products, this being the heaviest loan sought. Cotton was the next heaviest, $2,505,000, and the rest was for tobacco exports. The countries to which these exports are to be sent are England, France, Italy, Portugal, Japan, Germany, Czecho-Slovakia, Denmark and several South American countries.

Of considerable interest was the statement of Dr. Francis M. Boteiho, Japanese writer, to the effect that foreign trade development was the surest safeguard against war with Japan.

Practically every problem in foreign trade was given a thorough airing by men competent to speak with authority on such subjects.

Some time ago the Detroit Board of Commerce was asked and did take a definite stand in favor of a reduction or elimination of income taxes on American concerns doing business in foreign countries. This action is nation-wide. One angle of this question was brought in the convention by Daniel R. Williams, American Chamber of Commerce, Manila, P. I., who said that in the Philippines as well as everywhere else outside of the United States, the burden of income taxes was creating an unequal battle between the United States and competing countries in foreign trade, with the odds against American business. In support of his contention, and as an illustration of the inequality of taxation, the following figures are given:

Income	Philippine Income Tax	United States Income Tax	Difference Against Americans
$ 10,000	235	$ 80	$ 155
25,000	810	540	1,270
50,000	2,535	9,190	6,655
100,000	8,985	21,180	12,195
200,000	18,235	82,180	63,945
300,000	31,735	184,180	152,445
400,000	46,235	282,180	235,945
500,000	60,735	382,180	321,445
600,000	77,735	372,180	297,445

Exporters' Problems Classified

Foreign trade problems of American exporters, as classified by Frank H. Taylor, president of the S. H. Dental Manufacturing company, are six in number: Language, travel, exchange, extended credits, balance of trade, and war. Mr. Taylor touched briefly upon each problem, but by incorporating under each head the high lights in the addresses of other speakers bearing upon each of the problems, the current opintons of export students as expressed in the convention may be the more easily digested.

Mr. Taylor divided American exporters in two merchandising classes. First: Bulk merchandise, such as foodstuffs, coal, copper, steel, cotton, raw materials generally, goods manufactured under specifications for contract or otherwise, representing a class of exports in direct competition with foreign products where the controlling influence in their sale, in the absence of banking affiliations, is price Second: A class of products which spring from some characteristic genius in the American people and which sell on their individual merits, with the element of price competition more or less secondary. In this class are such products as agricultural machinery and tools, locomotives and certain types of motor cars, machine tools and labor-saving devices, textiles and sewing machines, typewriters and calculating machines, printing and composing machines, padlocks and pens, boots and shoes. Mr. Taylor put stress upon the exporters' problems as applied to this second group. The first problem he discussed was that of language. His thought was: "We cannot know people unless we can talk to them and talk to them precisely." He quoted an extract from a letter from an American in Italy who spoke Italian fluently, and who was endeavoring to master French. In reply to a request that he represent a concern in France as well as Italy, he said that he could not do so successfully, as it was necessary for a trade representative in France or Belgium to speak French like a native, and although he had been studying the language a year, he did not feel competent to handle it.

Prof. J. Anton DeHaas, professor of foreign trade in the Graduate School of Business Administration, New York University, amplified Mr. Taylor's thought in his address on "Fundamentals in Foreign Trade Education." Summarized, Prof. DeHaas' argument was that through education the American mind must gain the international consciousness and understanding that comes unconsciously to the European because of his closeness to the boundaries of many foreign nations, if it is to be engaged in foreign trade problems.



J. WALTER DRAKE

Chairman of the board of the Hupp Motor Car Corporation, Detroit, and one of the speakers at the Eighth Annual Convention of the National Foreign Trade Council.

Present Instruction "Useless"

On the subject of languages the professor described present methods of teaching languages in the schools as so inadequate as to be a waste of time. The average European understands at least one language other than his own, and the majority of cases, several languages. In Holland the student studies four languages. In American schools, the speaker pointed out, the student may take a language for two years, but there is no requirement that at least one language must be studied from the grammar to the high school. If we are to build up foreign trade machinery, he said, we must begin with the proper foundation. This must consist of one or more languages, history and geography.

In the two latter studies, Prof. DeHaas declared, the instruction given in the lower schools was of little benefit as a background for future training in foreign trade activities. The geography method employed is dry and uninteresting and the history as too much concerned with wars and politics and too little concerned with economics.

What is needed, he said, is a course of international understanding gained by the young American mind in the lower grades through the proper teaching of geography, history and languages, Prof. DeHaas stated, built to the advanced training in foreign trade. This training, he pointed out, must include a knowledge of administration and execution, production, product and production, payment and shipping, the market and the customer. The two factors he put emphasis on were market knowledge and a sympathetic understanding of the customer, and neither could be delegated, he asserted.

Replying to the claim that Europe afforded better courses and schools in foreign trade, the professor declared that there were more schools and more courses in the United States than in Europe, but that they dealt too much in details and not enough in those studies that develop insight. The training, as he described it, must be of such a character as to develop international consciousness as felt by those who live constantly in an international atmosphere.

Moving the thought of the importance of an understanding of language in foreign trade further along, the deepest significance of international understanding through education comes out in the short address of Col. Fred Cardway, vice president and general manager of the Packard Motors Export Corporation, on "Psychology in International Merchandising." To understand psychology one must know something of language, of history and geography. Col. Cardway said:

"Psychological truths are independent of time, place or race. Every step in a sales negotiation is a mental process—the mental attitude and mental expression of the salesman; the mental attitude and mental expression of the customer; the arousing of atten-

Digitized by Google

tion; awakening of curiosity or interest; creating desire; satisfying the reason and moving the will—all these are purely mental processes, and in their understanding is found the bases for successful, international marketing.

"Having gained full knowledge of the mental characteristics evolved from a given set of national influences, the salesman is then in the proper frame of mind to approach his prospects. His next aim should be to arouse curiosity. For curiosity whets one's appetite and when the salesman has directed the attention of the buyer towards an image of some thing new—a new idea, a new device, or a new pattern, a real step will have been taken towards clinching the transaction. The novel always incites a man's inquisitiveness."

Dr. Guillermo A. Sherwell, of the Inter-American High Commission, said that our foreign trade was being carried on in a relatively more haphazard way than European foreign trade; we had less system, less knowledge and perhaps less desire to establish system and acquire knowledge. Dr. Sherwell said:

"If I were asked what is the main fault with the American foreign trader, I should say that it consists of our shortness of vision. We cannot see beyond a short space of time. We are impatient; we want immediate results; we cannot wait; our bankers want money today rather than the business of the future; and our buyers and sellers want large profits right away rather than a sound, permanent market.

"Besides this fault, I think there is another almost as detrimental, consisting of our sacred respect, almost verging on adoration, for the kind of god, fetish or shibboleth: 'Our Rules.' I want our merchants to be warned against this god. I want them to abandon and to forget it and to put on their altars an opposite god, which is the only god of foreign trade: 'Your rules.'

"We have had great success in recent years and we think it was due to ourselves, forgetting that it was due mainly to the very abnormal conditions through which the world has been passing. Now that our foreign trade is shrinking, we raise this question: 'Why is it diminishing?' And there are two main reasons: Because we do not know and do not want to know, and because we are still pleasing ourselves and not our customers."

Mr. Taylor's second problem was that of travel. It was his argument that more traveling abroad should be done by the heads of American industries. He regarded the present period of depression as a most opportune time for such travel. Much of the knowledge considered by Dr. DeHaas as essential to foreign trade could be picked up by industrial leaders if they spent some time in those countries where they are selling or expect to sell goods. Mr. Taylor made the statement that it was a pity that more of our better men did not mingle with foreign business men, industrial leaders and financiers.

J. Walter Drake Speaks

Among his problems Mr. Taylor did not consider that of government service in foreign trade, which, however, was the title of an address by J. Walter Drake, chairman of the board of directors of the Hupp Motor Car Corporation, Detroit. Mr. Drake outlined the function of the Government in world commerce in this way:

"Foreign trade is the nation's enterprise. The Government must not only establish the foundation for it but also must foster, encourage and participate in its conduct."

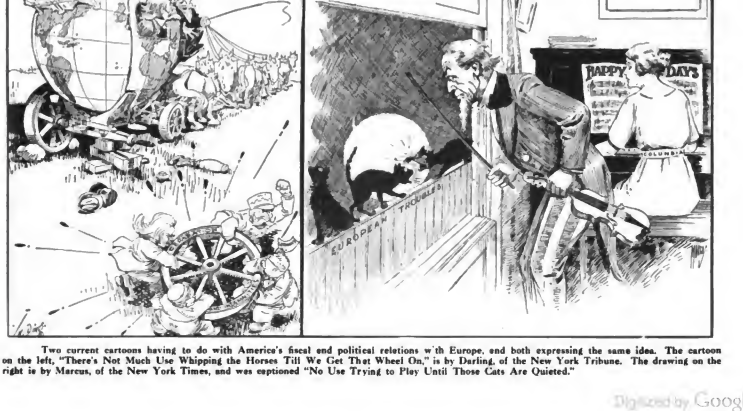
Foreign trade, he said, was the weakest point in American industrial development. This is the result of the contentment of industrial leaders in finding and developing domestic commerce, confident that this country is great enough to consume all that can be manufactured, when, as a matter of fact, there are many lines in which production power far surpasses consumption possibilities. As a result of this viewpoint the United States has not developed a foreign trade policy. Reverting to the Government's function, Mr. Drake said:

"Business can no more continue without government participation than could a private business abolish the sales organization when the season's output has been sold and trust to finding a new market each year for its product without sales service and effort. Diplomacy and foreign trade intelligence of the Government run through every line in the chart of the foreign trade structure. When these activities of the Government fail to function or break down, the business languishes.

"In the first place, there must be a single department of the Government in charge of all foreign trade service. Secondly, such a department should be organized and equipped in every respect equal or superior to the private business with which it co-ordinates, in scope, personnel and efficiency. There should be provided the means of obtaining and retaining the services of trained men who will meet the requirements of this highly specialized work. Finally, adequate funds must be provided by the Government to maintain the establishment on a plane equal in every respect to those of competing nations. If we are to accept the idea of government service in foreign trade, and indeed we shall not be long engaged in that trade if we have not such service, then as business men determined to prevent the frustration of our plans we should insist that the Government should have a real service under one head. The chief executive of the nation has given us his assurance that we are to have business in government. Certainly, here is one place to apply that principle. Abolish the two-headed control of foreign service.

"In order to utilize the necessary elements already existing, to preserve the best of their organizations, and to eliminate the great amount of duplicated effort, there should be one department under a general board in charge of foreign trade service. Under this board's direction the department should be built up out of the reorganization and consolidation of every form of activity of the Government in this connection. Of necessity, this board must have in its active membership the chief officials of the two departments of the Government concerned with foreign trade, State and Commerce. The board in charge of this department must so organise and arrange

(*Continued on Page 28*)



Two current cartoons having to do with America's fiscal and political relations with Europe, and both expressing the same idea. The cartoon on the left, "There's Not Much Use Whipping the Horses Till We Get That Wheel On," is by Darling, of the New York Tribune. The drawing on the right is by Marcus, of the New York Times, and was captioned "No Use Trying to Play Until Those Cats Are Quieted."

Digitized by Google

Profits From Purchases

They Are Indirect But Nonetheless Tangible; Some Factors in the Process of Earning Them

By ELWOOD SAMPSON

Chairman, Public Relations Committee, National Association of Purchasing Agents, Detroit

THE PROGRESS of each individual firm through a period of depression may be described as follows:

Deflation is the period when the managing executive is giving his entire attention to conserving resources by cutting down expenses and eliminating every possible expenditure. Bottom is reached and the turn for the better is accomplished when he no longer must concentrate every mental faculty on reduction of outgo, but can give intense consideration to the various ways and means which have in them possibilities for profit. When this point has been reached the future outlook is basically one of improvement. For that business concern has then changed from operating on a purely negative basis to a positive one.

Profit, like labor, may be divided into the two classes—direct and indirect. Direct profit is the direct reward from successful sales effort. Indirect profit is the reward which comes fom any department other than sales in carrying out any special measures that indirectly increase the profit account of the business. By "special measures" I mean to exclude the standard requirements of a properly organized department.

Further, this same analogy between labor and profit is carried out in the problems affecting both. Direct labor is conceded to be an unavoidable necessity in the manufacture of any product. Direct profit is also a self-evident necessity, if a firm is to stay in business. Therefore the points at issue affecting either are generally clear cut and very few in number.

On the other hand, indirect labor and indirect profits are indirect in any showing made and are full of ramifications wherein great savings and great losses are equally possible. Consequently it is in this division of a manufacturing plant that managing ability or lack of it is so readily apparent in the great profit or loss resulting therefrom.

Indirect Profits in Purchasing

In this article we shall confine ourselves to the possibility of indirect profits which can be realized in the purchasing division.

Especially note that the emphasis is placed upon the words "profits from purchases" and not "saving from purchases." The latter is the term applied to the results obtained from a regularly organized purchasing department carrying out the standardized departmental functions of obtaining the right material within the time required, and at the best possible price. This is thoroughly understood by every business man and needs no consideration here.

The most evident possibility of purchasing profit is in foretelling the trend of prices. Although this is so recognized by almost every business man, still the development in this direction, with a few exceptions, is still in an infantile state.

The general method at present of judging the market trend is to talk the situation over with this one and that one who ought to be in a position to be fully informed concerning his particular commodity; read the various trade papers; note what various competitors are doing, and then act accordingly.

In this method judgment is based mostly upon surface indications. The danger of this is that surface signs apparently all point one way. Also, they have a most unhappy faculty of completely reversing themselves over night. Today everything looks rosy. Tomorrow is just the opposite.

A brief consideration of the immediate past will illustrate plainly how true this is. Sixteen months ago the demand on the surface appeared insatiable. Prices were all going one way, upward, at a continually increasing speed. Prosperity in the sense of large paper profits appeared to be insured for years to come.

Only a year later exactly the opposite was true in every respect. Business was in a greater state of stagnation than ever before in the history of the country. Prices were all going one way, downward, with no stopping point in sight. The whole country on the surface appeared at a standstill. There was no response to all the propaganda efforts to cause people to "buy now." Every surface sign indicated that nothing but general ruin was ahead.

The great majority of business firms, basing their buying judgment upon the surface signs outlined above, overbought a year ago to an immense degree and have held off completely this year from ordering or contracting, except for immediate and imperative needs.

On the other hand, here and there in Detroit and throughout the country have been buyers who have operated upon a carefully worked-out, scientific plan of forecasting the market. For such final judgment is based upon a consideration of the underlying fundamental factors and not merely on surface indications. These men were not buying heavy a year ago, for fundamental signs all pointed to a heavy decline during the latter part of 1920.

To illustrate how this is done, I am taking a tried and proved plan (not an academic one) and reducing it down to a classified outline of the factors to be considered:

I. General economic conditions whose effect is the same on all business:

1. The ratio of the total demand of all commodities to total supply.

(a) The irreducible minimum necessary to sustain life.

(b) The fluctuation due to the general buying attitude of the consumer.

2. The world production of gold versus the total world production of all other commodities.

II. Specific conditions which affect individually the various commodities:

1. Seasonal variations, or the tendency of the various commodity prices to maintain the same relative increase or decrease through the various seasons of the year. Several classes of this seasonal variations are the following:

(a) Staple articles of food whose seasonal price is based upon the time of harvest and is influenced by the length of time in which pronounced deterioration can be prevented.

(b) Perishable food products whose price is affected by the period of greatest plenty, and the cost of prevention from perishing.

(c) Manufacturing products subject to seasonal conditions affecting production, such as operating rolling mills in extreme hot weather.

(d) Products affected by seasonal demand, such as ice in summer and coal in winter.

2. Annual variation:

(a) Due to the amount produced each year as compared with previous years.

(b) Due to the amount carried over from the previous year as compared with previous carry-overs.

3. Ratio of total purchases to total consumption.

Substitution as an Element

III. Relative conditions affecting commodity prices. (By this is meant those conditions which cause a substitution of one commodity for another):

1. The common properties which various commodities have that permit commodity substitutions to be made.

2. The relative level of prices of the various competitive commodities.

3. Inventions and new manufacturing processes which permit specific commodities to be made cheaper and better than other commodities in the same competitive class.

IV. Government policies:

1. Taxation.

2. Currency inflation.

3. Tariff.

4. Regulation of business.

V. Trade association policies:

1. Combination to maintain arbitrary prices, or

2. The opposite policy of not permitting any such combination and through educational work improving the general productive ability of the membership.

VI. Financial and credit conditions:

1. The general policy toward business of the Federal Reserve Bank:

(a) As a corollary thereto the general policy of the individual banks toward commercial loans.

2. The rate of bank interest charged on commercial loans.

3. The general ratio of (1) cash assets to (2) stock inventories to (3) fixed assets.

VII. Transportation conditions:

1. The rapidity with which commodities can be transported long distances and correspondingly permit or prevent competition from firms at distant points.

2. The general level of freight rates, which correspondingly tends to permit or prevent shipments from distant points.

3. The specific commodity freight rates which give certain commodities or certain localities competitive advantages over others.

4. Artificial freight basing points.

VIII. Labor conditions in their effect upon commodity prices:

> DURING the next few years some of the tidiest profits in American industry will be *saved* out of operations. Heretofore, much of our profit has been *made*. But *saving* profit is a different thing altogether.—*James H. Collins, in the Saturday Evening Post.*

Digitized by Google

1. The general scale of pay.
2. The local scale of pay.
3. General labor efficiency.

The briefest consideration of the above will show how great is the difference foretelling price trends by following such a plan instead of by shrewd guess work.

It's Hardly Simple

The application of this plan is not a simple one in any sense of the word. The various factors are not distinct from each other and do not parallel each other. In fact they form a veritable network in their criss-crossing. The attempt to point out how to give the relative value to each of the factors outlined and how to apply them in a practical manner is impossible in this article. That would take several volumes. Also, there is no general plan which can be worked out to fit all business. So the most important thing is to work out a specific detailed plan of foretelling the price trends of the important commodities used by each particular company.

To accomplish this it goes without saying that proper training and experience and more than ordinary ability is essential.

A second important potential possibility for producing buying profit is that of "buying good will."

While "buying good will" is somewhat analogous to "selling good will," there are certain important differences. There are the well understood points (1) of financial strength; (2) of paying bills promptly, and (3) of creating a friendly regard. More than this is the rarely attempted policy of making sources of supply feel that the buyer has their best interests and real welfare at heart at all times. The following instance will illustrate the application of this:

A year or so ago the writer had 2,000,000 pounds of metal to purchase on a keenly competitive basis. The best price quoted to us was one half cent a pound less than the best price quoted by the same firm on the same quantity to the other party. I was curious to know the reason why and asked the president of the mutual source of supply why this difference in the price.

"Because of the difference in your buying policies," he replied. "You have our interests at heart and continually work with us in every way. If something goes wrong you immediately get in touch with us and have the trouble looked into promptly. On the other hand the other firm takes a 'high and mighty' attitude. They were just as apt as not to let a hundred thousand pounds of material accumulate for weeks and then reject it upon some technical imperfection. This makes it very costly for us to have to work over such a lot of material. We never have these costly experiences on our orders with you. Also, you constantly work with us to help take care of your requirements with the least changes in production, and to help us to keep our costs down. Because of this buying policy of yours we are able to produce your material for half a cent a pound less than we can produce the same lot for the other firm. You are, therefore, entitled to this differential in price."

As every business man knows, there are certain firms which everyone particularly likes to do business with, because they continually work for their customers' welfare. They co-operate in every way possible. As a result they gain and hold a place which cannot be taken away from them.

What It Does Not Mean

In the same manner "buying good will" can be cultivated with just as sure a reward as "selling good will." In cultivating "buying good will" I do not mean displaying a goodfellow generosity of spirit in giving a certain preferred few all the business in their line at any price which may be asked. This policy is bad for both buyer and seller. It is bad for any firm to feel that they have such a hold upon their customers that they can sell them at any price whatsoever. For this causes a gradual letting down in efficiency through lack of competition. This in turn hurts their respective customers in obtaining new business. Accordingly, a certain feeling of competition should nearly always be created and be felt continually by a buyer's source of supply.

But after the order has been placed there should be just as constant an effort on the part of the buyer to help his sources of supply as there is on the part of the latter to help its customer.

The cost is comparatively low to a source of supply when production can be carried on without interferences and without frequent re-running of large quantities of material. The cost is rapidly increased when this plan cannot be followed because of lack of co-operation on the part of the buyer.

One of the large motor companies has almost a nation-wide "buying ill-will" because of its high handed buying policy. Many firms have been caused immense losses purely through arbitrary and unjustifiable actions on the part of their purchasing department. The result is that many high grade firms, even in a time like this, refuse to do business with this particular motor car company. Also, during the period from October, 1919, to August, 1920, when the seller's market was at its height and the buying competition was at its worst, this one particular motor car company was almost uniformly charged more than any other company. It seemed that word had been passed through all the industrial sections of the country: "Now is the time to get back our losses." There was almost a gentleman's agreement to charge this company ten per cent more than any one else paid. Accordingly the "buying ill-will" which they had developed cost them some millions of dollars more than they had gained by their arbitrary stand in the past.

A third important potential possibility of producing buying profit is through the closest possible team-work between the engineering and purchasing departments.

With reference to equipment or requirements of a highly specialized nature, it is the general practice to turn the matter over to the engineering department, allowing it to make final decisions. To have the purchasing department merely to send a confirming order. In such a plan the technical ability of the engineer is fully utilized, but the marketing ability of the purchasing agent is completely lost sight of. The natural training of an engineer is such as to make him naturally work within very close limits and to very rigid specifications. His sense of value is not developed enough to cause him to give the cost feature of close specifications very fine consideration. On the other hand, if both engineer and buyer are held equally responsible and each required to give the matter his fullest consideration, some immense savings in price would be accomplished without any sacrifice of quality whatever.

An Example

Some astonishing results were accomplished in this direction by a large Detroit firm recently. The director of purchases said he believed he could make an appreciable saving in the cost of some of their materials if the chief engineer was instructed to work with him and give him as wide a range of limits as possible without injuring the quality. Instructions were issued to this effect and the two of them went to various sources of supply to work out first hand with them every saving in cost possible without allowing the quality of their product to suffer in any respect. It was found that upon one of their items of regular production they could eliminate a certain requirement, which was customery in engineering practice but which was unnecessary in this particular instance. This change means a saving of $30,000 a year on a normal production basis. Another item was changed at a saving of $10,000, another at $5,000 and another at $3,000, thus making a saving of some $48,000 a year upon only four kinds of material, purely through close teamwork between the engineer and buyer.

A fourth important potentiality of producing buying profit is in "selling" the purchase orders and contracts instead of "placing" them.

Of all of the various phases of purchasing in its highest professional sense this is by far the most difficult to do. It requires a man of exceptionally high caliber who has a wide all-

A Word About Mr. Sampson

ELWOOD SAMPSON, author of this article, has had several years' experience in professional buying, having been successively identified with the Rands Manufacturing Company, Keller Pneumatic Tool Company, Motor Products Corporation and Detroit Auto Specialty Corporation. No one in the buying profession, perhaps, has any more complete understanding of the factors entering into price trends.

Our readers will remember that in his March article in these columns Mr. Sampson stated that certain raw materials, especially copper, tin, lead, zinc, cotton and rubber, had reached bottom and that the next change in price in any of these would be an upward one. Subsequent events have proved how accurate was his forecast.

Writing in the February, 1920, issue of the Detroit Purchasing Agent, Mr. Sampson said:

"An analysis of all the statistics gathered and basic factors affecting the business situation shows clearly two distinct conditions ahead of us. The next big far-reaching change will be a period of deflation which will bring the business of the country back to a healthy, normal basis. This will scarcely make itself felt, however, before the latter part of 1920. The immediate future is a general advance in commodity prices and increase in volume of business. In fact the present outlook is for the greatest volume of business in dollars and cents that this country has known, for the first six months of 1920."

How true this proved to be, every business man knows.

A careful reading and study of this article will suggest to the wide-awake business executive the possibilities for "saving profits," as yet untouched, perhaps, in other departments of his organization.—The Editor.

Digitized by Google

around business knowledge, including particularly a thorough understanding of finances and of costs. This rare type of individual can utilize his knowledge to get his particular orders and business placed at a differential under that quoted to competitors. He will not do this by any "breaking down" of prices through taking advantage of the buyers' market. Instead he will do it by first gaining the complete confidence of certain sources of supply; second, by both working together and making a careful and detailed analysis of the various elements of cost involved in filling the buyer's orders, and third the mutual elimination of certain elements of cost unnecessary to carry on that particular business between the two firms. This particularly includes the ability on the part of the buyer to "sell" his firm's business to his sources of supply through being able to present the special advantages which his orders have over that of his buying competitors.

The various possibilities for buying profits presented in this article do not cover the whole range of possibilities by any means, but they are the very important ones which are potentially the most important factors for success in the long period of keen competition ahead of us.

This is now a buyers' market and undoubtedly will be for some years to come. "Buyers' market" means great possibilities of "profit from purchases," just as the "sellers' market" means great possibilities for "profit from sales." Many of the manufacturers may feel that this is outside of the possibilities within their own organization. In most cases I believe they will be mistaken because purchasing agents as a class have a knack of always measuring up to whatever is required of them. When it was a sellers' market and there was a great shortage of material they went out and got what was necessary to keep running, somehow, somewhere. The nature of their work is such that develops ability and initiative. Therefore if they are required to produce buying profits by realizing the fullest possibilities which lie within their province, the great number of them will do so.

On the other hand there are some who do not have the training and the wide knowledge and experience necessary to achieve success in this direction. The matter then becomes one for the general management to decide whether it wants to forego the realization of the possibilities of the situation.

In conclusion let me emphasize this as strongly as possible: All industrial history teaches us that the new methods successfully put into practice by the ablest leaders of today become the established practices of the rank and file of tomorrow. Therefore those firms who survive in the years of the keen world competition ahead of us will do so because they utilize the great opportunities for profitable buying.

Truck on Rails Solves Foundry Hauling Problem



Albion Malleable Iron Company's New Motorized Equipment for Removing Foundry Waste.

STUDY of the internal hauling problem of the Albion Malleable Iron Company, Albion, by a transportation engineer resulted not only in greatly increasing the efficiency with which the work is done, but also in saving the company $4,200 a year. This particular phase of the transportation end of the business consisted of hauling from fifty to sixty tons of foundry refuse and hot clinkers every day from the furnaces to the dump, a distance of about 1,500 feet.

Two two-horse teams, with the drivers and four shovelers, were required to handle this refuse each day. Quite frequently it was necessary for the crew to work several hours' overtime. The repair bills for equipment were very high and veterinary services for the horses were also extremely expensive, due to the fact that almost every day one or two horses would be injured by having fetlocks very badly cut by hot or sharp slag. Often the horses would be thrown and seriously injured. To do this work with an ordinary rubber-tired motor truck meant the destruction of a set of tires every day.

In loading the wagons the crane would pick up a large tray of refuse, and in attempting to dump it into the body usually succeeded in spilling about half of the contents on the foundry floor, necessitating rehandling at an additional delay and expense.

A Packard transportation engineer was called in to make a survey and analysis. The analysis showed that the investment in horses, wagons, harness, barns, etc., totaled approximately $3,900 and that the cost of operating this equipment was $22.80 a day, including the teamsters' and shovelers' wages.

As a result of the survey and analysis it was recommended that the company grade a roadway from the west entrance of the foundry out across the lowlands for a distance of 1,500 feet, purchase steel rails and ties and lay a miniature track the entire distance.

To operate on this track it was recommended that the company purchase a size "EF" Packard truck, equipped with a five-yard gravity side dump body. It was also specified that the rubber tires be removed and that in place of them there be flanged webbed cast rims, riveted to the wheels to follow the guage of the track.

After studying the recommendations the company officials decided to follow them out. The cost of 3,200 feet of fifty-pound steel rails and a sufficient numer of eight-foot oak ties to lay the track was approximately $3,500, not including the cost of labor. Considerable grading was done at one point and the material placed on the lowlands to form a roadbed or fill for the track.

By this time the truck was ready for delivery and was placed in operation. Its initial trip was an occasion that aroused the interest of practically the entire organization. An assemblage of officials and department heads watched the truck back into the foundry, receive a seven-ton load from the crane, make the run to the dump and back again in less than fifteen minutes, ready for the second load. The entire accumulation of approximately sixty tons was taken out and dumped in about two hours' time. The driver was then taken off the truck and put on other work for the remainder of the day.

After watching the operation of this unit and keeping cost records for about a month it was discovered that the fixed charges per day were $7.71, including interest on the truck. The variable charges were $1.05 because the unit would cover only about five miles a day. The total cost was therefore $8.76 a day, as against $22.80 for the operation of the horse equipment, a net saving of $14.04 a day, or approximately $4,200 a year.

The efficiency and dependability of this unit in this particular class of work has so impressed the officials of the company that they

(*Continued on Page* 19)

Digitized by Google

New Rate Adjustment Sought

All Michigan Freight Charges to Be Involved In Proceedings Instituted By Traffic League

By ERNEST L. EWING
Counsel, Michigan Traffic League, Grand Rapids

THE LOWER PENINSULA of Michigan is a large and important part of what is known as Central Freight Association territory in connection with freight rate matters. In 1914 the Interstate Commerce Commission granted the eastern railroads, including the Central Freight Association lines, an increase of five per cent in all freight rates and commented upon the class rates in C. F. A. territory as being on a very low basis or scale. In 1917, in what is known as the "C. F. A Class Scale Case," initiated by the railroads, a new and substantially higher scale of rates, known as the "Disque Scale," was authorized by the federal commission for application throughout C. F. A. territory, with the exception of that part of the lower peninsula of Michigan lying north of the main line of the Michigan Central railroad from Chicago to Detroit. The new and higher scale of rates also carried the fifteen per cent advance when it became effective

The reason for excluding such a large part of the Lower Peninsula from the benefits of the new scale of rates was the contention of the Michigan railroads that, although it was generally a higher scale of rates than had prevailed for many years, it was not high enough for Michigan. The representatives of the Pennsylvania Lines, New York Central Lines, Pere Marquette, Grand Trunk and other Michigan railroads contended before the federal Interstate Commerce Commission that the Lower Peninsula of Michigan north of the Michigan Central main line was so sparsely populated and produced and consumed such a small volume of traffic as to make a much higher scale or adjustment of rates necessary if the carriers were to earn anything in excess of operating costs. The representatives of the Michigan railroads strongly urged that Michigan conditions affecting railroad revenues were comparable only with those prevailing in the sparsely populated sections of the New England territory.

Michigan freight payers located north of the Michigan Central main line were not strongly represented in that proceeding and therefore very little was offered in contradiction of the railroad statements of unfavorable conditions and necessity of higher rates in Michigan than in any other part of the territory then receiving consideration. Of the cities and towns in Ohio, Indiana and other parts of C. F. A. territory thirty-seven were organized for the purposes of the C. F. A. class scale case, under the leadership of their principal traffic representatives, and were very active throughout the case, but it was not their object to protect and advance Michigan interests; they were consistently looking out for Toledo, Fort Wayne, South Bend, Indianapolis, Chicago, Milwaukee, Green Bay and other manufacturing and jobbing cities and towns that compete, in Michigan, with Michigan manufacturers and jobbers.

It was the contention of the Michigan railroads that traffic conditions not only justified a higher scale of rates in Michigan, but that conditions became more unfavorable and the necessity of higher scales of rates became more urgent as the distance from the Michigan-Indiana-Ohio state line increased, and that rates, to, from and between points in the Lower Peninsula should be based upon progressively higher scales for each of several zones or cross-sections of Michigan. The Interstate Commerce Commission had very little evidence in rebuttal of what the railroads claimed. That was due to the failure of Michigan freight payers to appear in the case or to support any effort on their behalf. The Commission finally approved the railroads' plan of rate making whereby the Lower Peninsula was divided into four zones, each having a progressively higher scale of intrastate rates as the distance from the southern boundary of the state increased.

The basic scale, known as the "Disque Scale," was prescribed for all of the C. F. A territory outside of Michigan and including that part of Michigan on and south of the Michigan Central main line; that part of C. F. A. territory was established as "Zone A." The portion of Michigan lying north of the Michigan Central and south of a line drawn from Muskegon to Bay City was established as "Zone B," and its scale of rates was made substantially higher than the basic, or "Zone A," scale. The northern half of the Lower Peninsula was divided into two additional zones, "C" and "D," each having progressively and substantially higher rate scales.

Intra-state Proceedings Follow

Following that decision by the Interstate Commerce Commission, the Michigan railroads appeared before the Michigan Railroad Commission to demand the same adjustment of Michigan intra-state rates. Michigan freight payers again failed to participate in that proceeding with sufficient strength and preparedness successfully to combat the carriers' representations and the activities of those who appeared on behalf of Toledo and other Ohio and Indiana shippers. The result of that proceeding was the establishment of two additional and overlapping zones for intra-state rates, the intra-state zones being known as "Zones E and F." Zone "E" includes the lower half of the state and zone "F" the northern half of the Lower Peninsula. The dividing line runs from Muskegon to Bay City but the "Thumb" district is included in the lower zones.

The Michigan rate adjustments so established were entirely unsatisfactory to all the Michigan freight payers or their traffic representatives who gave the matter any attention as it developed, but they were relatively few as compared with the number actually affected. The Michigan Traffic League was then a newly organized body of a membership composed of Michigan shippers, principally shippers located in the southern portion of the state, and was not then sufficiently representative of the entire territory successfully to oppose the carriers and the outside interests.

The zone adjustments became effective in the latter part of 1917 and the early part of 1918. Federal control of railroads became effective January 1, 1918. As soon as the United States Railroad Administration organized its rate committee the Michigan Traffic League initiated proceedings before the Detroit District Freight Traffic Committee, which was the committee having jurisdiction, and endeavored to accomplish a substantial modification of the Michigan rates. That effort produced no results during the period of federal control, and with the passing of the Railroad Administration all possibility of relief from that source ended.

On June 25, 1918, the Michigan rate scales were increased 25 per cent and that increased the rate "spreads" between the several zones. A point in Zone "B" having a rate four cents higher than a competing point in Zone "A" found its rate disadvantage increased one cent by the 25 per cent advance. Not only were the scale or base rates increased but the differentials as between the zones were increased. On August 26, 1920, all rates were increased 40 per cent and all rate "spreads" or "differentials" were again widened. The increase in the rate "spreads" was important as between competing points in Michigan but was vastly more important in that it greatly increased the advantages over Michigan shippers which the original zone adjustments gave to competing shippers in other and adjoining states.

As Michigan rates now stand, they are not only excessive as compared with rates in all other parts of the United States but they are most unjustly discriminatory as against Michigan and in favor of Ohio, Indiana, Illinois and Wisconsin shippers. Detroit wholesalers cannot compete with Chicago, Milwaukee and the twin cities, St. Paul and Minneapolis, in the Upper Peninsula. That is equally true with respect of Grand Rapids and other Michigan jobbing points.

The effect upon Michigan manufacturers is most serious in connection with their inbound shipments of materials. They not only ship their products to competitive markets under very unfavorable conditions and rates but they pay a great deal more for their materials because of the unfavorable inbound rates.

As between points in the Lower Peninsula of Michigan, the disadvantage of the zone system of mileage scale rates are greatly aggravated by the carriers' use of inflated mileages. The mileage scale rates are not applied by the direct and shortest routes. The railroads endeavor to get the longest haul possible. To illustrate that the rates from Lansing to Muskegon are cited. Those rates are based on a distance of 122 miles. The distance from Lansing to Muskegon, via Grand Rapids, is approximately 96 miles. A stronger illustration is afforded by the rate adjustment as between Cheboygan and Allegan. Those rates are based on the distance via Michigan Central from Cheboygan through Bay City, Jackson and Battle Creek, half-circling the Lower Peninsula, whereas the distance via the direct route, Cheboygan to Mackinaw City, Michigan Central; Mackinaw City to Grand Rapids, Pennsylvania, and Grand Rapids to Allegan, New York Central, is about 100 miles shorter. The Michigan Traffic League has checked several hundred instances of inflated mileage in Michigan.

Prior to the 40 per cent advance of August 26, 1920, the Michigan Traffic League filed a complaint with the Michigan Public Utilities Commission wherein it sought a readjustment and substantial modification of the intra-state rates; the establishment of joint through rates between Upper and Lower Peninsula points in lieu of the combinations of local rates to and from Mackinaw City which now exist; Lower Peninsula shippers from Upper Peninsula markets and give that portion of Michigan over to competing shippers in other states; the elimination of zones "E" and "F" and the correction of inflated mileages. The railroads answered that complaint to deny its charges

Digitized by Google

and to say that any order by the Michigan commission reducing existing rates would be taken to the Interstate Commerce Commission for review under the provisions of the Transportation Act, 1920. It became apparent to the League that a majority of the Michigan shippers were equally interested in the obtaining of some modification of interstate rates and that a more comprehensive procedure was advisable. The complaint before the Michigan commission was therefore withdrawn, after a joint conference between the members of the League and representatives of the Michigan railroads, before the Michigan commission, had failed to produce any helpful results.

It is now the purpose of the Michigan Traffic League to file a complaint against interstate rates to and from Michigan points with the Interstate Commerce Commission, and a complaint against intra-state rates between Michigan points with the Michigan Public Utilities Commission, at a very early date, and to petition the two commissions for a joint hearing under the provisions of the Interstate Commerce and Transportation Acts. That is expected greatly to simplify the proceedings, and it will deprive the railroads of any grounds upon which to threaten an appeal from the Michigan commission to the federal commission.

The Michigan Traffic League has greatly strengthened its organization. Its membership is largely representative of Michigan freight payers. The traffic committee of the Michigan Manufacturers' Association is principally composed of members of the Michigan Traffic League. The directors of the Michigan Manufacturers Association have adopted a resolution wherein they recommend the activities of the League in this matter as being entitled to very careful consideration by all members of the manufacturers' association. A similar procedure before the Interstate Commerce Commission against all C. F. A. class rates which is proposed by an organization having its headquarters at South Bend, Ind., is not endorsed by the Michigan Manufacturers Association.

There is much to indicate that the Michigan Traffic League will be successful in this effort. The League is composed of pratical, experienced, traffic men who are thoroughly familiar with Michigan transportation affairs and conditions, and with the manufacturing and jobbing conditions in Michigan. A majority of the League members are experts in rate matters and in Commission procedure. The organization of the Michigan League is similar to that of the National Industrial Traffic League and members of the state league are prominent in the activities of the national organization.

The members of the Michigan league, individually and collectively, have endeavored to avoid the necessity for evidence before the federal and state commissions by almost four years' effort to prevail upon the Michigan railroads properly to modify and otherwise adjust the Michigan rates, and they have been forced to the conclusion that no substantial modification of Michigan freight rate conditions will ever be obtained without Commission procedure. The officers of the League are frank to say that they want Michigan rates reduced as well as equitably related to the rates enjoyed by competing territories. It will be their contention that the Upper Peninsula of Michigan must be given the full benefit of the "Zone A" scale of rates and that joint through rates between the Upper and Lower Peninsulas must be established on a basis that will not permit shippers in other states to shut Michigan shippers out of the Upper Peninsula markets.

It is expected to handle this matter to a conclusion before the two commissions within the next six months. The League members and committees are now actively canvassing the state for such further support and cooperation as remains necessary to their plan of action. Every shipper, every association of shippers and every commercial organization in Michigan is invited and urged to assist the League. The members of the League are doing all of the work involved in the preparation of the case and that will greatly reduce the cost of the effort.

The writer has been selected as counsel for the League. Parties desirous of communicating with the League should address E. C. Nettels, in care of the Postum Cereal Company, Battle Creek, the League's secretary and treasurer, or the writer, at Grand Rapids.

RAUCH HEADS CONSOLIDATION

At the organization meeting of the Consolidated Paper Company, Monroe, a corporation which is the result of the merger of the Boehne & Rauch Paper Company and the Monroe Binder Board Company, Edward C. Rauch was elected president; L. W. Leathers, Eugene C. Betz, J. C. Bullis, F. E. Williamson and H. L. Rauch, vice-presidents; W. C. Tullis, secretary, and L. W. Newcomer, treasurer. These, with others to be chosen later, will constitute the board of directors. The corporation is capitalized at $7,500,000, of which $5,000,000 is common and $2,500,000 preferred.

DWIGHT SUCCEEDS HANNUM

John H. Dwight, who since January, 1920, has been assistant general manager of the Saginaw Products division of the General Motors Corporation, has been appointed general manager, succeeding George H. Hannum, whose selection as general manager of the Oakland division recently was announced. Prior to joining GMC Mr. Dwight has been identified with the Belle City Malleable Iron Company and Racine Steel Castings Company as vice-president and general manager and with the Mitchell Motors Company as plant manager. As general manager of the Saginaw Products division he will have supervision of the Jacox steering gear plant, the crank shaft plant, the motor plant, the grey iron foundry and the malleable iron foundry, all at Saginaw.

The Editor's Job

[From the Dodge Idea]

THE editor's job is not the easiest in the world.

He has one definite objective—to plan and publish a magazine that will please the majority of readers. To do this involves a tremendous amount of work of a nature that is often beyond the conception of the reader.

In the first place, it involves the reading of hundreds of manuscripts submitted. This, in itself, is work. A manuscript may be found which bears every promise of being readable, instructive and worth while, but it may fall flat in the closing paragraphs. Again, a well-written manuscript may seem to meet every editorial requirement, but a careful reading may bring to light some highly undesirable feature that means rejection. Some statistical data may be slurred in the writing; some biased and unreliable views may be expressed that effectually kill the article in question.

The editor must judge every article by a multiple standard. He must judge calmly and with as large a measure of impartial intelligence as he is able to command. He must, in a large measure, guess the type of matter 32,000 intelligent factory executives want to read. He must conceive their respective and collective likes and dislikes and be on an eternal search for live and constructive matter.

He must have a conscious realization of the responsibility on his shoulders as a builder of public opinion. He creates and moulds opinion and policies of far-reaching effect by the very nature of the editorials he writes and the text matter he publishes.

He must build up faith in his magazine, for unless the readers have absolute faith in the editorial and text matter in the magazine, their faith in the advertisements will he exactly on a par with their faith in the reading material.

BUICK POWER PLANT COMPLETED

Within a few days the new $4,000,000 power plant of the Buick division, General Motors Corporation, Flint, will be turned over to the officials by the contractors. It has taken fifteen months to build this plant, which is said to be the largest one in the state and the most complete unit of the kind. It will develop 8,000 k. w., and has automatic machinery for handling coal, cooling and handling ashes and cooling water used in the boilers.

THE SITUATION IN CLEVELAND

According to reports from Cleveland, most of the automotive manufacturing concerns there have been increasing their production, which, however, is not in most cases up to the peak output of 1920. The Peerless Truck & Motor Corporation is said to be turning out twenty-five to thirty cars a day and finding the general demand maintained. The company is not making more than what distributors' orders call for. With the F. B. Stearns Company business is declared to be satisfactory. The Grant Motor Car Corporation has been producing thirty cars a day and is expected to reach forty shortly. The Lang and Rubay body making concerns are said to have a fair amount of orders booked. The report is that the business of the Standard Parts Company is improving. The White Motor Company is still operating at the rate of fifteen trucks a day, which is less than 50 per cent of capacity. At the Winton factory the conservative policy which has always been followed is prevailing, the manufacturing program being practically the schedule of dealers' and distributors' orders. At the Cleveland and Chandler motor car plants activities have been speeded up.

STEWART-WARNER SALES UP

Sales of the Stewart-Warner Speedometer Corporation for April aggregated as much as those for the first quarter of the year, it is reported.

Digitized by Google

Congress the 1921 Wonderland

It's a Strange Thing, This New Atmosphere of Welcome for the Business Man in Washington

By TOM L. MUNGER

One of the multitudinous impressions that crowd upon one who visits Washington and transacts business with any of the governmental departments there is one that stands out more clearly than all the rest. This is especially true if one has had occasion to make similar visits during the administration that passed out of existence this year. The outstanding impression nowadays is that one has suddenly entered a world wherein the ordinary values of life have been turned topsy-turvy; wherein one encounters very casually those unnatural phenomena revealed to Alice in Wonderland.

For example: The WELCOME sign has been hung out for the business man. It is true there had been much talk about this, but business men were almost persuaded it couldn't be. Their experiences with the former administration had led unmistakably to this conclusion, and moreover, one of the country's most eminent divines had told them flatly they had no business interfering with the processes of government—processes that presumably were beyond their feeble powers of comprehension.

At the White House

Today the WELCOME sign for the business man is displayed more prominently upon the doorstep of the White House than anywhere else in Washington. Strange as it may seem to those who have not followed closely the course of events at the national capital, the business man who has legitimate business with the President of the United States may see him with very little formality. The attitude of the nation's chief executive in this respect, of course, has borne a profound influence upon every department of the Government, and in no instance has this influence been more profound than in Congress.

Whereas in the past the labor leader has been welcomed and his word has only too often been incorporated into law, today the business man is welcomed and Congress is busily engaged in the work of incorporating some of his words into law.

Of course the personnel of the present Congress is comparatively little changed intrinsically from that of the preceding one or the one before that, at least so far as general character and ability are concerned. The only vital change has come in the virtual elimination of the former attitude of suspicion of the business man and the apparently great decrease in the popularity of the labor leader. In fact, in some quarters there is evident a tendency to suspect the motives and the fairness of the latter.

Congress still has a large quota of lawyer congressmen; those snowy-haired old fellows (and some young ones, too), who remind one forcibly of that passage in the immortal Alice which goes:

"In my youth," said his father, "I took to the law,
And argued each case with my wife;
And the muscular strength which it gave to my jaw
Has lasted the rest of my life."

Then, too, there is the usual number of Dormouse congressmen; the Yea-and-Nay Sayers, who never take an active part in any discussion, but sit heavily through it all, apparently almost wholly somnolent, rousing themselves sluggishly at the end to cast their votes, only to return at once to their former state. Naturally the rightness or wrongness of the votes cast by these individuals depends entirely upon the second-hand information they receive, and today they vote right oftener perhaps than ever before, because nowadays the listener in Congress sometimes gets an earful of something besides oratory.

And again, there is the edifying spectacle of Judge So-and-So, the elderly and dignified congressman from a Southern state, who takes an active part in a committee hearing, serving as spokesman for the labor opponents of a measure which is damned as "iniquitous and subversive of the rights of labor."

"You are old, Father William," the young man said,
And your hair has become very white;
And yet you incessantly stand on your head—
Do you think, at your age, it is right?"

A pathetic sight, truly, this conservative gentleman, who, having been forced once upon a time to "stand on his head" to obtain an administration view of legislative requirements, is still too conservative to get right-side-up with the times on such short notice.

But it must not be inferred that all members of the present Congress are either long-winded or somnolent and at odds with the new conditions. Indeed, for the most part, quite the opposite is the case. Gone are the black string tie, the Prince Albert of honorable tradition and the wide-brimmed black felt hat. Congressmen cut their hair short nowadays and their attire is more often like that of the tired young business man when striving to do a little business before going out to tire himself some more on the golf links. They "make it snappy" these days in the halls of Congress.

The opportunity for making the observations upon which were based the foregoing reflections was given by the occasion of a hearing before the House committee on merchant marine and fisheries on the bill introduced by Rep. Frank D. Scott, of Alpena, Mich., to revise the LaFollette Seaman's Law. This measure, which grew out of the Seaman's Act Conference held on April 8 and 9 under the auspices of the Detroit Board of Commerce, is intended to relieve Great Lakes shipping of the burdens that are slowly forcing it out of existence.

The LaFollette Hearing

With regard to this bill and the hearing thereon, it is needless to say more than that 60 representatives of the Detroit Board of Commerce, Lake Carriers' Association, merchants and vessel owners and operators, and of commercial organizations, shippers and vessel men in the Great Lakes states, appeared before the committee on April 2, 3, 4, 5, 6, 7 and 9.

It was made very clear to the committee that industrial and commercial interests on the Great Lakes have been greatly injured by the curtailment of vessel service that has resulted from the operation of the LaFollette law and that a revision is vitally necessary. The vessel men also made clear the justice of their demand for a revision. Several labor leaders, including Furuseth, international president of the seamen's union, were present and indulged in some perfervid oratory, which did not seem to impress a majority of the committee very much.

At the conclusion of the hearing it was generally conceded that, while since 1915 annual attempts to have the LaFollette law revised have failed, it looks this year as if a favorable revision would be obtained. But the end is yet to come, and it may safely be asserted that if any let-up of pressure in favor of the revision is permitted, the failure of still another attempt at revision will be recorded.



—Darling in the New York Tribune.

Folks Do Say, Though, That Until Their Mother-in-Law Came to Live With Them Their Family Life Was Perfect

---

$35,000 LUMBER FIRE

A large dry shed of the L. Stephenson Lumber Company, Wells, was destroyed by fire a few days ago, causing a loss estimated at $25,000, while the station and general office of the Escanaba & Lake Superior Railway Company was damaged to the extent of possibly $10,000. The shed contained a large quantity of dry pine and other lumber. A gale was blowing at the time of the fire and for a time the town was in danger of destruction.

ROMEO ELECTION

The Romeo Business Men's Association has elected the following officers: President, B. Roy Brooks; vice-president, Harry Gray; secretary, Charles T. Bradley; treasurer, J. N. Rowley.

MICHIGAN REPRESENTATIVES NAMED

Among the directors elected at the recent third annual convention of the Mississippi Valley Association, John V. Carr, Detroit, and J. G. Graham, Jackson, were chosen to represent Michigan. United States Senator William B. McKinley, Champaign, Ill., was elected president.

CHICAGO REO'S NEW MARK

The Reo branch in Chicago announces that April was the biggest month of business in its history, 186 passenger cars and speed wagons being sold, which is twelve more than the total for last October, which then constituted the high mark. April sales were 20 per cent better than those of March. The May outlook is good.

Digitized by Google

Allegheny

STEEL SHEETS

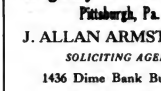
AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

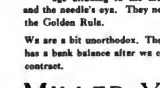
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729



THE Biblical studies of many electrical contractors ceased at the passage alluding to the man of means and the needle's eye. They never reached the Golden Rule.

We are a bit unorthodox. The owner still has a bank balance after we completes our contract.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT



AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

COOK-WILLOUGHBY PARTNERSHIP

R. R. Cook and D. J. Willoughby, well known in automotive circles, have organized a company to be known as Cook & Willoughby, Inc., to distribute the Houdaille hydraulic shock absorber in Michigan and have located the salesroom and service station at 4465 Second avenue, at Prentis avenue. The Houdaille shock absorber is a French invention, the American manufacturing rights for which are held by the Houdaille Company, Buffalo. It is a shock absorber for motor cars used extensively in Europe. At one time Mr. Cook was foreign sales manager for the Cadillac Motor Car Company, at another time was connected with the Lalley Light Corporation. Mr. Willoughby has been associated with the Dodge and Studebaker organizations and also the Lalley Light Corporation.

OLDS SHY OF MATERIALS

The Olds Motor Works, Lansing, is meeting with more difficulty in obtaining material for manufacturing than it is in selling cars. While the company has orders for 10,000 vehicles on its books, it finds it hard to get a balanced stock of materials, the shortage being nearly as acute in some lines as during the war. The company is heavily booked on the new fours and eights, and with a full supply of material is assured of a big production throughout the summer.

Guy H. Peasley has been made sales manager of the Olds, succeeding Charles A. Tucker, who resigned to return to the Nebraska Oldsmobile Company, Omaha, of which concern he is president and general manager. Mr. Peasley joined the Olds organization in 1911 as a stenographer and bill clerk. For four and a half years he was head of the distribution department and last year was made assistant sales manager.

Thomas O'Brien, former head of the sales promotion department, has been named assistant sales manager.

KELSEY SOON IN PRODUCTION

The Kelsey Motor Company, Newark, N. J., incorporated last year, has already produced its first cars and is developing an enlarged production schedule, which, it is expected, will be attained by the end of May. The company was formed to manufacture and market an automobile with an improved type of transmission which C. W. Kelsey, vice-president and general manager of the organization, developed at his own expense during the last seven or eight years. The Kelsey Motor Company is capitalized for 200,000 shares of $ per cent cumulative preferred stock at a par value of $101, and 400,000 shares of common stock of no par value. Something less than one-third of the common stock has been set aside and placed in trust for the benefit of the original organizers. This stock they cannot get possession of until the company has earned two years' dividends on the preferred. The remainder of the common has been and is being sold in conjunction with the preferred.

NEW DETROIT GEAR CONCERN

Announcement is made that the Stevenson Gear Company, a new corporation organized in Detroit with capital of $3,600,000, will start work this month on a $1,500,000 factory which will employ 500 men. The concern will manufacture gears on special machinery invented by G. E. Stevenson, Indianapolis, secretary of the Stevenson Gear Company of Indiana, a $10,000,000 corporation. Richard T. Wingo is president of the Detroit company; Frank C. Sibley, secretary, and G. W. A. Linton, vice-president of the American State Bank, treasurer. These with Mr. Stevenson and E. D. Johns, the latter treasurer of the Indiana corporation, are directors.

DURANT DENIES RUMORS

W. C. Durant has issued a statement in New York denying that he is contemplating a merger of the Studebaker Corporation and the Pierce-Arrow Motor Car Company into Durant Motors. In a short time, he says, he will outline formally the plans of his new organization.

SOME RESULTS OF JORDAN'S CUT

A statement issued by the Jordan Motor Car Company, Cleveland, is to the effect that following the price reduction announced May 1, applications for dealer franchises were received from 436 firms and individuals. Within two days after the announcement dealers delivered 239 automobiles. The May production will not exceed 600 cars.

STUDEBAKER EARNS $2,110,577

Net profits of the Studebaker Corporation for the three months ended March 31 were $2,110,577 after deduction of charges and federal taxes, comparing with $4,472,092 for the similar period of last year. Sales aggregated $18,478,270, as against $23,301,242. Shipments were 11,620 cars, compared with 13,414. Quarterly dividends of $1.75 have been declared on the preferred and common stocks, both payable June 1 to shareholders of record May 10.

ADDING THREE TRUCK MODELS

The Gotfredson-Joyce Corporation, Ltd., Walkerville, Ont., which has been making a two-ton truck, called the G & J, has placed on the market a 3½-ton model. This model has a four-cylinder Hinkley engine, worm-drive Timken-Detroit axle, Brown-Lipe sliding gear, Timken roller bearings and nickel steel gears throughout, Spicer propeller shafts and other standard fittings. The price of the chassis is $5,175, or $1,375 more than the price of the 2-ton chassis. The concern expects to place on the market shortly a 5-ton model as well as a 1-ton light truck. The officers and directors of the Gotfredson-Joyce Corporation are: Benjamin Gotfredson, president; Robert B. Gotfredson, vice-president, and Frank H. Joyce, secretary and treasurer. Benjamin Gotfredson and Mr. Joyce are both officers of the American Auto Trimming Company, with plants located in Walkerville, Detroit and Cleveland.

A GMC APPOINTMENT

The General Motors Corporation announces the appointment of E. F. Johnson as general manager of the inter-company parts division, with headquarters in Detroit. Mr. Johnson assumes supervision over Saginaw Malleable Iron, Central Foundry, Michigan Crankshaft, Central Gear, Saginaw Products, Canadian Products, Northway Motor, Central Forge, Central Axle and Muncie Products.

MULLINS BODY REPORT

For the three months ended March 31 the Mullins Body Corporation reports profits of $73,155 on $320,050 of sales. After deduction of taxes, interest, etc., the surplus left was $22,473, which, added to former surplus, brings the total up to $2,168,458. It is reported that this concern shortly will remove from Warren, O., to Detroit.

Digitized by Google



Burmaline


Victor-Balata


Leather

Belting Economy Is Obtained

By selecting the kind of belting best adapted to the drive conditions.

We have complete stocks of Leather, Balata and Burmaline Belting—something to meet every condition. Let us help solve your transmission problems.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

More Car and Tire Price Cuts Announced

By MARC BRAUN

PRICE REDUCTIONS by automobile and tire manufacturers continue, especially among the latter.

As was announced last week, Jordan, Marmon and Goodrich inaugurated the current movement. Since then the Chevrolet Motor Company, Flint, and the Oakland Motor Car Company, Pontiac, in the automobile field, and the Lee Tire & Rubber Company, United States Rubber Company, Goodyear Tire & Rubber Company and Pennsylvania Rubber Company of America, among the rubber goods makers, have followed suit.

Chevrolet and Oakland being General Motors units, reports are already going the rounds that all the other GMC motor vehicle subsidiaries—Buick, Cadillac, Sheridan, Olds and General Motors Truck—will fall into line sooner or later.

Officials of some of these concerns only a few weeks ago declared that price reductions with them were not being contemplated—that in fact "it couldn't be done" at this time. However, the writer has found that the meaning of "it can't be done" sometimes is "it can be done." In our issue of April 16 there appeared excerpts from a number of letters from motor car makers on the price situation which gave the impression that price cutting at this stage of the selling season couldn't be done. Indeed some of the makers characterized recessions as "suicide." But some of them have done it since—not killed themselves, but cut their prices. No wonder, then, that the writer received a neat, short note from a sales manager of one of these concerns, in which he wrote: "'It can't be done' isn't good English. It can always be done; it's just a question of when."

The Chevrolet Motor Company reduced the prices of its "Four Ninety" model 21 1-3 per cent—from $160 to $180, according to model—but no reduction has been announced on its higher priced cars, the F-B model. New and old prices are as follows:

	New	Old
4-90 Five-passenger Touring	$ 645	$ 820
4-90 Roadster	635	795
4-90 Coupe	1,156	1,325
4-90 Sedan	1,195	1,375
Delivery Wagon	645	820
Model T truck chassis	1,225	1,325
Model G truck chassis	720	920

With the announcement of the new prices, the recent bonus or rebate offer of the Chevrolet Motor Company becomes void. This offer was that if 50,000 cars were sold by the company in the United States and Canada between January 1 and July 31, 1921, the purchasers were to receive a rebate of $70 on open cars and $100 on closed vehicles.

The Oakland Motor Car Company made a reduction of $250 on its open and closed models, as follows:

	New	Old
Five-passenger Touring	$1,145	$1,395
Three-passenger Roadster	1,145	1,395
Coupe	1,815	2,065
Sedan	1,815	2,065

In addition to the reports that other General Motors Corporation units will reduce their prices, the names of four other Michigan companies have been mentioned in the same connection.

Commenting upon the recent tire reduction by the B. F. Goodrich Rubber Company, the Wall Street Journal says: "Straight 20 per cent reduction in tire prices by the Goodrich company was the largest single price cut ever made by any of the big rubber companies. Following the 15 per cent reduction last November, it places Goodrich schedules on a basis where they represent a decrease of approximately 32 per cent within six months. Current prices are about on a plane with 1914 prices and more than 40 per cent lower than peak prices during the war. The following tabulation of three popular-sized Goodrich fabric and cord tires shows prices as they are at present, as they were during the peak days in 1920 and what they were in 1914 previous to the war:

	Present Prices	March 1920	August 1914
Fabric—			
30 by 3½	$16.00	$23.20	$13.15
32 by 3½	20.25	28.05	20.35
32 by 4	26.90	36.80	27.50
Cord—			
32 by 4	43.85	58.70	42.85
33 by 4½	48.40	62.10	50.95
35 by 5	61.90	79.25	61.65

At the time this is written the exact extent of neither the Goodyear nor the United States tire cut had been made public. In the case of Goodyear, however, it was officially stated that a cut of 20 per cent was unwarranted and could not be made. The Pennsylvania Rubber Company of America announced a reduction of 20 per cent on cord and fabric tires, effective at once. The Lee Tire & Rubber Company made a cut of 20 per cent on cord and fabric tires and 15 per cent on puncture-proof tires.

At the time the Jordan company reduced its prices reports were already current that the Ford Motor Company was planning similar action. In reply to an inquiry in this connec-

Digitized by Google



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.

Name .....
Business Address .....
Home Address .....
Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

tion a Ford official said: "We do not know the origin of the rumor to which you refer, that there is to be a reduction in the prices of our cars, but in any event it has no foundation, as we are not devoting any thought to this subject at the present time. In any event it has never been our policy to make an announcement with respect to any price change prior to the time when it is to be put into effect."

Another of the higher officials of the company said: "It has never been the policy of the Ford company to govern its price policy according to what other automobile manufacturers are doing or may do. The Ford company follows its own policy, based on its business. When our business is found by us to warrant a price reduction there will be no waiting or watching what anybody else may be intending to do. And in the same way, if we think that we ought to advance our prices we shall do so whenever we think it necessary."

Asked about the price situation, an official of the Packard Motor Car Company said: "We are quite satisfied with the way business is coming to us. There are people who are under the impression that because prices are cut business will at once greatly increase, but there are also a good many people who are willing to buy the standard products made by concerns of high standing, of long established reputation and known to give a man his money's worth.

Motor Industry's Progress Shown in April Summary

A month's sustained and unbroken progress in the return march of the automotive industry is reflected in the May analysis of conditions made public this week by the Motor & Accessory Manufacturers Association.

"The gratifying betterment of fundamental factors noted in last month's survey is increasingly manifest in the first-hand reports and authoritative financial data consolidated in the summary for the month of April, says M. L. Heminway, general manager of the Association.

"Payments for the last month have been better than for the three months prior," says the report. "More firms are paying their current accounts in full on the date, and an increasing number are paying a larger proportion of their notes as they fall due, quite a number paying in full.

"Releases on old orders show a decided improvement. Many of the car and truck manufacturers are placing orders for new materials. Quite a number of vehicle manufacturers are operating their plants at full time or nearly so."

"Altogether," says the report, in recapitulation, "there is a decidedly better feeling among our members. Collections are better and money required from banks seems to be somewhat easier. Many plants are resuming operations on a larger scale than heretofore, and the condition of extreme depression has certainly changed for the better."

Makers of automotive accessories and the smaller replacement parts report an unusually large volume of business from dealers and jobbers.

"OLD TIMERS" OF THE WORLD

The Old Timers Club of the automotive industry may become international in scope. J. Ernest Miller, head of John Miller & Son, Ltd., Montreal, Canada, has written to the officials of the club suggesting that provision be made for a Canadian branch, as there are many "old timers" in the automotive industries in Canada who would like to join an organization of this character. P. Ed Spooner, secretary of the club, has also received similar requests from "old timers" in England and France. None of the founders expected such a rapid growth of the club. One of the strongest supporters of the organization is W. C. Durant.

MOTORS METAL PLANT FIRE

Fire caused damage estimated at $50,000 at the plant of the Motors Metal Manufacturing Company, Detroit, last Saturday afternoon. The origin was not discovered.

IN PRODUCTION MAY 16

Announcement is made that the Howell Foundry Company, Howell, will go into production for all kinds of grey iron casting work about May 16. The company is established in a new building specially constructed for foundry operation, with about 9,000 square feet capacity. Officers are: President, Charles A. Kanter; vice-president and general manager, F. T. Schreiber; secretary-treasurer, F. T. Schreiner. Detroit offices are located at 315 Murphy building.

BENTON HARBOR C. OF C. ELECTS

W. H. Hearn has been re-elected president of the Benton Harbor Chamber of Commerce. Directors are H. U. Rapp, J. N. Klock, W. O. Trail, P. J. Mamer, D. B. Peters and Will Godfrey.

EXPORT BUSINESS PICKING UP

The Lansing Company, Lansing, reports a revival of export trade, this concern being one of the largest exporters of manufactured goods in the state. The company has just shipped 200 tubular spreaderarrows to Peru. These are of steel construction and will be used in railroad work. Some of the southern republics have begun to take contractors' supplies in large quantities. European trade is reported to be showing little change.

STATE FOUNDRYMEN'S OFFICERS

J. Bigar Lee, Grand Haven, has been elected president of the Michigan Foundrymen's Association, a new organization formed in Grand Rapids. The other officers are: W. O. Adams, Ann Arbor, vice-president; Glenn L. Orr, Lansing, secretary; E. B. Turner, Manistee, treasurer. The board of directors includes the officers and C. E. Claridge, Kalamaoo; H. J. Hartman, Grand Rapids; A. K. Hazebett, Big Rapids; W. W. Sherman, Muskegon, and E. L. Pearce, Manistee. The association will meet in Muskegon, June 14, when the organization will be completed in all departments. It is planned to have special committees on labor, welfare, technical matters and to co-operate with the engineering department of the University of Michigan.

CANADA'S TRADE WITH THE U. S.

Canada's total trade with the United States for the twelve months ended March 31, 1921, was $1,399,000,000, an increase of $133,000,000 over the total for the year ended March, 1920, and representing more than one-half of Canada's trade with the world.

Canada's exports to the United States were $543,000,000, an increase of $78,000,000 over the aggregate for the year ended March, 1920. Canada's imports from the United States were $857,000,000, an increase of $55,000,000. Thus, Canada's adverse balance of trade with the United States has been reduced from $336,000,000 in the year ended March, 1920, to $315,000,000 in the year ended with March, 1921. This would indicate the establishment of a trend toward a gradual readjustment of the balance of trade between the two countries.

E. J. WELCH JOINS HUDSON

E. J. Welch, who has been assistant advertising manager of the Goodyear Tire & Rubber Company, Akron, O., has resigned to become a member of the advertising staff of the Hudson Motor Car Company, Detroit.

Digitized by Google

Ruggles Motor Truck Co. Organized in Saginaw

It was reported in this publication on April 23 that the plant of the Saginaw Shipbuilding Company, Saginaw, had been sold to Frank W. Ruggles, head of the Ruggles Motor Truck Company, Ltd., London, Ont., and founder of the Republic Motor Truck Company, Alma.

Details of the transaction, now perfected, show that Mr. Ruggles has interested a number of Saginaw business men in the organization of the Ruggles Motor Truck Company, incorporated under the laws of Delaware, and capitalized at $2,000,000. This concern has purchased the Carrollton plant of the Saginaw Shipbuilding Company and is expected to have it in readiness for production some time in July.

In the new company Mr. Ruggles will be general manager as well as president. Julius B. Kirby, secretary of the Saginaw Board of Commerce, has resigned to become a vice-president of the company. William J. Wickes, president of the Wickes Boiler Company, is also vice-president in the new concern. E. L. Smith is secretary; Walter C. Hill, treasurer; Charles T. Kerry, assistant treasurer, and John F. O'Keefe, counsel. These officers and Benton Hanchett, Henry T. Robinson, Otto L. Dittmar, all of Saginaw; John J. Thorne, Bay City, and Harry H. Price, Columbus, O., make up the board of directors.

CONDITIONS IN PONTIAC

Despite reports to the contrary men are being added to the working forces and production is being steadily increased in Pontiac factories. The Michigan Drop Forge Company reports that production is actually beyond normal. The plant is being operated twenty hours a day, with more than 100 men on the payroll, while the largest number employed in 1920 was 140. The normal number is 95. At the Wilson Foundry & Machine plant it is expected that production will be 50 per cent of capacity within another week. Business is increasing steadily. A few days ago an order for tire molds was received from the Fisk Rubber Company, Chicopee Falls, Mass., which will require probably 90 days for completion and which amounts to more than $200,000. The company, which makes principally parts for the Willys-Overland Company, Toledo, also reports increased orders from the Overland.

MILBURN LAYS OFF 400

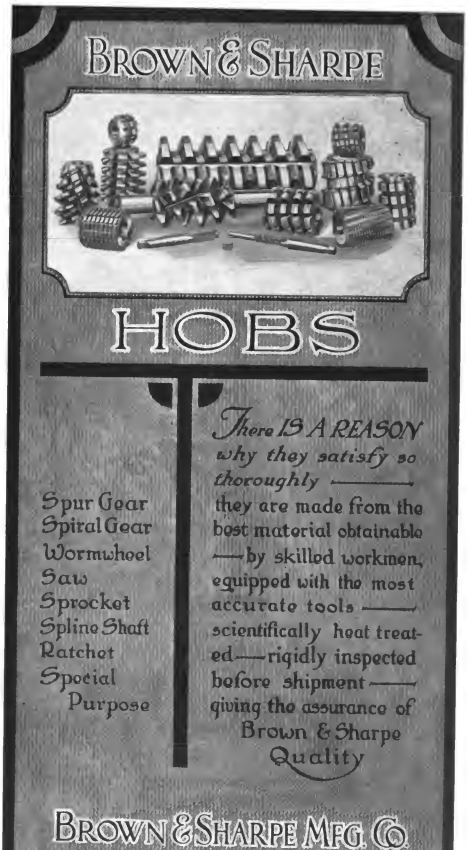
The Milburn Wagon Company, Toledo, last week laid off temporarily about 400 of its men in the body department, due, it is said, to orders from the Olds Motor Works, Lansing, to suspend shipments of bodies until further notice. These shipments had been going forward at the rate of thirty to thirty-five a day. The Milburn Company is keeping its force of 300 men in the electric vehicle department and expects that it will be able to take back the body workers within a few weeks.

PACKARD FIVE-YEAR EARNINGS

During the first latest fiscal years of the Packard Motor Car Company, Detroit—1916 to 1920—total net sales aggregated $240,561,082, an average of $48,1112,216 a year. The net earnings after depreciation, but not before taxes and interest, aggregated $46,336,947, an average of $9,267,189 a year. The net earnings after deduction of federal taxes, interest and depreciation, totaled $28,934,308, or at the rate of $5,786,861 a year.

MASON TIRE REDUCTION

The Mason Tire & Rubber Company has reduced the price of its heavy duty cord tires twenty per cent and its other types proportionately.



Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:30 a. m. and every two hours to 6:30 p. m

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p m

PORT HURON—8:10 a. m. and every two hours to 8 10 p m. Sundays only, 11:00 p. m.

Need an Elevator?

Ask LEITELT

Modern Designs

Superior Construction

LEITELT IRON WORKS

Office and Factory

315 Mill Ave., Grand Rapids, Mich.

Eastern Michigan Service

1900 N. Mich. Ave., Saginaw, Mich

MAIN 1491

SPRUNK ENGRAVING CO.

Commercial Artists and Engravers

700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

ORGANIZATION PROCEEDS WELL

Organization of the Michigan Highway Transportation Association, headquarters in Lansing, is proceeding and Secretary H. H. Hardy reports general interest in the undertaking. Eligible men are being advised of the association, organized in Grand Rapids last month, and are urged to affiliate.

Plans for an energetic membership drive will be formulated at a special meeting of the board of directors to be held in Lansing May 23. It is probable that the state will be sectionalized for membership purposes at that time.

The Michigan Manufacturer and Financial Record is official publication of the state association and clears all news of the organization and its members.

17 GRAND RAPIDS ROUTES

Seventeen motor truck routes are now operating in all directions out of Grand Rapids, most of them within a forty-mile radius. Charges approximate those of other carriers, plus a small amount for store door delivery.

WILL SUPPLY TRUCK BODIES

The Lansing Bus Company has been organized by Lansing capital to specialize in bodies for all makes of truck chasses. This includes a complete line of bus furniture, panel, sedan and other types. The company has located in the Fireproof Storage & Transfer building with offices and assembling warehouse space. The business will be managed by Fred L. Waite, who is financially interested in the new company and has had a long experience in the automotive field.

ROAD BUILDING ENCOURAGED

So far this year the State Highway Department has been able to let contracts for road building at a twenty per cent reduction over costs at any time since 1917. So keen has been the competition among contractors that as many as fourteen bids have been received on one job. Since March 26 contracts have been awarded for 87.4 miles of trunk lines to cost $2,081,744.24, and since July, 1919, contracts for 793.04 miles have been let, the cost being $12,979,719.49. The Oakland county road commission will spend more than $1,000,000 on road construction this year, and much of that money on main thoroughfares.

N. Y. C. STORE DOOR DELIVERY

Officials of the New York Central railroad are examining the possibilities of store-door delivery of freight over their lines. Several experiments have been made with results that have been pronounced most satisfactory. Container cars, each capable of holding about one-fourth of a carload, into which can be loaded four smaller compartments for freight, which in turn are filled, packed and sealed by the shipper, comprise the special equipment. One of these cars has made successful trips between Cleveland and Chicago; another is being employed on the Boston & Albany railway this week. A third car, intended for handling express and provided with nine of the portable containers, has made several trips on the Twentieth Century and other fast trains between New York and Chicago.

Besides expediting movement and delivery of freight and express shipments, the new system is of economical importance to both shipper and the railway company. The expense involved in demurrage, breakage and losses through theft are eliminated practically. Furthermore the cost of packing is cut to the minimum because heavy boxes and crates are practically abolished. Goods are packed in the steel boxes without fiber or pasteboard containers in many instances.

They leave the shipper's warehouse securely locked, and when unloaded at their destination may be unpacked and the goods lifted directly to the shelves without the necessity of knocking down heavy crates.

Officials of the New York Central railway have announced that they are satisfied with the results shown by the preliminary experiments and that the system will be expanded as rapidly as possible.

NORFOLK, VA., COMPETITION

Motor bus operation in and around Norfolk, Va., has grown so large that the local street railways company finds it impossible to set aside revenue for development. The refusal of the city government to permit a fare increase and the imminence of an expiring franchise have created a transportation problem which, reports say, either will demand an increase in bus operation or elimination of the service. Reports are that the motor buses take $1,200 daily away from the street railway.

CROTHERS MAKES A CHANGE

R. A. Crothers, for some time identified with the Fireproof Storage & Transfer Coupany, has severed his connection. Mr. Crothers was one of the organizers of the Rector Transfer Company, one of the first Michigan enterprises to use motor trucks. His new affiliation has not been announced.

TRAVERSE CITY SERVICE

Reports from all over Michigan indicate the rapid development of the motor bus operation industry. Every section of the state is now using these vehicles as a complement to other classes of service and as the public is becoming familiar with their advantages, they are finding many new sources of revenue.

A new line has just been established to operate out of Traverse City. Here the chief source of revenue is freights. Motor trucks make three weekly trips with wholesale groceries and other merchandise out of Traverse City, stopping at Beulah, Benzonia, Salle, Bear Lake and Onekama. On the return trips they pick up dairy products and other farm commodities. Plans are already under way to extend the service through Frankfort, Elberta and Arcadia and to set up a regular package freight business for use of the general public.

Originators of the plan are the National Grocer Company and Northern Creamery & Cold Storage Company, Traverse City.

IN PORTAGE LAKE DISTRICT

Resumption of bus service in the Portage Lake district of Michigan with the coming of spring has tended to stimulate activities greatly. Much purchasing was withheld awaiting opening of the bus season, because of the advantages in delivery by their means. Efforts will be made to extend the season for operation as long as possible.

Port Huron—The Gratiot turnpike from Military street to the Macomb county line is now under construction, grading culverts and bridges completed and surfacing under way. The River road and Hart road from St. Clair to Muttonville afford a perfect highway to Detroit. Roads under construction include Town line, Lambs, Shea, Avoca, Beard Hill, Capac, Yale, Church, Mill Creek, North Street, St. Clair, Macomb Line, Telephone Line, Marsh and Shore.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton
SALES REPRESENTATIVES: Atlanta Denver Portland
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700



Engine Erecting Building, Sheffield Car Co., Three Rivers, Mich.

Close co-operation



with your staff makes us practically a part of your organization while we are identified with your work.

LOCKWOOD, GREENE & CO.
ENGINEERS
1227 Washington Boulevard, Detroit

BOSTON CLEVELAND ATLANTA CHARLOTTE CHICAGO PHILADELPHIA NEW YORK
Lockwood, Greene & Co. of Canada, Ltd., 253 Beaver Hall Hill, Montreal, P. Q.
Compagnie Lockwood Greene, 47, Avenue de l'Opera, Paris, France

Drilling Economy

Is very largely a matter of right machines

THE

Avey

BALL BEARING
SENSITIVE
AUTOMATIC
AND
SEMI-AUTOMATIC
DRILLING
MACHINES
ARE THE MOST
ECONOMICAL



THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

AUGUST N. JOHNSON
MACHINE CO.
MANISTEE, MICHIGAN

MACHINE AND
BOILER SHOPS

General Repairing

MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS

BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING

We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting

of

POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN

Commercial and Portait

Rush Work Given Special Attention

Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Saginaw—April was a big month in local building. A total of 335 permits were issued, involving $879,382, or $300,000 in excess of the April, 1920, mark. The large increase was due principally to the Saginaw General Hospital permit, which figures on the list for $515,000, and to the Modart Corset Company's factory which is to cost $130,000.

Detroit—The Board of Commerce has invited the builders and building materials dealers of Detroit and elsewhere in the state to meet in a round table conference on present costs of materials and building and possible reductions in those costs to stimulate homebuilding. It is realized that if the present depression in building continues Detroit's home shortage will become more acute when industrial operations are back to normal.

Adrian—During the last month twenty-seven permits were taken out, as compared with thirty-five in April, 1920. The outlay involved last year was $46,875, while this year the total was $31,391. Of the eight permits for new buildings, three were for automobile service stations, three for private garages and two for dwellings.

Lansing—Page & Harryman, shoe dealers, will add two floors and basement to the rear of their present structure, the addition to cost about $15,000. Work will begin June 1 and

Detroit—Among the contracts awarded during the week ended May 5, as given out by the Detroit Builders & Traders' Exchange, were the following: A six-story and basement bank and office building for the United Savings Bank, in Griswold street; a bank building to house the Strathmore State Bank, in Grand River avenue; a brick and steel warehouse for the Contractors Equipment Company, to be erected on Martin and Herbert avenues; and an infirmary, a ladder house, a nurses home and a number of residences.

Among the more important items on the list of projects were a brick, stone and terra cotta branch bank building for the Wayne County & Home Savings Bank; a brick and steel theater to be erected on the West Side; an eight-family, two-story and basement apartment building; a stucco residence in Grosse Pointe; three stores and flat building, brick and steel construction; a two-story and basement, residence and garage, stone trim, to be erected in Longfellow avenue; a brick veneer, duplex apartment; a shingle residence to be erected in Bloomfield Hills, and some smaller construction.

The week ended May 7 was another "Million-dollar" week as far as expenditure for building work was concerned. The official record shows that 315 permits were issued, the cost involved being $1,087,330, as compared with $1,486,765 for the previous week and $1,284,905 for the corresponding week in 1920. There were 244 permits for new buildings and 141 permits for alterations and additions.

Lansing—In order to rush work on the new Prudden store and office building, the Rickman Construction Company has started night work, with twenty-five men on the night force and forty on the day. It is expected that all debris will be cleared away and the excavations completed within a few days, so that actual building may be begun. The footings and sidewalk walls have been put in. Steel for the reinforcement work has arrived and other deliveries are assured.

Detroit—The common council has for the third time rejected bids on the construction of the Belle Isle bridge and will readvertise. This action was taken because the Arundel Corporation, Philadelphia, declined to pare $217,000 off its bid so as to come within the maximum specified.

Royal Oak—Within a few days ground will be broken for the building to be occupied by the First State Bank of Royal Oak, at Washington avenue and Fourth street. The structure is expected to cost $210,000. The stucco structure now on the site is being moved, as well as another frame building.

Detroit—The Canadian parliament has passed the transit bill authorizing the construction, maintenance and operation of a railway and general traffic bridge over the Detroit river between Detroit and the Canadian side. Thus the last legal obstacle in the way of construction has been removed and building may begin before the end of this year, according to Charles Evan Fowler, engineer in charge of the project. The bridge, details of which were announced first in this paper last fall, will be of the suspension type, 110 feet clearance, and will cost in the neighborhood of $28,000,000.

Transportation

Muskegon—This city and Grand Haven have asked the Government to build a breakwater and make other harbor improvements. A survey of the present harbor facilities and reasons why improvements are asked have been prepared and sent to the government engineers.

Muskegon—It is estimated that Muskegon business interests will save $100,000 annually through the recent decision of the Interstate Commerce Commission by which the present favorable parity rates existing between this city, Grand Rapids and other Michigan cities and applying on shipments to and from eastern territory, are maintained, says the Muskegon Chronicle.

FISH LUMBER'S MICHIGAN OFFICE

The Charles W. Fish Lumber Company, Elcho, Wis., has opened a Michigan sales office at 616-17 Murray building, Grand Rapids, in charge of Frank S. Barnard. The company, which manufacturers northern hardwoods, operates five band mills—at Antigo, Birnamwood, Crandon, Elcho and Hiles, Wis. These mills cut 100,000,000 feet annually of hardwoods, hemlock and pine.

Purchasing Agents' Association of Detroit, offers to men the responsible buying authority certain channels of information available no where else.

Publicity Office 19 Garfield Building Glendale 8019

Digitized by Google

N. A. C. C. Names Delegates To Oppose New Taxation

Directors of the National Automobile Chamber of Commerce, meeting in Detroit late week, decided to send a delegation to Washington, May 16, to argue before the ways and means committee of the House against further taxation on automotive vehicles, as has been suggested by Secretary Mellon, of the Treasury Department.

"What we are asking for is fair play for a great American industry," said Alfred Reeves, general manager of the N. A. C. C. "We want taxation distributed on a basis of equality, because a tax on any single industry brands it as illegitimate. We are willing to have motor cars and trucks taxed additionally if every other vehicle that runs on the road is levied upon the same as we are."

The delegates for the automobile interests are C. C. Hanch, director of the N. A. C. C.; H. H. Rice, president, Cadillac Motor Car Company, Detroit, and J. Walter Drake, chairman of the board, Hupp Motor Car Corporation, Detroit. George M. Graham, vice-president, Pierce-Arrow Motor Car Company, Buffalo, will speak for the truck manufacturers.

Advertising managers of a number of automotive enterprises conferred at the Hotel Statler simultaneously with the meeting of the N. A. C. C. directors. The outcome of the meeting was a decision to form an advertising managers' division of the national chamber. The principal speakers at this meeting were H. R. Hyman, Cole Motor Car Company, Indianapolis, and H. C. Dart, Paige-Detroit Motor Car Company, Detroit. Those in attendance were:

J. G. Cashin, Paige; W. K. Towers, Reo; J. E. Baird, GMC; A. L. Davis, Atterhury; J. E. Helm, Acme; H. R. Hyman, Cole; H. C. Dart, Paige; W. S. Yeldell, Gardner; J. E. Pickins, Selden; N. E. McDarby, Moon; R. C. Spinning, Service; H. S. Daniels, Dort; A. J. Rogers, Marmon; C. V. Burnett, Malbohn; M. H. Newton, White; Roy A. Sears, Root & VanDervoort; A. L. Chambers, Elgin; C. M. Locking, Milburn; F. B. Willis, Duplex; E. E. Hess, Sayers & Scoville; F. Carle, Standard Steel car; Albert Stoob, Schacht; E. J. Shassberger, Olds; S. R. Swiss, Republic; George W. Cushing, Hudson; Gilbert U. Radoye, Haynes; J. P. Adams, Scripps-Booth; C. P. Drysdale, Lincoln; Cliff Knohle, Liberty; V. E. Burnett, Liberty; C. S. Bailey, Peerless; Robert T. Walsh, Barley; A. B. Batterson, Buick; W. J. Mattimore, Maxwell; F. W. Munro, Hupp; L. B. Dudley, Federal; A. F. Bowman, Garford; G. J. Dwyer, Willys-Overland, and R. E. Kellar, Apperson.

GODWIN NAMED TO BOARD

The board of directors of the Grand Rapids Savings Bank, Grand Rapids, has elected Arthur M. Godwin vice-president and director in place of Frank S. Coleman, resigned.

Motor Truck on Rails Solves Hauling Problem

(*Continued from Page 8*)

are considering extending the track through the foundry and out to their core sand and coal bins. This would enable them to run the truck through and eliminate three more teams and six or seven more men, now required to handle this work.

The entire investment, including track and truck, is approximately $10,500, which will be paid for in approximately two years and two months of operation. When the remainder of the track is laid the investment will amount to $13,000 and a saving of $39.93 a day, or about $9,000 a year, will have been made possible.

Better Service for Detroit and vicinity



A Warner & Swasey Service Station in Detroit
5928 Second Boulevard

A place in your vicinity where you can see the machine once or twice—
or as many times as you like—
to be sure it is what you need for your work.

A place to buy tools for your turret lathes—
in a hurry if you like—
All sizes in stock.

A real Service Station with competent men in charge—
Come and see us
or telephone us

C. S. STILWELL, District Manager
WM. B. POPE

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Branch Offices:	Works—Cleveland.	
	Detroit	5928 Second Boulevard
	Boston	Oliver Building
	New York	Singer Building
	Buffalo	Iroquois Building
	Indianapolis	Lemcke Annex
	Dayton	Mutual Home Building
	Milwaukee	Sycamore Building
	Chicago	618-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, MAY 14, 1921

The German War Settlement

THE ACCEPTANCE by the Germans of the ultimatum of the Allies respecting the indemnity which shall be paid by the former as the cost of the war puts the business of world reconstruction on a new plane. The German economists have all along been maintaining that the reorganization of business within the limits of the German Republic was only possible after the terms of settlement had been defined. They have now been defined and if the obstruction to business resumption was what the economists declared it to be, it has been removed.

Just what the settlement means cannot be exactly determined at this time. The form which the payments shall take and the time of paying them have been pretty well set up. They involve a cash payment in gold to which the German exaction from the French in 1871 looks like a trifling bauble. This must please the French, who have not lost memory of Bismarck's rapacity when he had them on their knees more than forty years ago. At the same time the withdrawal of so much cash capital from Germany in one lump must have the effect of rendering German business very unproductive for a long time. This will in turn react upon the ability of Germany to become a consumer of foreign raw materials or fabricated product, a situation in which we, as Americans, are very much interested.

The Germans are required to support the debt which has been created as an indemnity by a substantial export tax, which has been set as high as twelve per cent. The financial and economic sides of this requirement are very interesting subjects of speculation. We in this country have been apprehensive of the tariff necessities which would equalize cheap German productivity with the products of goods made upon an American living standard. This would only be accomplished by a protective tariff, the proceeds of which would go into our own treasury. The necessity of a protective tariff for the purposes of protection is discounted to the extent of twelve per cent of the exportable value of German products by the requirements for the amortization of the war debt now created; while the condition that our treasury would be enriched by duties upon so much of these products as entered our country is changed by applying the twelve per cent to the interest and principal of the war debt. Now it is not conceivable that these items will be paid in money. They must be paid in goods. These goods constitute the basis of profitable trade. Most of this debt is due to France and England. They are, therefore, setting up new trade conditions of profit to themselves and their people. Inasmuch as we are not participants in the indemnity, thanks to the altruistic position taken by President Wilson, the Frenchmen and Mr. John Bull have, to the extent that the condition under discussion operates, put one over on us in a trade way. It is true that they, too, owe us money, the payment of the interest and principal of which are to be made in the same way. But the fact is that they get the goods first. We may get them at second-hand, and in an advanced state of fabrication. It was this situation, no doubt, that the Germans had in mind when they made a tentative proposal to the United States to take over and become responsible for a portion of the Allied debt to the United States. In that event we would be getting their available raw materials at first-hand. It is not impossible to imagine that a regular interest and principal payment to this country, say in potash salts, would be a mighty fine thing for us to be enjoying. It might be more valuable to us than either English or French gold or goods.

The Germans have had imposed on them an impressive industrial slavery, which, at the least, will bear upon them as a burden for a generation. Yet this is only the penalty for injustice, for which they are entitled to no sympathy.

Price Control by Manufacturers

REP. KELLY'S standard price bill—a measure designed on the one hand to protect manufacturers against price slashing by unscrupulous retailers, and on the other to put an end to some of the rampant profiteering of which some dealers have been and continue to be guilty—has been reinstated in the House of Representatives. Mr. Kelly will make an effort to put it through during the present session.

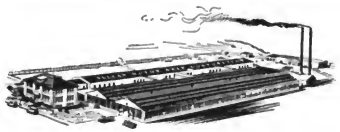
This bill, which has been indorsed by the National Association of Manufacturers, the American Fair Trade League and most of the state associations of manufacturers, retailers and wholesalers, permits independent manufacturers with registered trademarks to print on the packages containing their product the price at which it is to be sold. Retailers selling the goods at less than the quoted price would be subject to punishment. The measure thus acts to protect the manufacturer's good will, which now is put at the mercy of the buccaneer bargainers who cut standard prices and set up "misleaders" to deceive the public.

Moreover, it protects the purchaser. When in one establishment one may purchase a tube of tooth paste for twenty-five cents but in the store next door be forced to hand over thirty or thrity-two cents; when in one block one may buy a can of standard brand tomatoes for twenty-eight cents but in the next block be obliged to hand over thirty or thirty-five cents for identically the same article, it is a "dead open-and-shut case" of profiteering, other factors being equal. If the retail price were printed on the package the customer would have no one to blame but himself if he paid more than that.

Safeguards both for the public and the retailer are furnished One clause of the bill provides that if anyone believes the manufacturer's price too high he may appeal to the Federal Trade Commission, which, after investigation, may revoke the right to fix the price but may not substitute another. On the other hand, a merchant going out of business and who therefore may wish to conduct a sale is afforded opportunity to offer to sell the goods back to the manufacturer at the price he paid for them. If the maker does not wish to take them back the dealer may sell at any price he likes.

The bill deserves serious consideration.

Digitized by Google



Join Hands with these Master Axle Builders

THE Vulcan Motor Axle Corporation started new one year ago. Its officers and executives knew how to build axles and they planned a better axle. Of the money needed to get into production this group supplied one-third; the rest was subscribed by bankers and successful business men, their personal friends.

Their dream of making a better axle has been realized, and they stand now at the threshold of that period in their career which should mark their most profitable development. They are anxious that those who go through this period of profit with them should be of the same high standing as those already associated with them.

You can ally yourself with the future of these men and their business. You can become affiliated with them now when their opportunities for multiplying the values of their business over and over again are the greatest—when your opportunities are on a par with theirs.

Investigate this opportunity to become a partner with these master axle builders.

OFFICERS AND EXECUTIVES

F. C. GILBERT	President and Treasurer
SIDNEY C. LOVE	Vice-President
C. C. MILLER	Vice-President
L. W. GOODENOUGH	Director
JOHN T. HANLON	Secretary
R. G. BERCHLER	Chief Engineer
ROBERT W. WILSON	Asst. Chief Engineer
AUSTIN GUERLINGER	Office Manager
CHAS. L. DAVIS	Superintendent

VULCAN MOTOR AXLE CORPORATION

Conant Avenue FINANCIAL OFFICE, 826 DIME BANK BLDG. Detroit, Mich.

VULCAN AXLES

Digitized by Google



Wallace Injunction Decision Taken Under Advisement

By H. BOND BLISS

[Staff Correspondent, Michigan Manufacturer and Financial Record]

LANSING, May 11—Hearings on the injunction proceedings of A. W. Wallace & Company, Detroit, against the Michigan Securities Commission were held before Judge Leland W. Carr in the Ingham circuit court here, Tuesday, May 10. The company seeks to make an injunction permanent preventing the Commission from suspending the license of the brokers as the result of selling some "free stock" of the Michigan-Colorado Copper Company, while the Commission asks the court to dissolve the injunction so it may proceed against the Wallace company.

Morning and afternoon sessions completed the hearing. Most of the time was devoted to the evidence presented by A. W. Wallace and W. J. Peoples for the brokers and H. N. Duff, executive officer of the Commission, for the Commission. Attorneys Clark, Emmons, Bryant, Klein and Brown represented the Detroit firm, while Assistant Attorney General S. F. Master appeared for the Commission. At the close of the hearing late in the afternoon Judge Carr announced that he would take the case under advisement and would announce his decision within a few days.

The evidence and arguments presented by the witnesses and attorneys for A. W. Wallace & Company tended to show that the Commission had granted the Michigan-Colorado Copper Company permission to sell 975,000 shares of stock, put 1,500,000 shares in escrow with the Commission, while leaving 500,000 shares free stock with the Wallace company, to be used if necessary for promotion purposes. They claimed that the Commission by its action gave approval to the stock itself, authorized the sale of the amount named and understood that the free stock was to be disposed of if required, and that it had no authority to deny the sale of this stock held by Wallace unless at the time of the original hearing the Commission had cancelled or ordered this stock placed with the other in escrow. Wallace claimed that insufficient notice was given the firm of the impending action of the Commission in threatening to suspend the broker's license, and in order to protect the company hasty moves were necessary to obtain protection, which was granted by Judge Howard Wiest, of the Ingham circuit court, June 29, 1920.

The Commission by its witness and attorney declared that no authority had ever been granted for the sale of the free stock, that the permit for the disposal of the 975,000 shares did not include an additional half million, that no resolution was hurriedly passed by the Commission to suspend the Wallace license, that proper notice was given for a hearing and that the restraining order should thereby be removed so the Commission could proceed to take what action was deemed proper.

Technical details involving the entire transaction were covered comprehensively during the hearings, while the report of the original appearance before the Commission for permission to sell the stock was also recalled. In this was brought out the questions and answers regarding the copper company. At that time Augustus C. Carton, president and original promoter, appeared before the securities commission, of which Attorney General, now Governor Groesbeck, was a member and took an active part in the questioning. This report showed that the company was willing to place the 1,500,000 shares in escrow with the Commission and that it was understood 500,000 shares of free stock were to remain out to be used if necessary. In face of that statement, Attorney Emmons contended, the Commission did validate 975,000 shares for sale.

Mr. Wallace while on the stand related the full history of the case. He said about half of the free stock had been sold, although it was declared 375,000 shares of this stock had been disposed of, a total of about 679,000 shares in all having been sold of both the authorized and free stock. In regard to the copper mine, he said that while conditions at present are not bright, no one, not even an expert engineer, could or would say that there was not paying ore there if properly developed.

To uphold the contention of the Wallace company Attorney Emmons cited a number of other cases which, he claimed, showed that Wallace had a right to dispose of this free stock under the permission granted.

In closing his case Mr. Emmons read the notice sent to the A. W. Wallace & Company on June 18, 1920, asking that firm to explain its sale of the free stock and stating that a resolution was proposed to suspend its license. He said that such a letter was not a proper notice and was not a statement of charges. Wallace, he declared, had no intimation that his sale of the stock would be regarded as improper previous to this time, he had been given no warning and supposed that in view of the Commission's approval it was right to dispose of the stock in the promotion plan. The first word he received of the opinion of the Commission was this letter, setting forth that it regarded the sale of the 375,000 shares as illegal and calling upon him to turn the proceeds received over to the copper company. In other words Wallace was told, he said, that his license would be revoked unless he paid for property which did not belong to the copper company. He was not granted a fair and open hearing, he thought, but was informed that the transaction was illegal, and was suddenly called to answer the charges. Such a move, he contended, was illegal and indefensible. And so he sought and obtained the court order to prevent this step by the Commission to ruin his business, and now he asked that the order be made permanent.

Now as to the legality of the stock, Mr. Emmons said, the Commission validated certain stock out of the treasury but did not require the free stock held by older clients to be placed in escrow or suspended. Then how could the Commission later have authority to put stock of the same company held by the public in two sets, one legal and right to sell, the other ill legal and criminal to sell? How would a purchaser know which stock he was buying, legal or otherwise? The Commission must either validate a stock or not. But knowing that this free stock existed in the hands of another, the Commission still gave its approval to this security of the Michigan-Colorado company, being asked that the 500,000 shares be kept free so it could be used if necessary to help put the entire deal across. With that statement made at the hearing, the Commission left the stock free, stock owned by Mr. Carton and then the Wallace company. The Commission was asked to validate 975,000 shares, and if it did not want any more than this sold, it could have ordered the 2,000,000 shares placed in escrow.

Here Judge Carr interrupted with a query: "Then you considered when the Commission validated 975,000 shares, it also validated the 500,000 shares of free stock?"

"Yes," replied Emmons, "for how could the public tell which was which—which stock was authorized to be issued or which was already out." The Commission had either to cancel this stock, place it in escrow or permit its sale."

On such a condition A. W. Wallace & Company were entitled to a fair hearing before an impartial tribunal. This it was not to be granted. The tribunal had already decided, the company had no time to prepare its case, it was compelled before the hearing.

Attorney Master in outlining the case for the Commission said: "The Commission had not passed any resolution to suspend the license of A. W. Wallace & Company, nor had it said it would. Chairman Frank W. Merrick had introduced such a resolution and told Wallace it would be passed, but he was not the Commission. Wallace was informed action would be postponed and he would be given a hearing on June 29, 1920. Thus the claims of Wallace are unsubstantiated. Wallace is guilty of selling stock which had not been approved. If his contention is upheld, then while the Commission approved the sale of 975,000 shares only, Wallace could in reality sell much more than a million shares. Suppose the Commission would authorize the sale of only 25,000 shares of a stock. Then could most of the rest of stock held by outside parties be shipped into Michigan and disposed of? But we don't believe the law would permit any such action."

"But the stock in question did not belong to the applicant for permission," interjected the judge. "You believe, then, that no stock could be sold except by the express authority of the Commission?"

Attorney Emmons declared that the Commission must change its method, and must understand that when a company is approved, what stock not cancelled or placed in escrow can be sold.

With these final general statements by the attorneys, the case was closed and the judge promised an early decision on the matter. Should the Wallace contention be upheld, the present temporary injunction against the Commission will become permanent and A. W. Wallace & Company will be permitted to continue business as in the past. Should the injunction be dissolved, then the Commission will be able to take up consideration of the case, call Mr. Wallace for a further hearing on the matter, and if it believes evidence warrants, revoke or suspend the Wallace license as stock brokers.

COMING GROUP MEETINGS

Bankers in northwestern Michigan will meet May 17 at Traverse City to hold the spring group meeting of that district, while members of the southwestern Michigan Banker's Club will hold their spring meeting at Allegan, Thursday, May 26.

DIRECT WIRE CONNECTION

Phipps, Williams & Beeson, Saginaw, investment bankers and brokers, who recently became members of the Detroit Stock Exchange, have obtained direct wire service between their Saginaw office and the principal exchanges by a correspondent arrangement with Merrill, Lynch & Company.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	151	136
Columbia National Fire	13	19
Commerce Fin.	15	30
Detroit Mortgage, com.	6½	2¾
Detroit Mortgage, pfd.	5½	6¼
Detroit Copper & Brass	16	26
Detroit National Fire	65	66
Detroit Life	64	66
Eureka Croesus	50	51
Federal Bakeries Co.	57	60
Federal Discount Co.	6	6½
Fisher Body	88½	89½
General Necessities Corp.	11	12½
Gladys-Belle Oil, com.	20	23
Gladys-Belle Oil, pfd.	40	42
Great Lakes Engineering, new	11	14
Hoover Steel Ball	13	14
Hayes Wheel Co.	13½	14½
Interstate Fire	26	26
Invader Oil	..	116
Invader Oil (new)	60	65
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks Units	10¼	11
Jewett, Bigelow & Brooks, com.	6½	7¼
Kelsey Wheel	56	66½
Little Wonder Stove	1¾	1¾
Monroe Binder Board	26	66
Detroit Motor Bus	3	9
McCord Manufacturing, com.	2¾	10¼
McCord Manufacturing, pfd.	40	60
Michigan Copper & Brass	15	16
Mich. Fire & Marine	78	60
Noble Oil, com.	39	40
Petoskey Portland Cement	13½	14
Peninsular Fire Ins.	61	21
River Raisin Paper	6	8¾
Trippensee Mfg. Co.	6¾	7¼
Union Mtge., 100% com.	6¼	6¾
Union Mtge., 90% com.	6	11

Motor Stocks	Bid	Asked
Briscoe Motors	16	16
Columbia Motors	6¼	6½
Chalmers	¾	1½
Chevrolet	160	400
Cleveland	42	46
Curtis Aeroplane	4	6
Durant Motors	20½	20¾
Elgin Motors	5	6
Haynes	160	176
Hupp	14¾	14¼
LaFayette Motors	70	80
Liberty Motors	5½	6
Liberty Motors, pfd.	50	60
Lee Tire	66¼	67½
Pierce-Arrow Truck	91	92
Mercer	4	8
Mitchell Motor	6	9
Motorbus	5	9
Nash	300	666
Pierce-Arrow Truck	41	41½
Republic Truck	61	21½
Saxon Motors	6¼	6¾
Scripps Booth	26	36
Stearns	66	23¼
Stromberg Carburetor	88¼	89
Studebaker	32½	33
Willys-Overland	6¾	9
Wilson Truck	6¼	6
Grant Motor	4	4¼
Jordan Motor	75	100
Peerless Motor	56	60
White Motor	41	46

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd.	96	100
Austin Machinery Corp., com.	2½	3
Brunswick-Balke-Collender Co. cm. A	80	..
Brunswick-Balke-Collender Co. cm. B	..	66
Brunswick-Balke-Collender Co. pfd.	96	97
Continental Motors Corp., com.	6¾	7¼
Continental Motors Corp., pfd.	32	36
Linderman Steel & Machine Co. com.	11½	16½
Muskegon Finance Co., pfd., with 100% bonus of common	9	10
Occidental Hotel Co., pfd.	89	90
Shaw-Walker Co., pfd.	9½	10
United Home Telephone Co., com.	4	6
United Home Telephone Co., pfd.	6	3

Quotes by Allen G. Thurman & Co., May 3.



When Peter Grimm Returned

You know the story of Peter Grimm—

—how he lived, died and, as the story goes, returned in spirit form to his old home and his loved ones.

How he found upon his return that plans made for others during his life were going wrong.

Yet how helpless he was to set them right.

He could only watch and suffer.

Unlike Peter Grimm, you still have an opportunity to insure, to a great extent, the future happiness of those dear to you.

You can make many provisions in your will that will eliminate confusion, and perhaps heartaches, in the settling of your estate when that time comes—perhaps suddenly.

And you can safeguard the future even more surely by choosing wisely the executor of that will—

—choosing with the same care that you would use in any affair requiring good business judgment.

—choosing as you do now for the best interests of your business and your family.

The Union Trust Company is empowered by the state to act as executor of wills.

Its experience, resources and facilities are centered on such exacting work.

The cost to your estate is low and is limited by statute.

We will send you literature on wills and executors or we will tell you the facts personally at your request. Write or phone us.

Union Trust Company

First trust company in Detroit

Digitized by Google

Motor Stocks

Wm. A. Neer & Co.
Members Detroit Stock Exchange

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

LEWIS G. GORTON
Stocks and Bonds
1418 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.
1 short blocks from Union Station.
HOTEL BROWNING, GRAND RAPIDS, Mich.

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

RESOURCES	May 4, 1921	Apr. 27, 1921	May 7, 1920
Gold and gold certificates	364,241	347,946	152,883
Gold settlement fund—Federal Reserve Board	482,200	488,319	392,750
Gold with foreign agencies	.....	.....	112,781
Total gold held by banks	846,441	836,165	678,215
Gold with Federal Reserve agents	1,326,887	1,317,860	1,121,311
Gold redemption fund	150,827	163,844	142,054
Total gold reserves	2,324,358	2,317,869	1,941,580
Legal tender notes, silver, etc	174,540	187,191	134,507
Total reserves	2,518,898	2,504,763	2,076,087
Bills discounted			
Sec. by U. S. Government obligations	892,266	920,537	1,144,175
All other	1,172,879	1,143,302	1,060,447
Bills bought in open market	94,302	103,609	409,834
Total bills on hand	2,159,547	2,167,448	2,614,456
U. S. Government bonds	25,489	25,690	26,786
U. S. Victory notes	19	19	68
U. S. certificates of Indebtedness—			
One-year certificates (Pittman Act)	289,375	289,375	259,375
All other	3,005	2,708	13,662
Total earning assets	2,476,439	2,485,140	3,214,357
Bank premises	21,908	21,892	12,457
5% Redemption fund against F. R. bank notes	19,886	21,339	12,128
Uncollected Items	524,654	519,826	761,490
All other resources	12,430	11,578	6,731
Total resources	5,516,412	5,504,480	6,026,229
LIABILITIES			
Capital paid in	101,857	101,235	92,526
Surplus	202,026	202,036	120,120
Deposits—			
Government deposits	23,509	25,872	22,127
Due to members—reserve account	1,671,001	1,656,718	1,818,615
Other deposits, including foreign government credits	24,428	23,309	24,284
Total deposits	1,728,911	1,725,899	1,935,376
F. R. notes in actual circulation	2,828,584	2,830,118	3,092,344
F. R. bank notes in circulation—net liability	153,859	156,249	177,972
Deferred availability items	441,069	430,700	541,584
All other liabilities	60,106	56,243	63,357
Total liabilities	5,516,412	5,504,480	6,026,229
Ratio of total reserves to deposit and F. R. note liabilities combined	55.3%	55.0%	*42.7%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	67.7%	67.3%	*47.1%

*Calculated on basis of net deposits and F. R. notes in circulation.

Banks and Bankers

STATE EXAMINERS' BANQUET

State bank examiners from all sections of Michigan were in Lansing, Friday evening, May 6, for a banquet in honor of Frank W. Merrick, retiring state banking commissioner, and the new commissioner, Hugh McPherson. Tribute was paid Mr. Merrick for the manner in which he had conducted the office for six years and regret was expressed at his departure. However, Mr. McPherson was recognized as a banker of experience and the same harmony of relationship as has existed was pledged for continuance.

McCONNELL SPEAKS IN LANSING

R. M. McConnell, vice-president of the National Bank of Commerce, Detroit, in an address before the Lansing Buyers' Club last week blamed the retail merchant for the tight money situation and delay in return to normal conditions, because he had failed to cut prices to conform with the reductions made by the wholesalers and producers.

TWO PONTIAC BANKS MERGE

Through the merger of the Pontiac Commercial & Savings and the Oakland County Savings, Pontiac will have a million-dollar bank as well as one of the largest banks in the state outside of Detroit. The merger is to be completed May 31, and Cramer Smith, president of the Pontiac Commercial & Savings Bank, will be president of the new institution On January 1, 20, the Pontiac Savings Bank, capital, $500,000, and the First Commercial Bank, capital, $200,000, were merged into the First Commercial & Savings Bank. The absorption of the Oakland County Savings Bank brings the third bank into the union. The Pontiac Commercial has deposits of $9,261,-877.74; the Oakland Bank, $2,051,257.55. For the time being two banks will be operated, but eventually a new bank building will be constructed and the three united under one roof.

GORMAN TAKES NEW POST

Frank E. Gorman, state treasurer, has assumed his new duties as cashier of the Capital National Bank, Lansing, succeeding Robert Y. Speir, who was promoted to be manager on the death of Fred C. Wherrett.

STATE BANK OF MERRILL

The State Bank of Merrill reports total deposits, April 28, of $592,902. R. T. Maynard, cashier of the Commercial National Bank, Saginaw, is president and John R. Duffy is cashier.

BANK OF DETROIT LISTS STOCK

The $1,000,000 capital stock of the Bank of Detroit was listed on the Detroit Stock Exchange, May 9. The dividend record is as follows: December 31, 1917, 1½ per cent; 1918, 8 per cent; 1919, 10 per cent; 1920, 10 per cent; present rate 10 per cent.

McCLISH SUCCEEDS CHAPPLE

V. L. McClish is the new manager of the east side branch of the National Union Branch, Jackson, having succeeded L. D. Chapple, who

Digitized by Google

resigned to manage the Jackson office of Webb, Lee & Company. Mr. McClish was for four years with the Central National Bank, Battle Creek; one year with the City National Bank, Lansing, and has been in the main office of the National Union about three years.

PRIVATE BANK CLOSES

The Farmers & Merchants Bank, Jones, Cass county, a private bank operated by Jones & Stanard is closed. Walter C. Jones was president.

NEW EATON RAPIDS QUARTERS

The Michigan State Bank, Eaton Rapids, has purchased the Vaughan block, at Main and Hamlin streets, and will make changes and improvements and occupy part of the premises. The bank was organized in 1884 and its resources are $700,000.

CHARCOAL IRON REPORT

Following is the annual report of Frank W. Blair, president of the Charcoal Iron Company of America, as submitted to stockholders at their meeting in Detroit last week:

"As indicated in our report for the year 1920, the net profits for the first nine months of that year amounted to $1,202,828.59. For the last quarter of 1920 the business situation throughout the entire country became so thoroughly demoralized in all lines as to cause us a loss of $157,264.94 for that period. The first quarter of 1921 has shown very little if any improvement in the market for iron, chemicals or lumber, and the statement hereto attached accordingly reflects the dull business situation by showing a lose of $86,845.66, which is a considerable reduction from the loss sustained in the previous quarter, and brought about largely through reductions in overhead expense.

PRODUCTION

"The total production and the quarterly average for the year 1920, as well as for the production for the first quarter of 1921, are shown in the following table:

Product	Total 1920	Quarterly Average 1920	First Quarter 1921
Pig iron, tons	92,456	23,564	14,474
Alcohol, gals.	1,129,518	382,379	234,022
Acetate, lbs.	16,784,836	4,196,209	1,346,226
Lumber, ft.	12,378,754	3,069,688	.....
Ore, tons	348,007	87,001	54,167

SHIPMENTS

The record of shipments of products for the year 1920 and first quarter of 1921 is set forth below:

Product	Total 1920	Quarterly Average 1920	First Quarter 1921
Pig iron, tons	75,459	18,864	4,661
Alcohol, gals.	576,534	144,133	57,573
Acetate, lbs.	7,948,626	1,987,156	2,306,512
Lumber, ft.	5,849,656	1,467,414	974,365
Ore, tons	337,035	84,256	31,159

"These figures point most accurately to the extent to which the business depression has affected the company. In our last report we mentioned that only the Manistique and Ashland chemical plants and furnaces, with the Yale mine on a limited scale, were being operated. Since that time both Ashland and Manistique operations have been entirely discontinued and the only point at which the company now is at all active is at the Yale mine, which is being operated on part time for the purpose of carrying out our ore contracts.

"For the convenience of stockholders a comparison of the principle items in the 1920 and present balance sheets is presented.

ASSETS	Dec. 31, 1920	March 31, 1921
Property account	$10,856,996.60	$10,856,495.77
Current assets	4,184,324.07	4,111,602.96
Deferred charges	121,614.21	168,722.72
	$15,162,924.88	$15,146,720.55
LIABILITIES		
Capital	$ 8,056,600.00	$ 8,056,600.00
Deferred	1,005,196.31	963,463.26
Current	2,280,241.51	2,439,658.80
Reserves	1,918,723.49	1,921,668.54
Surplus	1,952,175.57	1,765,329.91
	$15,162,924.88	$15,146,720.55

THE OLDEST HOUSE IN MICHIGAN

CITY OF RIO DE JANEIRO
The Capital of Brazil
5% SINKING FUND GOLD BONDS OF 1909

SECURITY: 1. Unconditionally guaranteed by the U. S. of Brazil.
2. Secured by a lien on the Trades and Professions Tax.

SINKING FUND: Direct Municipal obligation. Bonds are being retired by annual cumulative sinking fund which will retire entire by 1934.

THREE OPTIONS AS TO PAYMENT: 1. Sterling. 2. Swiss Francs. 3. Dutch Guilders.

YIELD: 15½% to 11¾%, depending on maturity and rate of exchange.
PRICE: Subject to change, $460 flat for £200.

We recommend this issue as an exceptionally high grade municipal investment.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

The Extensive Field

in which we operate is in itself assurance that this institution is equipped to handle a wide range of banking requirements entrusted to us by business houses and financial institutions.

Consultations and correspondence invited.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Kalamazoo Stocks.

Paper Companies

	Bid	Ask
American Box Board, com.	..	..
American Box Board, pfd.	..	..
Bardeen	18	19½
Bryant	18½	19½
Eddy, com.	9	4
Eddy, pfd.	..	10
Hawthorne	19	19¼
Kalamazoo, new	18	20
King	18	19
Lee, unlis.	106	108
Mac Sim Bar	..	19½
Michigan	18½	19½
Monarch	18½	18½
Rex	18	18
Northern Michigan Pulp	100	128
Standard	20	30
Sutherland	9¾	10½
Watervliet	19¾	20¾
Western Board	..	20

Banks

First National	220	230
Home Savings	170	190
Kalamazoo City Savings	150	155
Kalamazoo National	150	155

Miscellaneous

Barley Motor, com.	25	50
Barley Motor, pfd.	25	50
Hayes Wheel	..	..
Kazoo Loose Leaf	13¾	14½
Kazoo Corset	..	10¾
Utah-Idaho Sugar	..	..
Kalamazoo Dairy Mfg.	..	19¾
Limousine Body	..	19¾

Quotes by Olmsted & Mulhall, May 10.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	8	..
Economy Baler Co., com.	9¼	..
King Trailer Co., pfd.	..	..
Hoover Steel Ball, com.	19	..
Mich. Milling Co., com.	..	7½
Motor Products Co., com.	..	..
Prod. Foundries, com.	..	7¼
C. A. Sauer Co.	5	9

Quotes by Langley, Hildner & Co., May 3.

Pontiac Stocks

	Bid	Ask
Airlite Baking Co.	19	25
American Forge & Socket	..	4
Michigan Drop Forge	98	99
Pontiac Mortgage & Investment Co.	95	100
Van Auken Top	..	10

BONDS

Detroit & Pontiac Ry. 5s, 1928	98	99
Detroit & Pontiac Ry. 4½s, 1928	83	84

BANK STOCKS

Pontiac Commercial Savings	155	170
Oakland County Savings	150	155
American Savings Bank	149	150
National Bank of Pontiac	130	140

Quotes by Hughes, Burke & Co., May 9.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co.	93	98
Auto Body, com.	7	9
Auto Body, pfd.	8	9
Bates & Edmonds Motor Co.	..	18
Federal Drop Forge Co.	9¼	10
Firt Bond & Mortgage Co., Lansing Company	98	99
Michigan Mortgage Co.	98	99¼
Michigan Screw Co.	18	88
Motor Wheel Corporation	9¾	10¼
Novo Engine Co.	93	98
Reo Motor Car Co.	181	214
Lansing Stamp & Tool	17	..

Quotes by G. M. Murchey & Co., May 8.

Detroit Listed Bonds

Sales Week Ended May 10

Detroit Edison 7s, 1930, $.400 @ 98¾.
Detroit Edison 6s, 1931, $.000 @ 102.
Detroit Edison 7s, 1932, $00 @ 84¼.
Detroit Edison 7s, 1930, 100 @ 85½.
Detroit Edison 6s, 1931, $.000 @ 101¾.
Detroit Edison 5s, 1940, 1.000 @ 78½.

Sales Bank Stock

30 Merchants Nat'l @ 181.
Listed stocks, $3,285.00 shares.
Unlisted stocks, 139,074.00 shares.

A CORRECTION

We have been advised by Hughes, Burke & Company, Pontiac, that the quotation of $12 asked price in our issue of May 7 for Michigan Drop Forge should have been $32. Current quotation on this stock is given as 36 bid, 38 asked.

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	19	19¾	18
Bow Chemical	200	200	200
Firestone Tire & Rubber	92	90	87
Do, pfd.	97	95	76
Fisher Ohio Body	19	20	19
Do, pfd.	98	78½	81
Goodyear Tire & Rubber	11	29	8½
Do, pfd.	83¾	90	80
Miller Rubber	73	90	47
Murray Ohio	9	6	8
National Acme	81½	98¾	80½
Paragon Refining	10½	25½	12½
Portage Rubber	18	87	15
Do, pfd.	36	40	30
Standard Paris	1	11	1
Do, pfd.	2½	40	46
Victor Rubber	80½	90¾	..
Youngstown Sheet & Tube	61	79	79
Do, pfd.	104	104½	103¾

Quotes by Otis & Co., May 7.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	10	10¾
Commonwealth Power	9¾	10¾
Loftin Bute, pfd.	8¾	10¼
Michigan Sugar, com.	7½	7¾
Michigan Sugar, pfd.	3	3¼
National Grocer, com.	7	7¼
National Grocer, pfd.	81	84
Saginaw Shipbuilding Co.	7¾	8½
Symons Bros.	11	11½
Valley Home Tel. Co., pfd.	..	48

BANK STOCKS

Second National	305	315
American State Bank	300	310
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	305	315

Quotes by Phipps, Williams & Beeson, May 9.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 8	$107,699,994	$121,498,804
January 12	95,178,447	110,387,569
January 19	101,998,993	131,941,987
January 26	79,015,807	87,841,859
February 2	87,995,996	91,779,032
February 9	78,800,489	101,949,808
February 16	79,081,988	101,298,770
February 23	67,711,081	98,888,787
March 2	88,935,599	117,098,984
March 9	76,788,858	109,011,868
March 15	98,998,483	129,179,059
March 23	90,186,495	148,997,898
March 29	89,081,971	118,481,898
April 6	79,195,971	104,805,981
April 13	81,881,987	128,881,967
April 20	96,777,698	131,696,149
April 27	90,898,900	142,985,676
May 3	91,044,099	114,786,797
May 11	79,818,968	107,499,992
Month of		
January	389,480,998	467,281,870
February	302,841,888	485,286,896
March	377,878,840	570,489,898
April	884,294,979	540,878,869
May		484,880,958
June		888,768,897
July		528,884,148
August		589,888,676
September		561,898,840
October		518,488,784
November		468,088,440
December		451,284,845
Yearly totals, 1920		$6,188,888,905
Yearly totals, 1919		$4,504,888,186

Grand Rapids Stocks

American Public Utilities, Common	7	12
American Public Utilities, pfd.	14	21
Commonwealth P. R. & L., com.	9	11
Commonwealth P. R. & L., pfd.	39	51
Citizens Telephone Company	4½	4½
United Light & Railways, com.	84½	85½
United Light & Railways, pfd.	80	82
Utilities Service, Bankers' shares	99¼	29¾
Utilities Service, com.	240	245
Utilities Service, pfd.	67	67½
Commonwealth P. R. & L., pfd.	126	130
Utilities Service, Debenture "C"	92	95
Utilities Service, Debenture "D"	83	86

Quotes by Howe, Snow, Corrigan & Bertles, May 9.

Michigan Bond Items

The common council of Hillsdale this week authorized the issuance of $35,500 of municipal bonds, known as "Hillsdale Paving District No. 2" bonds for the improvement of Hillsdale street. The work is being done by the Asphalt Paving Company of Hamilton, Ohio. The bonds will be issued in two sets, the first twenty-five in the sum of $500 each, due on May 15 of each year as follows: Nos. 1-5 in 1928; Nos. 6-10 in 1929; Nos. 11-15 in 1930; Nos. 16-20 in 1931; Nos. 21-25 in 1932. These bonds and interest are payable out of the pavement, interest and sinking fund of the city.

The second set comprises forty-six bonds covering the part of the cost of the improvement to be borne by the property benefitted and will be termed as follows; Nos. 1-9 payable May 15 1928; Nos. 10-18 in 1929; Nos. 19-27 in 1930; Nos. 28-37 in 1931 and Nos. 38-46 in 1932.

Both sets are negotiable coupon bonds bearing interest at the rate of six per cent, payable semi-annually on May and November 15 of each year until maturity.

Watling, Lerchen & Company, Detroit, are offering an issue of $1,250,000 of first mortgage, 10-year bonds of the Eddy Paper Company at 98¼, to yield 7.75 per cent. These bonds, a complete description of which will be found in the advertising columns of this issue, are a closed first mortgage on property said to be worth nearly five times the amount of the loan. The Union Trust Company of Detroit is trustee. It would appear from the description that the bonds would qualify as savings investments for Michigan savings deposits.

By a vote of 358 to 48 taxpayers of the village of Ford voted Monday to issue water works extension bonds for $37,919 for the purpose of connecting up the water system of that village with the filtered water system of Wyandotte. The city of Wyandotte has entered into a contract with Ford Village to furnish filtered water for a period of years. Heretofore Ford water, which was pumped from the Detroit river, was the cause of giving the village the highest typhoid death rate in Michigan, according to the State Board of Health Bids will soon be advertised for for the sale of the bonds.

A few days ago the city controller of Saginaw put on sale $100,000 of sewer bonds and $100,000 of street improvement bonds, dated May 2 and bearing five per cent interest. Sales the first day totaled nearly $50,000.

Voters of Corruna have decided in favor of authorizing a bond issue of $9,000 for paving purposes.

The state administrative board has announced that $3,000,000 of highway improvement bonds will be sold June 1, for which State Treasurer Gorman will receive sealed bids until May 25. Bonds will be in denominations of $1,000, dated June 1, 1921, due June 1, 1941, and bearing interest at 5½ per cent. A certified check for one per cent of the amount of each bid, payable to the treasurer, must accompany each offer. This issue will bring the total highway bonds outstanding up to $10,000,000.

The Dowagiac school board is sounding sentiment for a $400,000 bond issue to meet school needs declared to be urgent. Mass meetings are being held and the board has offered one of four plans. A high school, the most pressing need, may be built at once, according to D. H. Perkins, Chicago architect. Unless taxpayers indicate they will build to the extent of $200,000, the unit plan cannot be put into execution. If the mass meetings indicate a

Digitized by Google

Michigan Bank Statistics

Name		Previous Published Statement Book Val.	Capital	Deposits	April 28 Deposits
Adrian State Savings	Adrian	216	$ 120,000	$ 2,009,037	$ 2,002,080
Lenawee County Savings	"	155	150,000		2,150,896
Commercial Savings Bank	"	127	110,000	1,521,513	1,542,076
National Bank of Commerce	"	130	100,000	1,272,765	1,178,916
Alma State Bank	Alma		$ 82,157	692,780	
Alpena County Savings	Alpena		1435,792	3,268,077	
State Savings Bank	Ann Arbor		1599,481	3,930,218	
Farmers & Mechanics	"		1306,812	2,183,317	
Ann Arbor Savings	"		2654,543	4,708,357	
First National Bank	"		1181,191	1,349,534	
American State	Detroit	147	1,000,000	18,584,766	14,491,109
Detroit Savings	"	151	1,500,000	23,152,629	22,570,151
Home Savings	"	266	1,500,000	22,794,126	21,654,277
First and Old Detroit National	"	195	6,000,000	57,265,542	60,863,038
Central Savings Bank	"	140	1,000,000	16,538,911	15,948,537
First State	"	161	1,000,000	11,963,285	11,789,417
Highland Park State	Highland Park	196	1,000,000	13,790,118	12,824,907
Merchants National	Detroit	166	2,000,000	10,003,295	10,338,793
National Bank of Commerce	"	229	1,500,000	22,882,718	24,237,142
Peninsular State	"	167	2,500,000	29,446,643	28,376,155
People's State	"	280	5,000,000	92,905,338	98,917,580
United Savings	"	159	500,000	6,988,505	6,980,586
Wayne County Home	"	258	4,000,000	71,893,857	68,820,235
American Loan and Trust	"	131	300,000	x2,416,842	
Bankers Trust	"	117	300,000	x2,231,198	x2,302,170
Guaranty Trust	"	172	300,000	x2,421,827	x2,498,948
Detroit Trust	"	256	2,000,000	x11,319,434	x11,091,987
Security Trust	"	338	800,000	x4,114,984	x4,042,945
Union Trust	"	192	1,000,000	x9,784,663	x9,383,081
Commonwealth-Federal	"	123	750,000	9,006,167	8,830,899
Bank of Detroit	"	159	1,000,000	16,622,260	17,760,015
Continental Bank	"	120	700,000	705,588	801,656
Michigan State	"	110	250,000	2,190,838	
American State	Dearborn	126	100,000	321,163	317,448
American State	Highland Park	132	200,000	2,098,452	1,700,634
Peninsular State	"	116	200,000	1,162,994	1,098,336
Rouge State Bank	River Rouge	120	50,000	344,798	277,311
Industrial Morris Plan	Detroit	119	500,000		x2,666,201
Hamtramck State	Hamtramck	135	25,000	2,634,566	
Peoples' National	"	161	100,000	927,830	
River Rouge Savings	River Rouge	260	50,000	1,264,096	1,153,552
City National Bank	Battle Creek	144	250,000	4,073,376	
Merchants Savings	"	134	250,000	2,727,545	
First National	Bay City	265	200,000	2,590,622	3,879,759
Bay County Savings	"	382	100,000	4,676,373	4,404,856
Bay City Bank	"		1558,207	4,360,404	
Peoples Commercial and Savings	"		1,167,551	8,238,750	7,672,336
Farmington State Bank	Farmington	177	40,000	604,447	
Citizens Commercial & Savings	Flint				
First National	"	232	200,000	3,317,770	
Genesee County Savings	"	260	500,000	6,982,155	
Industrial Savings	"				
Union Trust & Savings	"				
Grand Rapids Savings	Grand Rapids	204	400,000	10,325,117	11,756,347
Fourth National	"	197	300,000	4,349,867	4,296,963
Commercial Savings	"	134	300,000	3,237,848	2,945,099
City Trust and Savings	"	138	200,000	2,566,059	2,362,883
Peoples Savings Bank	"	163	200,000	2,062,828	2,260,222
Kent State	"	266	500,000	11,562,317	11,477,053
Grand Rapids National City	"	129	1,000,000	7,940,353	6,357,360
Grand Rapids Trust Co	"	165	300,000	x988,228	x986,202
Michigan Trust Co	"	139	1,000,000	x3,031,078	x2,642,181
Morris Plan Industrial	"	156	50,000		x981,936
Old National Bank	Grand Rapids	254	800,000	10,145,562	9,734,564
Central State	Jackson		100,000	700,820	
Jackson State Savings	"	151	300,000	1,940,393	1,854,959
Peoples National	"	183	150,000	4,673,908	
Jackson City Bank	"	260	200,000	2,721,973	3,044,847
National Union	"	183	400,000	4,150,024	4,411,421
Kalamazoo City Savings	Kalamazoo	161	600,000	6,696,972	
Kalamazoo National	"	143	500,000	6,936,188	4,707,491
Capital National	Lansing	190	300,000	4,116,430	4,291,007
City National	"	239	250,000	5,774,509	5,924,473
American State Savings	"	183	500,000	6,945,548	7,686,972
First National	Marquette	234	150,000	3,334,402	3,353,699
Dunand State Bank	Monroe	138	200,000	2,467,209	2,360,852
First National Bank	"		200,000	1,748,104	1,702,106
Hackley National	Muskegon	189	400,000	3,307,954	3,930,734
National Lumberman	"	302	100,000		2,770,404
Muskegon Savings	"	161	100,000		2,032,324
Union National	"	163	400,000		3,654,863
Oakwood State Bank	Oakwood	127	75,000	644,240	
Pontiac Commercial and Savings	Pontiac	140	750,000	9,629,322	9,261,877
Oakland County Savings	"		350,000	x1,177,223	3,016,300
American Savings Bank	"	150	400,000	1,900,000	1,980,635
National Bank	"		200,000	1,373,378	1,295,924
Federal Com. and Sav	Port Huron		300,000		4,859,318
First National Exchange	"	237	150,000	4,555,204	4,989,919
U. S. Savings	"	161	100,000	1,208,970	
American State	Saginaw	153	200,000	2,787,202	3,532,640
Bank of Saginaw	"	156	1,000,000	17,410,965	
Commercial National	"	231	100,000		1,431,000
Second National	"	282	500,000	9,587,443	8,766,743
Peoples Savings	Saginaw	232	100,000	2,930,000	
Central State	Sault Ste. Marie	124	100,000	1,031,277	
Traverse City State	Traverse City	156	200,000	3,016,462	

xTotal Assets. †Cap., Sur. & Und. Profits.

new school as the need, the bond issue will be voted upon at a special election.

Lowered building costs have spurred the school board of the Rockford district to action relative to the erection of the new high school building, for which bonds of $70,000 were authorized in 1919. Bids submitted several months ago clung close around the $100,000 mark, but recently an estimate has been received for the erection of the building at $85,000. Acting upon the hope that still further decreases will come, the board called a special meeting Monday evening, at which time they were authorized to sell the bonds at a rate not exceeding six per cent, serially, the first falling due in five years and carrying the privilege of refunding at the end of the period of fifteen years.

Plans are being worked out for the placing of concrete pavements over at least four blocks of the village streets of Rockford during the present year. These streets will be full width, curb to curb, and will doubtless be paid for by an issue of bonds which will be called for at a later date.

A special meeting was held recently which was attended by the township boards of Algoma and Plainfield townships and the village council of Rockford, at which time the road west of the village to three-corners of a mile was ordered placed on a state reward basis, and when accepted by the county road commission, it will become a part of the county system. Both township and the village will share equally in the expense.

The Jackson City Bank has purchased at par a $400,000 Jackson county bond issue authorized by the supervisors at their recent session.

Bids on $100,000 of Sault Ste. Marie waterworks bonds, refunding a portion of an old issue, will be opened by the city commission June 6. The bonds are to expire serially, $10,000 each year for ten years. The issue is to take care of the unredeemed portion of a $120,000 waterworks bond issue of twenty years ago. Of the bond issue, $4,000 was lifted last year and $16,000 is being taken up this spring by cash on hand, leaving $100,000 which must be refunded.

Electors of Houghton county will vote June 7 on the question of bonding the county in the sum of $200,000 for highway improvements. The proposed bonds will run 20 years, the paying interest at the rate of 5½ per cent. A provision will be adopted, in event the issues carries, to retire the bonds in less than ten years by the payment of a premium, probably one-half of one per cent for each year the bonds are yet to run.

The voters of the city of Hancock, Houghton county, will vote June 7 on the question of bonding the city for $650,000 to take it over a period of financial stress.

ROAD BIDS CLOSE MAY 18

CHEBOYGAN, May 10.—Bids have been advertised for by the county road commissioners for the paving of Mackinaw avenue from Main street to Smith's Creek, a distance of a mile. Specifications call for a 32-foot concrete pavement. The state highway department will construct a 20-foot concrete road over this distance, the city being asked to furnish $12,800 to construct the additional twelve feet. Bids close May 18.

RUDY FURNACE ISSUE OFFERED

The Rudy Furnace Company, Dowagiac, is offering investors $175,000 of its eight per cent preferred stock as a part of a $325,000 issue the stockholders sanctioned to carry out plant extension.

Stockholders at a recent meeting voted to capitalize at a million dollars and the Michigan Securities Commission authorized a $650,000 issuance, of which $325,000 is common and $325,000 preferred. Common stock owners of December 31 inherited the common stock.

The stock issue was voted to build a warehouse. The company, like other furnace concerns, is feeling the business depression, but is going ahead on the theory that normalcy is near at hand. They are making stoves and furnaces, but are without room to store them. Dowagiac warehouses are filled to the overflowing and the big factories of the "stove city" have redneed forces, but will not close down entirely.

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg. Phones Cherry 8640

We solicit your inquiries

Detroit Tigers' Home Dates for 1921

May 14, 15, 16, 17	Washington
May 18, 19, 20, 21	Boston
May 22, 23, 24, 25	Philadelphia
May 26, 28, 29	Chicago
May 30 a. m., p. m., 31	Cleveland
June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

MATTHEW FINN

High Grade Municipal and Corporation Bonds

Bought—Sold—Quoted

716 Penobscot Bldg. Detroit, Mich.

A DUPLEX TRUCK APPOINTMENT

Kurl P. Hodges has been assigned to the assistant sales managership of the Duplex Truck Company, Lansing

COMPANIES AND DEALERS APPROVED

The following companies and dealers were approved by the Michigan Securities Commission at its April meetings:

Allen Screen Co., Detroit; Associated First National Pictures of Michigan, Detroit; Acason Motor Truck Co., Detroit; Belle Isle Coliseum Co., Detroit; Bay City Gardens of Bay City; Commonwealth Mortgage & Investment Co., Lawton; Cheboygan Tile & Brick Co., Cheboygan; Central & Coast Co., Chicago; Clinton (Tramcar) Co., Elsie; Commercial Bonding & Mortgage Co., Detroit; Crosed Stave Corp., Grand Rapids; Calumet Garment Co., Laurium; Columbia Corp., Detroit; Coffee Dan's, Inc., Detroit; Curran Motor Products Co., Detroit; D. A. C. Garage, Detroit; Detroit Casket Co., Detroit, Eagle Products Co., Grand Rapids; Ferndale Land & Title Co., Detroit; Farmers Sugar Co., Columbus, Ohio; H. R. Finn Corp., Detroit; Gillett Motor Products Co.; Howard City; Gunsberg Packing Co., Detroit; Gohr Brothers Contracting Co., Lansing; General Refining Co., Tulsa, Okla.; Great Lakes Fuel Co., Detroit; Hughes, Gordon, Brasie & Co., Detroit; Inyo Chemical Co., Big Pine, Cal.; Jackson Screw Products Co., Jackson; James Washing Machine Co., Detroit; Kennedy Steel Corp., Danville, Pa.; Knickerbocker Co., Jackson; Meier, Alderton Shoe Co., Saginaw; McIntyre Machinery Co., Detroit; Michigan-Yukon Development Corp., Wilmington, Del.; Michigan Tire & Accessories Co., Grand Rapids; Northern Theatre Co., of Detroit, Highland Park; "New-Way" Motor Co., Lansing; Northern Fox Island Fur Farm, Shelby; Naco Corp., Detroit; Potomac Development System, Detroit; Pennsylvania Guaranty Corp., Pittsburg, Pa.; Providential Assurance Co., Chicago, Ill.; Pontiac Mortgage Investment Co., Pontiac; Roosevelt Airplane Co., Grand Rapids; Seven Islands Park & Hotel Co., Grand Ledge; Star Oil Co., Inc., Port Huron; Shiffler-Cumber Finance Corp., Detroit; St. Joseph Iron Works, St. Joseph; United Land Contract & Mortgage Co., Jackson; Viking Motors Co., Detroit; Worden Grocer Co., Grand Rapids; Workingmen's Co-Operative Store (Unit Two), Niles; Wolverine Bond & Mortgage Co., Ltd., Detroit; Wolverine Housing & Financing Co., Detroit; Zeeland Canning Co., Zeeland; Abitibi Power & Paper Co., Ltd. (Bonds), Montreal; Baker Land Co. (Bonds), Detroit; Barnhart Brothers & Spindler (Notes), Chicago; Cromwell Steel Co. (Notes), Cleveland; Richard H. & Ida Culbertson (Bonds), Detroit; Dan Hoan Product (Bonds), Detroit; Duplex Printing Press Co. (Notes), Battle Creek; Eastern Building Co. (Bonds), New York; Benjamin W. Fine (Bonds), Detroit; Fort William Paper Co., Ltd. (Bonds), Port Arthur, Ont.; H. B. & R. Knight, Inc. (Bonds), Boston; Loop Office Building Corp. (Bonds), Chicago; Mogul Petroleum Corp. (Notes), Adrian; Mark & Sarah Mitsakis (Bonds), Detroit; Chas. F. Noble Oil & Gas Co. (Bonds), Okla.; Oklahoma Gas & Electric Co. (Bonds and Notes), Oklahoma City, Okla.; Packard Motor Car Co. (Bonds), Detroit; Park Investment Co. (Bonds), Cleveland; Ryerson Co. (Bonds), Detroit; Standard Oil Products Co. (Bonds), New York; Samuel Tapper (Bonds), Detroit; U. S. Building Material Co. (Bonds), Chicago; Venango Oil (Bonds), New York; Western Smelting & Power Co. (Bonds), Seattle, Wash.

Dealers—Atwater & Atwater, Detroit; Bankers Bond Co., Detroit; Campbell & Co., Detroit; Campbell, Smith & Co., Detroit; Benjamin Dansard & Co., Detroit; Finance Corporation, Detroit; Fletcher American Co., Indianapolis; Corlolinus F. Garnett, Montague; Mitchell, Hutchins & Co., Chicago; George P. McMahon Co., Detroit; Walter L. Nash Co., Detroit; Peoples Finance Corp., Detroit; G. F. Redmond & Co., Inc., Boston.

The license of the Cloverland Cattle Company, Manistique, was suspended.

The Current-Detroit Radiator Company, Detroit, was reinstated.

A Symposium on World Trade

(*Continued from Page 5*)

its work that all diplomatic matters shall be promptly passed on to the State Department. At the same time, if the department is to serve properly the best interests of the country, there must be perfected means of demand to insure not only the gathering but the dissemination of information of value to the business world while it is still fresh and without allowing it to become subject to the channels of diplomacy for consideration."

The Third Problem

Third on Mr. Taylor's list of problems is exchange, regarding which, he says, there is a grave misunderstanding among Europeans. Here we come upon one of the paradoxical international viewpoints. One minute Europe declares the United States a nation of braggarts, boasting of powers we do not have, and the next minute we are charged with being a nation that can do anything it wants to when it wants to, and one of the things it could do if it wanted to is take the profit out of the exchange rate. Mr. Taylor said:

"How are we to make our European friends understand that the collapse of exchange is simply the barometer indicating what is going on in the financial relations of the nation and nation? The disturbance of exchange stands in the way of normal commercial relations between America and Europe. It creates a barrier that makes it difficult for our foreign customers, whose needs are very great, to receive and to pay for our products.

"As a result of several visits I have made recently to my European friends, I find many of them disposed to regard the abnormal exchange rates as something for which we Americans are responsible. They cannot get away from the idea that when we insist upon settlements in dollars we are making additional profits out of the transactions. Some have even said that if we were friendly enough and clever enough we could find a way by which they could escape this drain on their resources.

"I sometimes think it is inbred in the ordinary Frenchman's mind that we manufacturers in this country are actually getting three times the profits on our products sold in France as compared with the profits on the same products sold in the United States. This psychological misunderstanding is a heavy drag on the export business and particularly affects the buyer of those goods that, in a measure, are actually non-competitive. They want them because of their individual character; because they are better than goods made elsewhere; because they represent the development of American genius; but in their souls they believe that they must be charged, and it requires the calm reasoning of our ablest men to bring home to them that our goods cost us dollars, and that they must be paid for in the full equivalent of dollars. Our foreign friends must expect to pay enhanced prices in their own currency, because it is a fact that the conditions arising out of exchange are matters beyond our control.

"All this is dwelt upon because we must realize that we have a responsibility to see that we are not misunderstood. A regard for the decent opinion of all mankind is most important and, so far as we can make ourselves heard, we ought to clear up all misunderstandings that reflect upon our country.

As to Credits

Probably the most vital issue under consideration in the convention was extended credits. It was fourth among Mr. Taylor's problems. His brief remarks on the subject were as follows:

"Since our customers need our goods today, and cannot pay for them tomorrow or the next day, how shall we sell them on long-time credits? They have a right to ask for long credits because it is a fact that we have become a creditor nation and ought to be able to give them financial assistance. It will be a reflection on us if we as manufacturers and our friends in the banking business cannot get together and establish sound machinery for international trading. No matter how good the credit of customers may be, there are few

Digitized by Google

manufacturers in this country who can afford to finance exports upon short-term paper bearing their own indorsement. The difficulty is that such extended credit is a mere temporary bridge to enable our customers to buy what they cannot pay for now. It is a bridge to carry the load until the balances in foreign trading right themselves.

"Frankly, there is no one suggesting such a temporary bridge unless there is under construction a permanent bridge with solid abutments at both ends. There must be an adequate plan prepared and under construction based upon the reasonable determination that there is to be balance in trade with a reasonable time.

"As stated above, foreign business is not to be done by chance and foreign credits are not to be granted by chance. We are in fact a creditor nation, therefore it is our responsibility that a stabilizing plan, a permanent bridge shall be built up by co-operation between our bankers and our manufacturers. Maybe as two classes of citizens we do not know each other well enough even to talk together intelligently, but we ought to try jointly to formulate the basis by which our power to extend credit can be used effectively. An impoverished or improvident customer in America or in Europe is an undesirable one; but an honest, competent customer, temporarily short of funds, is an anchor for the future, once we find a way to serve him. I do not hesitate to suggest that if we can harness our powers intelligently, we can establish this relation with our foreign friends."

At the second general session, Wednesday, George R. Meyercord, president of the Illinois Manufacturers' Association, delivered an address on the "Value of Long Credits to the Exporting Manufacturer." He said in part:

"As I view the Edge law foreign trade financing machinery, it offers the first step whereby the manufacturer gets some reasonable measure of relief toward creating that highly desirable, stabilized situation whereby his frozen inventory is rendered more liquid.

"Every day American manufacturers are being offered profitable European business that they reluctantly are obliged to decline because this country has lacked the foreign trade financial machinery that has been developed so successfully by Great Britain.

Speaking in American Dollars

"The Foreign Trade Financing Corporation through its debentures speaks in American dollars to the American investor, and the American investor need only have faith in the vast capital of the corporation and in its management. It is unthinkable that the management will not be both able and of a superior order.

"From the standpoint of the manufacturer investing a reasonable amount in this enterprise," continued Mr. Meyercord, "I draw the following conclusions as to profits. Let me illustrate by example:

"Take the case of a manufacturer doing $200,000 exporting annually. Grant his profit is 15 per cent net on his sales. Fully one-half to two-thirds of his tenders of orders at this time require long time, which he has not been in the habit of granting. He is, therefore, turning down orders daily. Assume that only one-half of his prospects die by virtue of his inability to finance. That represents a profit of $15,000 that he is losing. Surely, such a manufacturer can afford to invest $10,000 in the stock of a corporation that will make it possible for him to earn $15,000 within a year."

The Edge Law banking machinery, of which Mr. Meyercord spoke, was discussed at length by Philip B. Kennedy, vice-president of the First Federal Foreign Banking Association. There are two such organizations, the second one being the Federal International Banking Company, New Orleans. Mr. Kennedy said that his observations of the workings of the bank during his association with it had confirmed his belief in its value. A ruling of the

ARTICLES that have to *fit* can't be bought from a list. Lead-pencils, cook-stoves, plows and other standardized goods can be bought that way and will likely give satisfaction. But you wouldn't buy a pair of shoes or a suit of clothes merely because they appeal to the eye and the price is right. You want them to *fit* you.

Bonds must *fit* their purchaser. First, they must fit in price, in yield and in maturity. Vastly more important, they must fit the savings plan most applicable to your own needs—financial independence at a given age, saving for a known future expenditure, or some other clearly defined purpose to be accomplished.

The direct road to a financial objective is traveled comfortably and without worry by those who plan their way and then buy their bonds to fit that plan. If you have your plan in mind, we will suggest the bonds to fit it. If you have no plan, we shall be glad to devise one for you when we know your needs, also to suggest some of the desirable and appropriate investments in the present bond market.

Our pamphlet, "Prices and Values," lists some of these bonds. Send for it. When you read the pamphlet and give us an idea of your needs, we can tell you the best bonds for you to buy—to fit you.

A. B. Leach & Co., Inc.

Investment Securities

Chicago	New York	Baltimore
Philadelphia	Milwaukee	Cleveland
St. Louis	Cincinnati	Minneapolis
Boston		Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Digitized by Google

THERE are no better bonds than the First Mortgage Bonds sold by this Corporation. They are secured in a ratio of two to one by Detroit real estate and sold on a basis to net investor 7%.

These bonds are as safe as Detroit—and Detroit is as safe as the nation.

Resources Over $7,000,000

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

MUNICIPAL BONDS
Free from Federal Income Taxes.
Yielding 6% to 7% Per Annum.
We will register with County Treasurer any bonds purchased and pay ½% fee, making them
FREE OF ALL STATE TAXES.
The Hanchett Bond Co.
INCORPORATED 1910
Municipal Bonds.
CHICAGO.
Dime Bank Bldg., Detroit
W. M. Denham, Representative.

COURTESY SERVICE SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

American Broaching Machines and Tools



American Broach and Machine Co., Ann Arbor, Michigan
F. J. LA POINTE, President
305 Scherer Building - DETROIT OFFICE - Phone Cadillac 5381

Federal Reserve has established two classes of foreign trade banks, acceptance and debenture. One bank cannot handle the two kinds of paper. Mr. Kennedy said the proposed $100,000,000 foreign trade financing corporation would be a debenture organization. An extract from Mr. Kennedy's address follows:

"That there is a special field for Edge Law banks in making commercial credits for from three months to twelve months is evidenced by the fact that leading commercial banks have recently referred this kind of business to Edge Law banks.

How Much Time Is Necessary?

"There is a reasonable amount of business offering in this zone of three months to a year. American exporters find that there are special conditions which justify credit to their foreign customers of this period. Our producers have the goods stored here or they can produce them. It may be a question of cutting down the working of a plant twenty-five, fifty or 75 per cent capacity, or of extending larger credits to foreign buyers. There may be no question that the American goods are needed abroad. The foreign trade connections may be experienced and the moral risk first class. Payment will be possible when the exported articles have been turned into money.

"Not all foreign business should carry three to twelve months financing by the American shipper. A large portion should be for under ninety days and plenty could wisely be done on long terms such as three, five, ten or even twenty-five years. There is, however, a material amount of foreign business which is logically suited on economic grounds to the period of three to twelve months.

"Credits should be as short as possible. There are, however, cases where longer credits are good business and other cases where it is either longer credits or no business. It is poor policy to take shelter behind slogans or excuses. This is preeminently a time when individual transactions must be worked out for the present, and let us not forget for the future.

"The very fact of specialization should give these banks a certain skill. Take, for example, cotton. The two Edge Law banks have together worked out a method of financing the export of a certain amount of low-grade cotton to Europe. Shipments have been made. Further plans are being worked out to move some more of the southern cotton to the other side on a sound credit basis. National and state banks encourage this special attention to meeting a problem of general importance."

Letters of Credit

In connection with foreign trade financing, the place of commercial letters of credit was considered by Wilbert Ward, New York Bankers' Commercial conference, who mentioned the plans now being made for a standard, uniform American letter of credit. This work is being done with the help of the divisions of analysis and research of the Federal Reserve Board, American Bankers' Association, American Acceptance Council and the National Association of Credit Men. Mr. Ward said:

"Naturally no form of commercial credit instrument, however well conceived, can overcome the human element and it seems important to keep always in mind that a commercial credit is primarily an instrument of finance. It is only in an incidental way that it can operate to protect the buyer from an unscrupulous seller, and banks never can, and properly ought not, undertake to check documents so carefully that the buyer is relieved of the duty of selecting his seller with care. However, I think you will agree with me in believing that some such forms as those proposed will go as far as rules and regulations ever can go toward ending commercial credit disputes, for these forms are calculated to end the misunderstandings which create disputes."

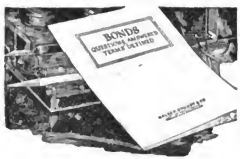
Referring to legal decisions on controversies arising out of commercial letters of credit, Mr.

Digitized by Google



THE MOST IMPORTANT STEP TO SUCCESSFUL INVESTING

OUR booklet "Choosing Your Investment Banker," emphasizes the importance attached to a careful selection of the investment banker by whose recommendations you are to be guided.



BOND QUESTIONS ANSWERED

OUR booklet "Bonds — Questions Answered, Terms Defined," explains the meaning of various terms which are often not clearly understood by the inexperienced investor.

Copies of either or both of the above booklets will be sent upon request.

HALSEY, STUART & CO., INC.

FORD BUILDING, DETROIT

TELEPHONE: MAIN 720

CHICAGO ST. LOUIS MINNEAPOLIS MILWAUKEE
NEW YORK PHILADELPHIA BOSTON

A Sound Investment

Our 6% Real Estate Mortgage Bonds are secured by FIRST Mortgage on DETROIT improved property, the value of which is more than twice the amount of the loan. This makes them legal investment for Michigan Savings Banks.

We guarantee the title, the interest payments and make the collection of the principal, when due, free of charge.

For further details, call, 'phone or write

AMERICAN LOAN AND TRUST COMPANY

Griswold and Larned Streets Detroit, Mich.

IN the first four months of 1921 the number of compensation insurance policy-holding members of the Michigan Mutual increased 20% over the total on January 1st, 1921.

Yes, there is a reason.

Every policy shares in savings | *Every policy is non-assessable*

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit Michigan

Digitized by Google

NOT AN AGENT BUT A MANUFACTURER
I WANT YOUR WORK
MAY I SERVE YOU?

J. C. GREEN
451 MONROE AVE.
DETROIT, MICH.
TELEPHONE MAIN 5545
CASTINGS
IRON, BRASS, BRONZE, ALUMINUM
PRODUCTION QUANTITIES
Production Machine Work
PATTERNS
WOOD AND METAL
FOUNDRY EQUIPMENT
FLASK-PLATES
CORE DRYERS
SEND ME YOUR INQUIRIES
FOR MY 6 FACTORIES
CAPABLE OF PRODUCING $800,000.00 WORTH OF WORK PER MONTH
LOCATED IN U. S. AND CANADA

FOR SALE—240 Volt D. C. Generators

No.			Speed
1	25	Westinghouse, MP, type M.	975
1	25	Northern, MP.	900
1	25	Ft. Wayne, 4-pole	875
1	25	Keystone, MP.	725
1	25	General Electric, comp. to 1deal horizontal steam engine.	300
1	50	Western Elec., MP.	1250
1	50	Fairbanks-Morse, MP.	900
1	50	Northern, MP.	1050
1	35	Fairbanks-Morse, comp. interpole	1125
1	40	Northern, comp., to Fleming horizontal steam engine.	320
1	45	Westinghouse, MP, type S.	975
1	50	Ft. Wayne, 4-pole	600
1	60	Northern, MP.	800
1	75	Northern, 6-pole	525
1	100	Milwaukee, 6-pole	650
1	125	Allis-Chalmers, MP.	850
1	150	General Electric, interpole, 3-bearing	650

Would YOU buy a SECOND-HAND ELECTRIC MOTOR at ANY price? you KNEW it to be as good as new?
Write us your inquiries.
GREGORY ELECTRIC CO. Second-hand Electric Motors Bought, Sold and Exchanged.
In business since 1893.
10th and Lincoln Streets Chicago, Ill.

PISTON PINS
Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production
MICHIGAN PATTERN & MACHINE WORKS
F. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

The Bellefontaine Bridge and Steel Co.
Fabricators of
STRUCTURAL STEEL
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6858.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451
Main 6602
680 Fort St., E.
DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

Ward said: "The courts will undoubtedly abide by the testimony of men like yourselves as to the business practice and customs. It is in your hands, therefore, to say what the custom, and eventually the law, will be, and the banks will accommodate themselves to that decision. I repeat, however, that you cannot expect to have one custom and one law for exporters here and another custom and another law for importers there. If you finally decide that you have fulfilled your obligations to foreign buyers by delivering merchandise on a dock and calling it a shipment, then you must expect to have sellers abroad take the same attitude toward American merchants when they become buyers. If you feel that you do not want to receive such treatment when you import, then it would seem advisable to go on record immediately as saying that you do not intend to give such treatment to foreign buyers as exporters.

"I repeat that the banks can accommodate themselves to any settlement you may desire to make of the question. It seems obvious, however, that for the protection of merchants and bankers here and abroad the question should be settled in one way or another without further delay, and I commend it to your organization for careful consideration."

While admitting that theory teaches that exports and imports ought to balance, Mr. Taylor, discussing trade balance as his fifth problem, declared it was useless to expect such a balance for a long time under the conditions now existing in Europe. He drew an illustration from England, which, as a creditor nation, has wealth invested in all parts of the world. So much money had been loaned in South America that she drew foodstuffs and other imports in quantity nearly enough to take care of her home needs; and they were paid for by the earnings of the investments planted near where the crops were grown. The records of a recent month show English imports divided in the following proportions: One-half, foodstuffs; one-fourth, raw materials; one-fourth, manufactured articles.

These proportions, Mr. Taylor said, made it obvious that exports of manufactured goods from England were inadequate for balancing trade. The rest of Europe, he said, needed enormous quantities of foods and materials from the United States, calling for huge sums of money, which cannot be balanced by manufactured goods from Europe.

"As we are a creditor nation, and if we mean to do an export business, it seems clear that the first step is to create a broad foundation of invisible imports into the United States that will hold one abutment of our permanent bridge," Mr. Taylor said. "The only way this can be managed is under the guidance of our great bankers, who today can sell millions of securities within twenty-four hours for the requirements of any domestic corporation. Our bankers can count upon eventual relief through a gradual growth of imports, because our people have always shown a disposition and willingness to buy freely the things that represent the genius of other countries, to pay good prices for them and also a reasonable duty to add to our government's budget and to equalize part of the difference in international wages. Under a proper tariff, importations will increase, but not nearly fast enough to meet the requirements of the day. Foreign securities must be marketed here."

War As a Factor

Mr. Taylor's last problem was war, which is fundamentally the great credit risk, he said. He urged limited armaments. "European credit," he declared, "hinges finally upon some actual, satisfactory assurance that another war is not to occur. This is not politics. Our country, notwithstanding the ground lost, still may lead the world away from mutual distrust and hatred by arranging for practical and actual disarming. Sooner or later a demand of this character will come from all parts of the country, so we, as credit men, can lend our voices without any risk of doing harm."

The commission houses and their functions in foreign trade were discussed by two speakers, W. E. Peck, New York, and F. W. Lincoln, of Henry W. Peabody & Company. The sum and substance of their remarks was that the export commission houses undertake to supply the deficiencies under which export manufacturers are now laboring, and that they not only centralize the export efforts of many small manufacturers but finance exports and furnish the trained staffs which both the Government and the manufacturer have lacked.

The technique of advertising for foreign trade and in foreign countries was discussed by Elmer H. Allen, of the President Suspender Company; A. B. Cole, publicity director of the Westinghouse Electric International Company, and Frederick Dickinson, advertising manager of the Hupp Motor Car Corporation, Detroit. Mr. Dickinson's address was a recounting of some experiences in foreign advertising, all tending to show the danger of an American manufacturer's trusting the preparation of advertising copy for his products to foreign copy writers who do not know the technique of such advertising nor the character of the product advertised.

Packing for foreign shipment, insurance, the situation in the Far East, and the influence of foreign trade on agriculture were other topics. C. C. Martin, National Paper & Type Company, discussed packing; William D. Winter, Atlantic Mutual Insurance Company, spoke on insurance, and Willis H. Booth, vice-president of the Guaranty Trust Company, New York, discussed agriculture.

Digitized by Google

Free from Michigan Taxes and in the Opinion of Counsel a Legal Investment for Michigan Savings Banks

$1,250,000

EDDY PAPER COMPANY

First Mortgage 7½% Ten-Year Sinking Fund Gold Bonds

Dated May 1, 1921 — Due May 1, 1931

Total authorized issue $1,250,000. Interest payable May and November 1, at the Continental & Commercial National Bank, Chicago, without deduction of 2% normal Federal Income Tax. Coupon bonds in denominations of $1,000, $500 and $100. Redeemable as a whole or in part at the option of the Company on or before May 1, 1926 at 105 and accrued interest and at ½% less each succeeding year thereafter until maturity. Registerable as to principal.

UNION TRUST COMPANY, DETROIT, MICHIGAN, TRUSTEE

The following information is summarized from the accompanying letter written by Mr. Oscar Gumbiner, Vice-President of the Company:

BUSINESS — The Eddy Paper Company was incorporated under the laws of the State of Michigan in 1906 with a capital of $18,500. Shortly thereafter they purchased the plant of the Three Rivers Paper Company, Three Rivers, Michigan, with an initial capacity of 2700 tons per year. This output has increased from time to time until at present the Company has a capacity of 100,000 tons of paper products per year. The Company now ranks as one of the very largest producers in its line in the world.

PLANTS — The Company's plants, with the exception of the small original plant, are of highest type steel and concrete construction. The equipment represents the latest and most modern development in paper machinery. The plants have a floor capacity of approximately 55 acres. Sprinkler systems are employed throughout and ample insurance is carried to protect the Company from all known hazards. All of the plants are located in Three Rivers and White Pigeon, Michigan.

SECURITY — These bonds are a first *closed* mortgage on all of the fixed properties of the Company now owned or hereafter acquired. Net tangible assets, after deducting all liabilities and using a sound depreciated value on all plants and machinery, as determined by independent appraisers, are *$4,800 for each $1,000 bond.* These bonds are followed by $1,750,000 par value preferred and $7,000,000 par value common stock.

EARNINGS AND PURPOSE — For the five years ended December 31, 1920, net earnings have averaged over three times maximum interest requirements and for the year 1920 approximately five times interest charges. The proceeds from the sales of these bonds will retire all bank loans and other loans, leaving the Company entirely free of debt with a large cash working balance.

SINKING FUND — The indenture will provide that the Company, beginning with the calendar year 1923, shall set aside 25% of its net earnings, after interest charges and Federal Taxes have been paid, as a sinking fund for the purchase of bonds of this issue at not exceeding the call price or for the redemption of bonds at the call price. Bonds either purchased or called for the sinking fund are to be cancelled. The minimum yearly sinking fund shall be $75,000.

MANAGEMENT — The same management which has built up the Eddy Paper Company from a small concern to one of the predominating factors in its particular industry is still in control of the Company and no change in management is anticipated.

A MICHIGAN INVESTMENT FOR MICHIGAN PEOPLE

These bonds are offered when, as and if issued and received by us.

WIRE OR TELEPHONE ORDERS AT OUR EXPENSE

PRICE 98¼ AND ACCRUED INTEREST YIELDING 7.75%

WATLING, LERCHEN & COMPANY

INVESTMENT SECURITIES

GROUND FLOOR—PEOPLES STATE BANK BLDG.
CORNER CONGRESS AND SHELBY STS.
DETROIT

TELEPHONES { 9302 / 9303 / 2304 CADILLAC

MICHIGAN TRUST BLDG., GRAND RAPIDS.

All statements made herein are from official sources, or from those which we regard as reliable, or are the expressions of our belief.

Digitized by Google

TAX EXEMPT IN MICHIGAN

$300,000

THE NORTHERN COMPANY

12 YEAR FIRST COLLATERAL TRUST 8% GOLD BONDS

Dated March 15, 1921 Denominations $100, $500, $1000 Due March 15, 1933

DETROIT TRUST COMPANY, TRUSTEE

The Company was formed for the purpose of merging the American Life Insurance Company of Des Moines, Iowa, with the Northern Assurance Company of Detroit, Michigan.

The Northern Assurance Company, after giving effect to this merger, will have **insurance in force** estimated at $73,554,972 having a market value of over $1,000,000 and a **premium income** of $2,358,316 for 1921.

The Northern Assurance Company with the approval of the Michigan Insurance Commissioner has pledged 5% of its entire **premium income** which is nearly **five times the annual interest charges on this issue,** from which it is required to pay to the trustee in monthly installments sufficient amounts to meet the annual interest charges and sinking fund requirements for the retirement of these bonds.

All matters pertaining to this issue have been approved by Mr. William C. Manchester and Messrs. Stevenson, Carpenter, Butzel and Backus, Attorneys, Detroit.

Full particulars sent on request.

Langley, Hildner & Co.

INVESTMENT SECURITIES

National Bank Bldg. Norris Building
Ann Arbor Grand Rapids

The statements contained herein are not guaranteed but are derived from sources we believe are reliable.

COAL
C.C. COREY
COKE

1908-4 MAJESTIC BLDG. DETROIT, MICH.

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

New Corporations

FOR WEEK ENDED MAY 7, 1921

Good Roads Service Co. of Michigan, Kalamazoo; to place road markers or guides on public highways and streets of Michigan; Paul D. Hoel, Kalamazoo; H. M. Kleiser, T. F. O'Connell, Chicago ..... $ 10,000

Apex Motion Picture Corp., Detroit; producing motion picture films, selling, leasing and dealing in same; Edward P. and Leon A. Martin, 278 Canfield Ave.; George K. Bourn, Detroit 25,000

Passero, Detroit; to manufacture and sell all kinds of women's, men's and children's wearing apparel, furs, etc.; Harry A. Passero, Willard Hotel; Merle B. Bundy, Marie Du Schere, Detroit 50,000

Willis Auto Sales Co., Detroit; to engage in buying and selling secondhand automobiles and accessories; garage; H. Earl and Margaret H. Smalley, Ida A. and Frank H. Conture, 84 Winona Ave., Detroit 10,000

Highland Body Mfg. Co. (F.), Cincinnati, O.; J. R. Carr, Greenwood and Holden Aves., Detroit 150,000

Sax Kay, Detroit; manufacturing, buying and selling, wholesale and retail, ladies' lingerie, blouses, silk underwear; Elisabeth Kinwana, Laura F. Pack, Stevenson Hotel; Walter L. Nau, Detroit 40,000

Shiffet-Cumber Finance Corp. (F.), Delaware; commissioner of state banking department, agent 500,000

Peborine Co., Grand Rapids; to manufacture, buy, sell and deal in and with mouth washes, tooth pastes, etc.; Thomas L. Hills, Floyd E. Harrett, Earl W. Reynolds, Grand Rapids

Motorists' Service Station, Detroit; mercantile and merchandising business; to sell and deal in oil, gasoline, tires, etc.; Elton B. Ingersoll, 2767 Monteith Ave.; Merrill L. Bush, Raymond K. Dykema, Detroit 10,000

Pardico Fuelizer Co. of Detroit; general manufacturing, mercantile and trading business; Clarence A. Parton, 434 Smith Ave.; Frank R. Dean, Clarence F. Dean, Detroit 2,000

Kent City Oil & Gas Co., Kent City; to buy and sell illuminating oils and lubricating oils, gasoline and gas, etc.; Earl J. Jones, Albert Sauer, J. C. Olmstead, Kent City 100,000

Ruggles Motor Truck Co. (F.), Wilmington, Del.; F. W. Ruggles, president; E. L. Smith, secretary, Alma; $2,000,000 preferred and 40,000 shares common, non-par value.

Detroit Precision Tool Co. (F.), Cleveland, O.; T. C. Emerson, East Cleveland, O.; $150,000 preferred, 2,000 shares common, non-par value.

Akron Varnish Co., Akron, O.; George B. Marenlay, vice-president, Detroit 15,000

CHANGES OF NAME

Dunlop Tyre and Rubber Co. (F.) (Del.), (name changed to Dunlop Tire & Rubber Co. (F.) (Del.), Wilmington, Del., Detroit ..... $ 600,000

John D. Raab Chair Co. (name changed to Grand Rapids Furniture Shops), Grand Rapids 2,000

INCREASES

Brookfield Mutual Telephone Co., Brookfield, from $50 to 20,000

Holland Canning Co., Holland, from $60,000 to 1,995

Leahy Co., Muskegon, from $42,000 to.. 125,000

Nelson Brothers Co., Saginaw, from $350,000 to 60,000

James Heddon's Sons, Dowagiac, from $100,000 to 970,500

Douglas & Lomason Co., Detroit, from $42,500 to 150,000

Bastion-Blessing Co. (F.) (Ill.), Chicago, Ill., (land from $300,000 to 500,000

Delaware, Lackawanna & Western Coal Co., Detroit, New York City, from $6,800,000 to 750,000

E. H. Godfrey & Sons Co., Milwaukee, Wis., Calumet, from $1,000,000 to.... 20,000,000

Lever Brothers Co. (F.) (Me.), Portland, Me., Detroit, from $4,000,000.. 1,500,000

Consolidated Cigar Corp. (F.) (Del.), Wilmington, Del., Detroit, from $5,000,000 pref. and 90,000 shs. com. n. p. v. to $5,000,000 pref. and 150,000 shs. com. n. p. v. 1,600,000

NOTICES OF CHANGES OF ATTITUDE

Isham & Isham, Detroit 10,000

Hill & Cox, Inc., Detroit 6,000

Newton & Haggerty Ladder Co., Township of Springwells, Detroit 20,000

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



Fifteen Cents a Copy

Five Dollars a Year

GENERAL LIBRARY
MAY 23 1921
UNIV. OF MICH.

Wage Readjustments in Michigan
Saving America's Dye Industry
Grinding As a Production Process
Motor Price Trend Still Downward

(Financial Section Starts on Page 24)

DETROIT, MAY 21, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 21*



Whether used on motor cars, trucks, or tractors, Long Cooling Systems assure continuous service, uninterrupted by any radiation trouble.

Our Engineering Department Can Assist You

Each Long Cooling System is designed to order for each type of motor with which it is to be used. Each step in creating the design is taken in co-operation between the Engineering Departments of our factory and those of the manufacturer. Proper design insures proper construction. By reason of this co-operation, Long Cooling Systems represent minimum cost and maximum efficiency.

Let us confer with you regarding your radiation problems.

LONG MANUFACTURING CO., DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines

LONG
COOLING SYSTEMS

The Recognized Standard for Tractors, Trucks and Motor Cars

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Wage Readjustments in Michigan

To What Extent Has Workers' Pay Been Reduced And What Has Been the Effect on the Output?

WHEN industry, under the necessities imposed by the Federal Reserve Board, began the process of deflation, it was said that labor would be "the last to deflate." Wages, which during the period of the war had become a production cost factor out of all proportion with their normal bulk, and had remained so for more than a year after the Armistice, would have to come down, but other costs would be tackled first. This decision on the part of employers was prompted by two reasons: First, it was apparent that the cost of living was not going to fall as rapidly as a good many people expected, and because of that employers wished to avoid imposing any unnecessary hardships upon the men and women who worked for them; and, second, it was expected that wage reductions would be met with opposition from employes all along the line—in fact the prediction was general that we soon would encounter a widespread series of strikes.

The process of deflation has been working out just as forecast. Inventories have been worked off or scaled down until now it may be said that business and industry have in this respect got back to a point somewhat closely approximating conditions previous to the war. Prices of materials have been and are still being battered down until now we are well on the road to normalcy in this regard. And ever since the first of the year, manufacturers have got around to labor.

Apparently Labor Expected It

Surprising as it has been to employers, they have experienced little difficulty indeed in reducing wages. There have been a few strikes, but they have been very much the exception to the rule. Labor has seemed to realize that it must do its share, both in the way of accepting less pay and in doing an honest day's work. Perhaps it has been forced into this way of thinking by the fact that so many thousands of men are out of jobs and are willing to take most anything offered. Perhaps, on the other hand, there have come home to it some of the extremeties to which employers have been forced, this last year. Its sense of loyalty may have been aroused by the realization that so many manufacturers have been keeping their plants open, at heavy losses to themselves, just to keep their organizations as nearly intact as possible. At any rate, labor, with exceptions, of course, has "fallen to with a will."

Wage readjustment in Michigan began about the first of this year. Factory executives held many conferences during November and December regarding employment conditions. It was seen that something would have to be done before long, and soon after January 1 superintendents and foremen began to sound out sentiment among employees. What they found astonished them. They found that most of the men in the shops were expecting that pay would be cut—indeed many said they were surprised that reductions had not been made before that time. In some instances, in fact, delegations of employes waited on the management, expressing their willingness to accept less money if only they could be kept on the job. In some cases employes even went so far as to submit new and lower scales.

So that the task of readjusting wages to meet the new conditions has not been so difficult after all. Dissatisfaction, it is true, was expressed in some factories, and there were scattered strikes, but, on the whole, the process was gone through without disturbance.

To what extent have wages been reduced in Michigan; how did employers go about the job; in what spirit was the readjustment received by employes; what has been the effect on the output per man, and what is the prospect as to additional cuts in the near future? This paper has within the last few weeks received several letters from readers asking these and other like questions. In order to answer them intelligently, a questionnaire embodying these points was addressed to a representative group of manufacturers within the state normally employing some 200,000 men and women. Replies have been received from factory executives whose working forces aggregate approximately 150,000 and who represent the following lines of manufacture: Metal working; automobiles, motor trucks and motor parts; paints, oils and varnishes; cement; office equipment; iron, steel and wire; stoves; furniture; food products; railroad equipment; machine tools; sugar; pumps and paper. In addition, the replies covered in a general way the building industry.

The following counties, in which are located most of the principal industrial centers in both the lower and upper peninsula, are represented in the replies: Wayne, Kent, Kalamazoo, Jackson, Saginaw, Bay, Genesee, Wexford, Washtenaw, Berrien, Barry, Lenawee, Calhoun, Ionia, Houghton and Iron.

The replies reveal that:

All but six of the employers reporting have reduced wages, and four of these have special conditions to deal with.

The reduction averages seventeen per cent, running in individual cases from five to thirty-five per cent. (In this connection note that the United States Department of Labor's statistics show that the cost of living has come down approximately this much.)

Eighty per cent of those replying made a straight cut in the hourly wage or piece work rate.

More than 90 per cent notified their employes either by posting notices in the factory one to three weeks in advance of the reduction or by having their foremen or superintendent talk personally with the workmen, either individually or in groups. Less than ten per cent adopted the method of closing down their plants for short vacations and then rehiring at the end of the period at a lower rate.

In less than a dozen cases was any resentment expressed by employes, and in these cases it was only general in character.

In almost every instance the output per man has increased since the wage reduction became effective, the increase running all the way from "slight" to 75 per cent.

Further Reductions Uncertain

Employers are uncertain as to whether they will be obliged to make further reductions in the near future, an even fifty per cent of the writers expressing the belief that wages had reached a minimum in their cases for the next few months at least, while twenty-five per cent said further adjustments were in prospect and with the other twenty-five per cent the wage policy would depend on business conditions.

The charge frequently is heard that manufacturers are taking advantage of the oversupply of labor to cut wages, their method consisting of "discharging men out of one gate and hiring them at another for less money." How far from the facts such allegations are is evidenced by the pains taken by employers covered by this questionnaire to explain carefully to their employes the reasons why they had found it necessary to reduce pay. In answer to the question: "What means did you adopt to notify employes?" the secretary and treasurer of one of the best known Detroit manufacturing concerns—a concern normally employing some 4,000 men and women—writes:

"By discussion with the division superintendents first; by a comprehensive exposition to the foremen of all the circumstances, events and reasons leading to the decision, and pointing out to them the importance of establishing, by a graduated wage scale, the incentive that is vital to progress; and finally to the employes through the superintendents and foremen, who explained the purpose of the move, verbally and in detail."

(This corporation classified all jobs in accordance with length of training, degree of skill and amount of endurance necessary to the proper performance of each, and adjusted its rates to correspond with this classification.)

A Bay City manufacturer writes: "In addition to the reduction in the base rate, some of the standards in our bonus or premium system were also changed, but still keeping well within the possibility for large increased pay either by individuals, groups or in the whole plant.

"In making the change in rates, we change the rate for the general classification throughout our whole plant, each man being individually rated under the general classification to which he belongs. The men are then notified individually, a statement being addressed to each one, indicating the reasons for the necessity of the change. In arriving at the changed individual rates, great care was taken by consultation with the foremen, as well as by comparison with our own experience record, and

Digitized by Google

all checked against the cost of living and the increased value of an employe because of long service.

"This action met with no resentment whatever and we believe it was thoroughly understood that no advantage whatever was being taken of the dull times and that the action was entirely reasonable.

"In addition to reducing wages, our working force has been much reduced, although we keep on our roll just as large a number as possible and allow them to alternate in time of work so as to bring some income to as a large a number as possible."

Given a Chance to Criticize

An Adrian employer says: "We posted up the wage scale in bulletin form where all the employes could see it some time before the reduction was made, giving them a chance to criticize the same before its taking effect."

The following is from a Battle Creek manufacturer: "We simply had the foreman in each department notify his men that the company found it necessary to reduce wages at that time and specified the amount of the reduction to each individual."

The instances just cited are typical of the means adopted by more than 90 per cent of the employers who answered the questions asked.

In this connection, excerpts from letters from four manufacturers who have not deemed it advisable or necessary to reduce the wage scale, are interesting. One writes:

"We have not as yet made any reductions, other than those brought about by their being employed only a portion of the time. We are at present able to give them work only half time and this naturally has reduced their earnings by that much. We do not anticipate any trouble or opposition if wage reductions become necessary. It is our endeavor to keep our employes fully apprised regarding the general conditions and our own financial situation, and it is our opinion they will believe a wage reduction necessary if we make the statement that such is the case. We shall probably be forced to this action a little later, for I feel that our men are suffering severely from the depression and do not wish to make the burden greater at this time if it can be avoided."

Another's experience: "When business shrunk away in the fall of 1920 we did reduce our working force and shortened our working day by one hour. This action was agreeably accepted by our men; the shorter day appeals to them, and leaving our wage rate where it was, we are getting an increase in output with a smaller force, and in this manner have reduced the amount of wages paid in proportion to production. We do not expect to make any reduction in the wage rate."

A Special Condition

A manufacturer who employs printers writes: "To-date we have made no reduction in our wages but are contemplating doing it within the next few months. In our particular line we do not feel that a reduction at this time would be wise, since I think you are familiar with the general printing conditions throughout the country. The quantity of our orders has been very much reduced, however—so much so as to compel us to cut down the working hours in three plants to forty-five hours a week from 54, and in two plants to thirty-six hours a week, from 54."

From a motor truck maker: "We have not reduced our wages for the reason that we have been employing during the last four or five months only our foremen and a few of our best employes, and for the reason that we have been operating on a four-day-a-week basis we do not feel that for the good of the organization we can afford to reduce wages. However, some reductions have been put into effect in this city and at any time that we add to our working forces in the way of common labor or semi-skilled labor we will put them on the basis of about ten or fifteen per cent reduction."

The lack of resentment at the reduction shown by workmen was surprising to employers, many of whom frankly confess they expected trouble. Following are a few quotations from letters:

From the general manager of one of the largest metal working concerns in Detroit: "We found no disposition on the part of our employes to resent our action. As a matter of fact, this cut has only recently been made, and most of them expected we would do it earlier when a great many other concerns were cutting pay."

From a Detroit corporation with plants in both geninuslas: "As nearly as we can figure, there was absolutely no feeling on the part of our employes; in fact, they were grateful to the company for continuing to operate under present conditions."

From a Detroit motor parts maker: "Each and every man, after reading the articles which we had posted, came into the office and requested that his wages be reduced twenty per cent, and we can truthfully say that we have not reduced a single man's wages in our plant, except those that personally requested it."

From an Adrian manufacturer: "There was really very little criticism, as the employes expected the reduction and probably, in the main, understood that it was necessary."

From the president of a Battle Creek concern: "There was no complaint, as the men all realized that if the company continued to operate by building stock for future sale, it would be necessary for them to accept a reasonable reduction in wages."

From a Belding manufacturer: "No particular comment has been made by the employes, they realizing that the wage scale now is much higher in proportion to the cost of living than it was a year ago."

Only Four Quit

From a Bay City manufacturer: "Early in January we discharged all men whom we do not pay by the month. We gave our monthly men one week's vacation and advised them that at the end of that period they could return to work, but that their pay would be reduced about thirty-five per cent. Three or four of our men did not return but the balance came back."

From the works manager of a Detroit metal working concern: "Labor conditions have taken a decided change; the supply for work without even asking the wages they are going to be paid. At that, we believe in being perfectly fair with our men, as most of them have been with us for a long time and have always been loyal through desperate labor conditions."

Hardly less surprising than the lack of resentment at wage reductions has been the increase in output per man since the cuts were made. The increase ranges all the way from "slight" to as much as 75 per cent. One manufacturer of automotive equipment writes:

"Every man that we are working today has appointed himself a committee of one to see that every man turns in a full day's work. Every man in the shop does his share of work. We are turning out approximately 2,000 parts per day. The reductions in the salaries of our employes have been able to reduce the price to the purchaser practically fifty per cent and do the work with eleven men less than we did the same work last year. In other words, we figure, and our charts show, that sixteen men are doing now what twenty-seven did last year on the same work, and are doing the job better, as our rejections have run practically nothing or less than one per cent, while during the months of April, May and June last year our rejections ran as high as twenty-per cent.

"Our manufacturing output during the month of April increased 100 per cent over March. The only way that manufacturers can live today is by the fullest co-operation of their employes; and there surely never was a time when the slacker was in greater contempt from the employes' standpoint. It can truthfully be said that if the manufacturers shall be permitted to gain their rightful place again, instead of the 'fighter will win' slogan, it must be changed to 'workers will win.'"

Some Figures

The following is from a letter from an upstate manufacturer:

"As to production, instead of reduction in output of pounds per man-hour, this has increased in a gratifying extent. To illustrate this, we would call your attention to a table attached herewith which shows the pounds of output of finished product per man-hour, which includes the entire shop and office payroll for the times indicated.

	Lbs. Output Per Man-Hour
Average January to October, 1920	7.58
November, 1920	8.42
December, 1920	9.21
January, 1921	7.60
February, 1921	9.78
March, 1921	11.87
Average November to March	9.20

"Note in this connection that from January to October, inclusive, 1920, we were running practically 100 per cent output. The reduction in personnel and in output began November 1, 1920, and has continued in an increasing ratio until at present we are running about forty per cent capacity. The figures speak for themselves and indicate the improved output during the latter period."

The Adrian district concern engaged in the manufacture of paint says: "There certainly has been a greater willingness on the part of some of the men from whom we could not speak well at all in the way of such service for the last year or two."

From an Adrian manufacturer: "There has been a marked increase in the output per man, resulting in from twenty-five to forty per cent more efficiency than a year ago and a general realization that this is necessary in order to hold their positions."

Among other expressions from employers as to individual efficiency per man, since wage reductions were made, these may be found: "Thirty-nine to 70 per cent increase;" "Getting better than one-third more production per month than we ever got before;" "Increase;" "Slight increase noticeable in the output of the day workmen, and hourly final results are constantly time studied;" "Increased considerably over last year;" "Owing to our greatly reduced volume we have been unable to show much of an increased output per man;" "More than doubled increase in output per man;" "Marked increase over a year ago;" "Men are doing their work more cheerfully;" "Twenty per cent increase;" "Increased efficiency has made it practicable for us to operate with less number of people;" "Our percentage of work performed per man per day has increased about 75 per cent;" "Increased slightly."

Only one manufacturer of the entire number answering the questionnaire has noted a falling off in output per man. He writes: "The number of employes on our roll in February, 1920, was 537, and the number on our payrolls in February, 1921, was 556. Considering our production during February, 1920, as 100 per cent, our production per cent for February, 1921, is 12½ per cent decrease conservatively estimated." He does not give the reason for falling off.

A Rap at Retailers

As was said in an earlier paragraph, employers are evenly divided on the question as to whether further wage cuts will be necessary within the next few months, half of those writing believing the minimum has been reached at least for the present, while half the remainder say No and the other half say their future policy will depend entirely on business

(Continued on Page 33)

Digitized by Google

Saving America's Dye Industry

Why German Competition Must Be Stopped, and How; Two Meetings of Industrial Leaders Held in Detroit

By F. W. HERSEY

PRIOR to the war the most important industry in the world was the manufacture of dyestuffs, although the world did not know it. Such a statement will arouse immediate challenge in view of the mighty power of the steel industry, the ramifications of the rubber industry, the importance of the transportation industry, the great strides made by the automotive industry and the dependence of human life upon the food industry. They were all considered greater before the war than the business of making colors, so far as public opinion was concerned, but public opinion was not interested in making war.

The American public knew of the dye industry as one exclusively German. Germany furnished 90 per cent of the dyes used throughout the world, and yet in a single year the valuation of the dyes manufactured by her was only $68,000,000. The significance of this statement can be understood only when one thoroughly understands the real use Germany was making of that industry. From the production offices of the great textile mills in this country to the bargain counters of department stores one question and one answer typifies the trend of American opinion. The question was: Are these fast colors? If they are, they must be German.

The American Industry Is Born

When war shut off trade with Germany housewives began to complain of colors "crocking" and "running." The textile manufacturers voiced the same complaint. When the German submarine freighter, Deutchland, stole into New London, Conn., after evading the English blockade and carrying under water a boat load of "priceless" dyes there was great rejoicing among the textile manufacturers and users of dyestuffs, and a wild scramble for the limited supply at any prices demanded.

As the war progressed there were fewer complaints against the colors on the market, a greater supply of good selected colors and less connection between the dye industry and German dye manufacturers. The reason lay in the rapid development of an American dye industry in which millions of dollars were being invested and the best chemists engaged. Of course the main object was not the manufacture of dyes for commercial purposes but the production of chemicals for war purposes. This country had become so accustomed to relying practically on one source for the many derivatives of coal tar that little thought had been given to developing this industry in the United States. The war forced the issue. But even the stress of war and the call for the manufacture of essentials only did not prevent the manufacture and marketing of some dyes.

While the first product did not successfully match the German product, continued experimentation and the gradual development of facilities resulted in great improvement in the staple dyes and an increase in the quantity. This was the beginning of a real dye industry in the United States. As the intermediates from which colors are produced by various chemical reactions are obtained from coal tar, a by-product of bituminus coal in the manufacture of coke, the supply of raw material was then, and is now, greater in this country than in all of Europe, and as great as in any other country on earth. The problem confronting this country in the manufacture of dyes is not one of raw materials, but of knowledge of organic chemistry, adequate production facilities and such protection as will safeguard the investment necessary to finance plants and the training of the dye chemists of the future.

In 1914 there were seven establishments in the United States, $3,000,000 invested and 500 persons employed in the manufacture of dyes at $3,536,795. Four years later there were 77 companies making finish dyes to the amount of 58,464,866 pounds valued at $62,026,390, which was 45,977,246 pounds increase over 1917. Dyes made in 1918 were not produced in 1917 because they had not been developed. This indicates how rapidly the dye business was developing. The producers of intermediates, of which the four important ones are benzol, naphthalene, toluol and anthracene, numbered 127; their annual production was 357,662,251 pounds valued at $25,382,892. In synthetic drug manufacture there were thirty-two drugs of coal tar origin being made by thirty-one United States firms having a total output of 3,500,000 pounds valued at $8,000,000. Three of these drugs were used in stemming the influenza epidemic.

The coke industry in 1918 produced 25,900,000 net tons of by-product coke and 3,480,000 net tons of beehive coke. The total output of finished products of coal tar origin, exclusive of poison gases and explosives, was 75,494,000 pounds, valued at $83,095,404. In the research work necessary, 2,000 chemists and technically trained men and 25,000 untrained men were employed at wages of from $10 to $75 a week, and only 15.4 per cent received less than $25 a week. There are now 157 different dye plants employing 77,000 persons who produced 29,000 tons of dyestuffs and 9,000 tons of photographic chemicals, perfumes, flavors and intermediates for dyes and military purposes.

At the present time there are 11,037 establishments in the United States, employing 1,070,460 persons, absolutely dependent upon dyestuffs, and 56,949 establishments employing 1,037,183 persons, indirectly dependent upon dyestuffs. At one time 400,000 persons were thrown out of employment because of the lack of dyestuffs.

Colossal Struggle at Hand

This brief survey of the dye industry has been given to explain the possibility of this industry if German competition is removed and sufficient encouragement given to its promotion. The United States today stands on the brink of what most probably will be a struggle for industrial supremacy unlike anything ever witnessed before. Germany will not relinquish her control of the American dye market without having exhausted every means within her power to hold it. She has $500,000,000 invested in the dye industry. German dye plants, in some of which more than 11,000 distinct dyes are made, have been united in one enormous trust known as the "I. G. Trust," the purpose of which is to finance and conduct a campaign to recover all the dye markets of the world temporarily lost as a result of the war.

One reason why Germany was so confident of victory in the war was the knowledge, first, that the struggle would be mainly one of chemical weapons, and secondly, that she had the finest and greatest chemical producing



McCutcheon in the Chicago Tribune.
CLEARING THE TRACK

Reid in the New York Mail
UP IN THE AIR

From the Brooklyn Eagle.
ON THE SINKING DECK

Digitized by Google

plants and organization in the world. Also, that by creating a monopoly of the dye industry she had prevented her enemies from developing chemical plants and learning the secrets of chemical warfare. She failed to win the war but she still has her dye industry, intact and prepared to produce all the dyestuffs the world can use for years to come.

In any consideration of the dye industry the subject must be handled in three main divisions—dyes and industrial chemicals, synthetic drugs and war munitions. Subdivided from another angle the dye industry means industrial preparedness, health preparedness and war preparedness. The subject is far too extended to be handled in one article; therefore we shall consider first the subject of dyes from the standpoint of industrial progress and preparedness with the need of protection by adequate legislation.

Two Meetings in Detroit

Until there has been the necessary protection of the dye industry in this country there can be no effective competition against our late enemy. It is the accomplishment of this protection that is engaging the attention of the Chemical Foundation, Inc., chemical and dye manufacturers and legislators. It is recognized that the subject of trade competition with Germany is an all-American subject, that any industry which embodies the key to adequate national defense concerns the whole United States rather than any one industry which may benefit by such legislation as may be enacted. For this reason those statesmen and industrial leaders who wish to see the United States independent of Germany or any other nation in its industrial development are endeavoring to arouse public opinion in support of measures protecting our infant dye industry.

Michigan is as much concerned, both as a manufacturing state and a consuming center, as any other state in the Union. The support of Michigan is desired, and to this end two important meetings have been held in Detroit for a thorough discussion of the dye industry and its rights to protection. The first meeting was held last week at the Detroit Athletic Club, where representative manufacturers gathered to pledge their support to any reasonable legislation that might be required.

The second meeting was held in the Detroit Board of Commerce May 17, and addressed by Joseph H. Choate, Jr., counsel for the Chemical Foundation, Inc., who announced that Congressman Nicholas Longworth was preparing to introduce a bill prohibiting the importation of coal tar products into this country for three years except under licenses to be granted by the United States Tariff Commission. These licenses would be granted only to importers when certain dyes could not be obtained in this country, or if obtainable could not be purchased at reasonable prices or within a reasonable length of time.

The Longworth Bill

On August 1, 1919, Mr. Longworth introduced in the Sixty-Sixth Congress a bill providing for an increase in tariffs on dyestuffs and an embargo against German dyes. In effect this bill amended the existing tariffs law in full particulars, as follows:

First, it brought the phraseology of the existing law up to date to prevent the evasion of its provisions through undervaluation and false designation of articles imported.

Second, it repealed the provision under which specific duties were to be reduced at the rate of 20 per cent a year for five years.

Third, it increased the rates of duty from 15 per cent ad valorem and 2½ cents a pound on intermediates, to 40 per cent ad valorem and six cents a pound on intermediates; on finished products, from 30 per cent ad valorem and five cents a pound, to 45 per cent ad valorem and seven cents a pound, which made the duty on intermediates substantially the same as on the finished products.

Fourth, it provided that no foreign dyes could be imported into the United States for two years except under licenses granted by a license board to be created under the act.

This measure designated coal tar products and differentiated between dyes and certain chemicals as the finished product and the intermediates from which they were derived, but the term "coal tar products" was used so that under that law it would have been impossible for Germay to export any of her coal tar products except by smuggling.

This bill went to the Senate, where the license provision was stricken out and in its place a provision for an embargo for three years was made to be administered by the Tariff Commission. This was done because the Senate objected to the licensing method as against American policy. The measure went into committee in both the House and Senate and was reported out favorably. Marked opposition to the measure was shown by Senator Thomas, Colorado, and Senator Moses, New Hampshire.

Senator Thomas spoke for seven days and a half against the measure. This filibuster killed the bill. There was behind this opposition two main influences. One was pro-German opposition to the measure because it meant the total destruction of Germany's hopes in the American dye market. The other was the fear of a few textile manufacturers, importers of dyes and users in other lines of manufacture, that the measure would result in a marked increase in the cost of dyes and the impossibility of getting certain selected dyes not being manufactured in this country.

The second bill which Mr. Longworth will sponsor will resemble the first one in all essential details, except that the license feature may be replaced by a three-year embargo. There is now a movement afoot to have the embargo term increased to ten years.

As said before, the dye industry has three main divisions, each of which would be sufficient unto itself as an argument against permitting German competition. For forty Germany has been making coal tar products. Germany is a country in which, prior to the war, scientists, chemists and industrial workers ranked second only to the military leaders. Every encouragement was given to the training of chemists by the government. They might be called the third arm of defense. In peace the dye industry gave Germany the leadership in the world in certain essentials to the well being of other industries. She allowed no competition to develop in any country. She used the same tactics in promoting her world market for dyes as she used in prosecuting the war.

She gained eminence through the quality of her product, and, having established the market, she resorted to every method, unscrupulous or otherwise, to hold it. Her agents operated in every country. In the United States as elsewhere, her spies were planted to bribe officials, block legislation, undersell and corrupt. The spending of huge sums of money, either for blocking legislation, corrupting officials or in selling her product below cost was carried on without concern so long as she retained control of the market.

Germany's Real Object

We know now what her real object was. The commercial side of her activities were secondary. The main purpose was to keep supremacy in the knowledge of organic chemistry, in the production of coal tar products and plant facilities within the borders of the German empire, and to prevent the nations which were her enemies from later from having the production power and the chemical secrets when war came to decide the fate of nations. To that end Germany planted her agents in the mills where German dyes or chemicals were not used, and these agents, by mixing substances or changing processes, lowered the quality or entirely spoiled the products to force the use of German goods.

Between Germany's competitive methods and the willingness of American industry to rely upon foreign nations for certain materials believed to be unprofitable for concerns in this country to manufacture, Germany succeeded in dominating the American market and the industries dependent upon dyes and other coal tar products. This is important when it is realized that the industries dependent upon dyestuffs produce goods valued at $3,000,000,000 annually, and that, prior to the war, American plants and assembly plants for German intermediates supplied only one-tenth of the American market.

In one of his war-time letters, Count Bernstorff reported to his government that the stock of dyes in the United States was so small that by withholding her exportations, Germany could throw 4,000,000 men out of employment. In 1915 Germany tried this plan to force hostile action against Great Britain and at least partial lifting of the blockade. Had Germany been able to flood this country with her textiles, that industry would have received a blow from which it might never have recovered. The dye shortage became so serious that at one time it was feared that the Government Printing Office would have to close, and the prices of some dyes went up 5,000 per cent. In 1913 the United States was importing 45,000,000 pounds of dyes and the value of the amount consumed was $25,000,000. Germany sent to this country 900 different dyes.

Rather than bend the knee to Germany, the American patriots went to work to develop a dye industry and at the same time get the by-products necessary to make poison gas and

(Continued on Page 33)

ANY DOUBT regarding Germany's "all-seeing eye" and her methods of stifling competition, which may linger in the minds of readers, should be dispelled by the experiences of the Dow Chemical Company, Midland, in attempting to compete with Germany in the manufacture and sale of chemicals. The Dow company began the production and marketing of bromides and was so successful that the attention of the German chemical trust was focused upon Michigan. An agent of the trust came all the way to Midland to interview Mr. Dow. The agent minced no words but informed Mr. Dow that he must cease the manufacture of bromides. It easily can be imagined the kind of reception the German representative received. Before leaving none to gracefully be informed Mr. Dow that his concern would dump upon the American market two pounds of bromides for less than it would cost Mr. Dow to make one pound, and the threat was carried out so effectively that the Dow Chemical Works went out of the bromide business in the United States.

But Mr. Dow turned a Yankee trick on the Teutons by manufacturing in Germany and selling on the German market bromides at prices lower than the Germans could manufacture them.

Digitized by Google

Grinding As a Production Process

Why Is It Actually Necessary in the Modern Factory? Advantages of Various Methods in Common Practice

By ALBERT A. DOWD
and
FRANK W. CURTIS

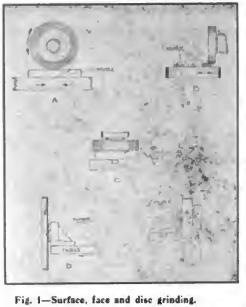


Fig. 1—Surface, face and disc grinding.

HOW can the process of grinding be used to assist production? Why is it not only advisable but actually necessary in the modern factory?

The manufacturer who is in competition with others, whether in the same or in different lines, will give careful consideration to the advantages of grinding operations in connection with his particular kind of work. If he does not do so he is "behind the times" and his work will not compare favorably either in quality or accuracy with that of his more progressive neighbor. In addition to this there are a number of cases when a grinding operation will rednce the cost of production very materially.

In considering the process of grinding and its application to the finishing of work, let us mention a few cases in order to make its advantages more clearly apparent. In finishing a surface on a casting or a forging, the work can frequently be held by means of a magnetic chuck and the surface ground without difficulty, thus doing away with expensive holding fixtures which might otherwise be necessary. Also, when work has been hardened it is likely to be distorted more or less so that it is absolutely necessary to finish it by grinding in order to be sure of the accuracy.

Grinding can be used instead of a turning operation in some cases but judgment must be used in determining when it will be profitable. In turning tubing to size, for example, the process is usually very slow and expensive, yet a grinding operation may be used instead of the turning method, with quite astonishing savings in the cost of production. The work produced will also have a better appearance and it will be much more accurate.

Not very long ago a case of this kind was encountered in a factory investigation. The tubing was being turned and finished to size on an engine lathe and the process was very slow and more or less unsatisfactory. The installation of a plain cylindrical grinding machine effected a reduction in the cost of production of nearly 75 per cent and also gave a more satisfactory piece of work. In many other cases the grinding process can be used to bring about substantial savings in the cost of manufacture.

Various Grinding Processes

In the application of grinding for the removal of stock and to produce accurate results there are a number of types of machines, each of which is suited to a particular variety of work. There are surface grinders of several kinds, with grinding wheel spindles arranged both vertically and horizontally; there are disc grinders of several kinds; cylindrical and universal machines, internal and chucking grinders and others of types more or less specialized.

In order to select the proper machine for a certain kind of work it is necessary to understand something about the fundamental principles involved in the grinding process. A very good general idea can be obtained, however, without going into the technicalities of wheel speeds and feeds, qualities of abrasives and other matters of importance from an engineer's standpoint. A few diagrams can be used to illustrate the principles employed on various kinds of work and to make clear the points of importance in connection with the subject of grinding in general. The descriptions will be given in non-technical language so that they can be readily understood by any executive, whether he is a technical man or not.

Fig. 1 illustrates several forms of surface and face grinding in a diagrammatic way. The illustration at "A" is a simple job of surface grinding which is done on a machine having a reciprocating table which carries the work as indicated. The grinding wheel removes the stock a little at a time as the work passes back and forth under it. In the example "B" the work is set up on a revolving table as indicated, and is held usually by means of a magnetic chuck. As the table revolves, the various pieces pass successively under the grinding wheel, so that the stock is removed

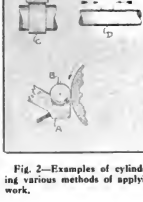


Fig. 2—Examples of cylindrical grinding, showing various methods of applying the wheel to the work.

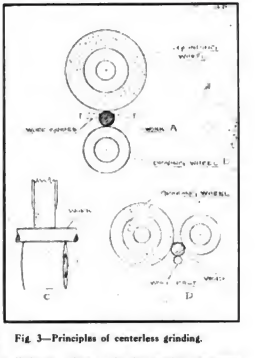


Fig. 3—Principles of centerless grinding.

a little at a time, as in the previous instance.

In the example "C" the work is placed on a reciprocating table as indicated, but the grinding wheel is of the cup variety and the work passed under it in such a way that the stock is gradually removed. The method shown at "E" is also a surface grinding proposition, but the work in this case is set up on edge so that the wheel attacks it horizontally. When this method of grinding is used the table is reciprocated and stock is removed gradually as in the other instances mentioned.

The method shown at "D" is termed disc grinding. The work in this case is set up on a swinging table and is passed back and forth over the face of the wheel on which an abrasive disc is mounted.

Fig. 2 shows a number of examples which illustrate the application of the grinding wheel to the work when the latter is of a cylindrical character. One of the important points in connection with grinding of this sort is the support of the work. The diagram at "A" shows a piece of work "B" which is supported by means of an adjustable rest in such a way that the action of the grinding wheel tends to hold it firmly in place so that there is no "chatter." As the matter of support in grinding is of the greatest importance, particular attention should be paid to it in any grinding operation. There are several ways in which cylindrical grinding can be accomplished, viz.: the table carrying the work can be traversed along the wheel while the work is revolving, as shown at "D;" the wheel can be dressed true and hrought up directly in contact with the work when a short piece or portion of a piece is to be ground cylindrically. This method of grinding is clearly shown at "G."

When it is necessary to grind a surface smaller in diameter than the remainder of the work and when this surface lies between two shoulders, it is necessary to dress the wheel as shown in the example "E." Then the work can be traversed slightly in order to

Digitized by Google

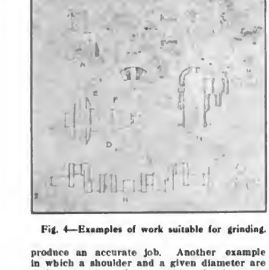


Fig. 4—Examples of work suitable for grinding.

produce an accurate job. Another example in which a shoulder and a given diameter are to be ground at the same time is shown at "F." in this instance also the wheel must be dressed true both on the side and on the diameter in order to produce the work accurately. The examples of cylindrical grinding illustrated in Fig. 2 are all held on centers but there is another method of grinding work cylindrically in which centers are not used.

Centerless Grinding

For various kinds of medium sized cylindrical work, such as pins, stud and small shafts, another type of grinding machine is often used. This type is termed a centerless grinder. The principles of this method are clearly illustrated in Fig. 3. The work, "A," lies on an abrasive driving wheel, "B," and is held in place between the work guides indicated. The work is driven by the driving wheel in the same direction as the rotation of the grinding wheel; therefore, as it is rotated, the stock is rapidly removed by the abrasive action of the wheel. The work is fed by the driving wheel, which is set at a slight angle to the grinding wheel so that its rotation causes the work to pass smoothly along under the surface of the wheel. This is clearly indicated at "C" in the same illustration. The angle of the driving wheel can be changed to produce various feeds.

The application of a somewhat similar principle is shown at "D" in the same illustration. In this case, however, the location of the work rests and driving wheels are slightly different.

The manufacturer frequently is confronted with a problem in manufacture, regarding which he is doubtful as to whether it is more economical to finish the various surfaces by milling, boring, turning or grinding. A decision on these matters is of vital importance in his production program and a careful analysis should therefore be made in order to select a machine suitable for the work in question. A number of examples of work suitable for grinding are shown in Fig. 4. Some of these pieces are of steel while others are of cast iron. The selection of the proper wheel for a given kind of material is also of great importance, but wheel makers give sufficient data in their catalogues to enable an operator to select a suitable wheel for any piece of work.

In order to form a better idea of the application of the grinding process to manufacture, let us examine the various examples shown in Fig. 4. In the example "A" the work is a shaft which has been previously turned, after which it is hardened and ground. In the grinding operation it is necessary to form a curved surface and therefore the wheel used must be dressed to the proper shape. Cylindrical grinders can be provided with wheel truing devices of such a nature that they can be applied to shape the wheel to the required form. The bushing shown at "B" is to be ground both externally and internally. The external work can be readily accomplished on a cylindrical grinding machine, while the inside diameter must be ground on an internal grinding machine or by means of an internal attachment.

The example shown at "C" is a bevel pinion in which the hole must be ground in such a relation to the teeth that it will run true. This kind of work requires a special method of setting up in order to obtain the correct relation of the hole to the teeth of the gear. The work shown at "D" has several grinding operations on it. The cylindrical work can be easily done on a cylindrical grinder but the angular faces shown by the dotted lines at "E" and "F" require a universal machine in order to generate the taper properly.

The gas engine cylinder shown at "G" is to be ground externally and this kind of work is generally done on a special type of grinding machine designed for the purpose. The six-throw crankshaft shown at "H" in the same

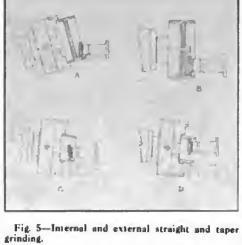


Fig. 5—Internal and external straight and taper grinding.

illustration must be ground in a number of places. The cylindrical grinder is used for work of this kind and a special indexing fixture is placed on the head of the machine so that the various bearings can be brought into their correct position for the grinding operations. The diagrammatic end view shows the relative positions of the various bearings which are to be ground.

The accuracy and reliability of the grinding process adapts it particularly to work requiring close fits and as a consequence it is now applied to many cases in manufacturing which a few years ago would have been turned or bored. For parts having conical or tapered surfaces, as well as those which have a radius, the grinding process is particularly well adapted. Fig. 5 shows several examples of internal and external straight and tapered grindings. The example "A" shows a tapered internal surface which is ground on a universal grinding machine by holding the work in a chuck as indicated. As it is necessary to make the opposite internal surface concentric, it is apparent that the second setting of the work must locate from the previously grounded taper, as indicated at "B." When this is done by means of a simple fixture, the other surface can be ground readily on a plain grinding machine.

In the example shown at "C" in the same illustration a tapered bushing is to be ground externally and internally in the same setting. The method of holding in this case is by means of a chuck having special jaws cut away so as to permit the grinding wheel to complete the inner surface without interference. The outer surface is ground with the same grinding spindle and an extra setting of the work is not required.

Another example of a similar piece of work is shown at "D," but as the method of procedure in this case is similar to the other, no particular comment is necessary. In the operations "C" and "D" a universal grinding machine is used.

Application to a Shaft

Fig. 6 shows a number of applications of the grinding process in manufacturing a splined shaft. This is a transmission shaft for an automobile. A number of grinding operations are necessary on it after it has been hardened. This is a very good example of the application of grinding to a piece of work which would otherwise be practically impossible to manufacture within the required accuracy. In following through the various operations it will be noted that the example "A" is a plain cylindrical grinding proposition. As great accuracy is required on this part, the work is set up twice and the 0.751 diameter ground first, after which another setting is made in the same manner, as shown at "B," at which time the 0.749 diameter is finished. Greater accuracy is produced when very close dimensions are required by making two operations, one of which is roughing and the other is for finishing. Two other cylindrical grinding operations are shown at "C" and D." These also have roughing and finishing operations on the same portion of the work.

It will be noted that a small diagram is shown at "E" in order to illustrate the method of grinding the splines on the shaft. This operation is done with a formed wheel, which is carefully dressed in order to preserve its accuracy. The work is indexed for the various operations and the machine used for the purpose is of a special nature designed for this purpose. The outside of the shaft is ground as shown at "F." This also is a cylindrical grinding operation. After this work has been done a knife edge wheel is used to cut off the end of the work, as shown at "G," thus removing the center and the end which was required in order to dog the work during some of the other operations. The finishing operation on the work is the grinding of the square portion by means of two cup wheels shown at "H." After two sides of the shaft have been ground, the work is indexed 90 degrees and the other two sides are completed.

When ball races with angular or spherical

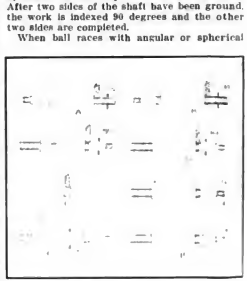


Fig. 6—Various applications of the grinding process in manufacturing a splined shaft.

Digitized by Google

seals are to be ground a special type of machine is used. A general view which illustrates the principles of this machine is shown in Fig. 7. A reference to this illustration will show the general points in its construction. The work, "A," is held in a collet chuck or similar device, and the spindle on which it is mounted is arranged in such a way that it can be adjusted in or out toward the center, "B," and it can also be swung radially about the center.

The wheel spindle, "C," is mounted on a slide which can be traversed by means of the handle, "D." In grinding an angular surface such as that shown on the work, "A," the head of the machine is locked in the correct position and the grinding spindle head is traversed back and forth to finish the surface.

Several other examples suited to this type of machine are shown in the same illustration. The diagram at "E" shows the application to a piece of annular work which is held in much the same manner as that previously described. The traversing of the grinding wheel spindle is also done in the same manner. The work, "F," is a collar having a radial groove, which is also to be ground for a ball-bearing and in this case the work is swung around back and forth while the grinding wheel is in contact with it in such a way that the curve is generated by the grinding wheel.



Fig. 7—Angular and cup grinding.

The example shown at "G" is an internal bearing race, which is ground by means of a formed wheel, as indicated. The work shown at "H" is a thrust bearing collar having a radial groove. This work is mounted in a chuck on the work holding spindle, and the radius is generated by swinging the work spindle through the arc required.

Other applications of angular and cup grinding methods could be shown, but those illustrated are representative of the various kinds in common use. If a manufacturer has much of this kind of work it is advisable to select a machine for the purpose which will have sufficient latitude to handle the various sizes which he is called upon to make.

It has been the attempt of the writers in this article to treat the subject of grinding from the standpoint of the man who does not know how to apply the process in his own shop, in order to show him the advantages of the various methods in every day practice. There are many special applications of grinding to different lines of manufacture and accuracy of the work produced is such that it commends itself to the discriminating judgment of all manufacturers of high-class products.

Grinding Machine Is the Invention of John R. Brown

ALTHOUGH the grinding machine as it is known today has been one of the most important mechanical factors in the development of accuracy, finish and economy in production, little attention has been given to the history of this machine.

In 1910 the publication "Machinery" carried an article concerning the invention of the grinding machine by John R. Brown, who was then senior partner in the firm of John R. Brown & Sharpe, Providence, R. I. Like the milling machine, the power grinder was a shop development intended merely as an aid to producing better work in the shop of Brown & Sharpe plant. It was only after the value of this machine became established in the mind of Mr. Brown that he decided to make it for general sales. In that plant the first machine was used to grind needle bars, foot bars and shafts for the Wilcox & Gibbs sewing machine. The device consisted of an emery wheel mounted on a carriage of a lathe and moved backward and forward in contact with the work.

In 1844 the first drawings for a grinding machine were made in the Brown & Sharpe plant. For the first machines parts of a 14-inch Putnam lathe were used. A wheel stand was mounted and to it added a feeding mechanism which included a reverse. Since then the footstock and feeding mechanism have been removed and the old machine is now used for grinding the faces of dies. As early as 1862 cylindrical grinding was done in the plant with a form of back-rest containing the essential features of the type of back-rest used today. A spring back-rest was used also for finishing and was applied by having a spring rod extending from the footstock. This rod carried leather washers which pressed against the work, and considerable skill was required in the adjustment of this back-rest to prevent chattering. Regarding this machine "Machinery" said:

"A dead center pulley, an important step in the development, was used. Wet grinding was done on these early machines by using a wet sponge held by hand against the work. The sparks were quenched in a dish of water placed below the work. Later a supply of water was provided through a nozzle.

"During the next few years about thirty of these machines were built and sold, the same plan of using dismantled Putnam lathes being followed. The first machine was sold to the Leavitt Sewing Machine Company, Boston, in 1865. The second one was sold to Charles Callefant, Paris, France. It included an apparatus for grinding bevel cutters. Several of these machines were in constant use in the Brown & Sharpe plant on sewing machine parts, but work kept piling up ahead of them and could not be hurried, as a considerable amount of time and a high degree of skill were required to produce work of a sufficiently high standard. There were also many kinds of work where finishing by grinding would be an advantage but which could not be done on these machines."

During this period Mr. Brown had constantly in mind the need of building a machine designed from the floor up, especially for grinding, with the result that in 1868 he had a drawing made of such a machine, which embodied most of the essential elements of the present grinding machine. This machine had the same wheel stand as the early carrier grinding lathe, but instead of having the wheel travel there was a sliding table which carried a swivel table on which were mounted the headstock and footstock, the headstock being arranged to swivel. This machine did not have a swivel wheel stand. No machines were built at this time because of the pressure of other business, but in 1874 working drawings were made for a machine which included a swiveling wheel stand and other features of improved construction. There were stops on the cross feed hand wheel, a feature which previously had been used on the earlier grinding lathe.

"One interesting feature of this machine was an arrangement for carrying off the water used in grinding. Another was the wheel spindle, the bearings and boxes of which were of hardened steel and had double tapers, the nature of which would indicate that there must have been some difficulty in producing them without a universal grinding machine. One of these new machines was sold to E. Corneley, Paris, France, in 1875 or 1876. The first machine of this type was exhibited at the Centennial Exposition in 1876, and at the close of the exposition was sold to M. Heilmann-Ducommun and Steinlen, Mulhouse, Alsace. The first machine sold in America was to the Whitehill Manufacturing Company, New York city.

"The judges at the Centennial Exposition, commenting on the Brown & Sharpe exhibit, said that these machines were characterized by great neatness of design and excellence of execution." Special mention, with commendation, was made by Thomas Bentley in his history of the exposition, published in 1876. He said:

"The superior class of tools here represented are of a character fitted to elevate the standard of workmanship in connection with machine shop manipulation. Accurate tools like these produce accurate and interchangeable work, cheapening production and at the same time giving that perfection which is becoming more and more indispensable in the sharp competition attending the manufacture of machinery. The machines themselves illustrate not in the least degree workmanship and finish, and in the nice adaptability of their motion and parts to produce the required work."

When Mr. Brown died in 1876 application for patent on the universal grinder was made, and it was issued February 27, 1877. The drawings submitted at that time were for a machine for form grinding as well as ordinary uses. A smaller machine was designed a few years later, which is known now as the "Baby Grinder." Since that early day the improvement of grinding machines has been steady, but the essential principles are today the same as were applied by Mr. Brown.

U. OF D. ENTERTAINS ENGINEERS

Members of the Detroit Chapter, American Association of Engineers, were guests of the University of Detroit Club of A. A. E. this week. The feature of the visit was an inspection of the engineering laboratories of the University. The chapter has arranged for its members a series of inspection trips to various industrial establishments and public utilities. The first of these have been made, the engineers visiting on the first trip the Connors Creek plant of the Detroit Edison Company, and on the second the concrete silo system of coal storage of the Mack avenue branch of the Malcomson Coal Company.

TOWER JOINS WEST CHEMICAL

R. Tower, formerly superintendent with the Oliver-Johnson Company, Inc., Providence, R. I., resigned his position May 1 to become a member of the West Chemical & Paint Company, Springport, Mich., manufacturer of paints and specializing particularly in industrial paints.

Digitized by Google

Hupp Cuts Prices; More Tire Makers in Line

ANOTHER automobile manufacturer has joined the list of price cutters. The Hupp Motor Car Corporation, Detroit, announced last Sunday a reduction of $200 on its open models and $315 and $325 on its two closed cars, the lower schedule going into effect immediately. The following are the new and the old prices of the Hupmobile:

	New Price	Old Price
Two-passenger roadster	$1,485	$1,685
Five-passenger touring	1,485	1,685
Four-passenger coupe	2,400	2,725
Five-passenger sedan	2,485	2,800

The Columbia Motors Company, Detroit, will not reduce its prices until August 1, at least, contrary to a report which was circulated during the week and which prompted the company to send the following announcement to its sales staff:

"The recent reduction of the list price of various automobile companies has no doubt brought inquiries from your trade regarding policy of our company. Our reduction in prices last fall was made in anticipation of lower costs on material and labor. Consequently we feel justified in guaranteeing our present prices until August 1, 1921."

Vice-President A. G. Seiberling, of the Haynes Automobile Company, Kokomo, Ind., makes the statement that present prices of Haynes cars will not be reduced at the expiration of price guarantee, July 1.

"The margin of profit is figured so closely that the Haynes company cannot possibly undertake a price reduction without sacrificing quality, and, of course, we will not lessen the at value of the car in any respect," says Mr. Seiberling.

The Hudson Motor Car Company and the Essex Motors Company, Detroit, in answer to reports that prices of Hudson and Essex cars were to be reduced, has wired to all its dealers and distributors as follows:

"Statements indicating that we are about to reduce prices on Hudson and Essex cars are without foundation.

"When we reduced both cars last fall from $500 to $450, we anticipated market changes that have since become effective. You can use this message with your trade."

The statement is made by President A. R. Erskine, of the Studebaker Corporation, that no price reductions are contemplated by the corporation at present.

Prices of the Dort cars have been reduced from $100 to $150, the Dort Motor Car Company announcing the following new schedule:

	New Price	Old Price
Five-passenger touring	$1,115	$1,215
Roadster	1,115	1,215
Coupe	1,585	1,685
Sedan	1,835	1,995

In connection with the reduction, General Sales Manager John D. Mansfield said: "These reductions are on the new model Dort cars first introduced in January of this year. As the new Dort is not a pre-war car, we, of course, are not endeavoring to establish pre-war prices, for there is not a pre-war price standard from which to judge these new models.

"Dort prices have been lowered because we have reached a production basis that enables us to operate on a lower overhead per car built."

The Paige-Detroit Motor Car Company, to put an end to rumors that a price reduction is impending, made the following announcement this week:

"Last fall—September 28, to be exact—we announced a reduction in price on all Paige models. These reductions were not warranted at the time, as we frankly stated in our announcement. They were made in anticipation of a drop in the costs of production which we believed to be inevitable.

"That drop actually materialized this spring, but having already anticipated by our recent price cuts, there can be no further reduction in the price of current Paige models and there will be none. In view of the facts stated, any further reduction would not be unwarranted, but could not be made without sacrifice of quality."

Thus, while motor car manufacturers are not failing into line as rapidly as had been expected in some quarters—which, however, does not mean that they will not gradually do so—hardly a day passes without an announcement of a price cut by a tire maker.

The Firestone Tire & Rubber Company has announced a reduction of 15 per cent on its cord tires, 17 per cent on its fabric tires and 20 per cent on tubes. Furthermore, and also as a competitive measure, it was stated that a new 30 by 3½-inch smooth-tread Firestone tire would be placed on the market, the selling price to be $13.95.

The Fisk Rubber Company has announced reductions ranging from 12½ to 20 per cent on its tires and tubes.

The Miller Rubber Company reduced the price of cord tires an average of 12½ per cent; fabric tires 17½ per cent and tubes 20 per cent.

The Kelly-Springfield Tire Company reduced prices on its pneumatic tires, except Ford sizes, 20 per cent; Ford-size, 22 per cent, and tubes 30 per cent.

The United States Rubber Company has made the following reductions: Royal Cord tires, 11½ per cent; Usco treads, 15 per cent; Chain and Nobby treads, 17½ per cent; tubes, 20 per cent.

It is the opinion of some of the tire makers that the price reductions will stimulate business, although others in the trade believe it will have no such effect. Sales of the United States Tire Company are said to have been showing steady gains for some weeks and have been well ahead of the production schedule. Business for April was well ahead of the same month a year ago, and the spring trade outlook is promising.

The Hood Rubber Company recently began working on the full shifts for the first time since last fall. Orders will be sufficient, it is expected, to warrant maximum production for the remainder of the year.

The Latest Report of Townley's State Bank

CONTINUED liquidation of their liabilities to the state bank on the part of private banks, heavy withdrawals by treasurers of political subdivisions and increased loans to state industries are revealed in the April report of the Bank of North Dakota, a copy of which has been received by this paper.

Private banks continued to liquidate their liabilities to the Bank of North Dakota during the month. Their total liabilities were decreased in thirty days by $669,792.08. In March 15 the total of liabilities was $6,613,928.74, while on April 15 this liability had been cut to $5,944,136.66.

Comparing the April liabilities with those of November 15, 1920, the last statement prior to the time the initiated law became operative, it is disclosed that private banks have decreased their liabilities to the state bank by $7,218,746.90. They have liquidated at the average rate of about $1,400,000 a month.

Another notable feature so far as the relationship of the private banks to the state bank is concerned is the fact that on April 15, 573 banks owed money to the state bank, while on March 15 there were 641 banks that owed money. Sixty-eight banks cleaned up all liabilities in the one month, while since November 15 last, when 805 banks were listed as depositary banks—232 banks have liquidated all their liabilities.

The liabilities of the private banks to the state on April 15 were made up of $3,474,969.29 of redeposits; $2,222,856 of loans and $246,321.15 of cash items out for collection. On March 15 the redeposits were $4,038,439.75, the loans were $2,312,865.05 and the cash items in transit were $289,542.46.

In the month redeposits decreased $563,480.46; loans decreased $90,008.83 and cash items in transit decreased $16,302.79.

Treasurers Quit the Bank

The record of deposits by public treasurers is one of the most interesting features revealed by the April report.

Notwithstanding the fact that it has been taxpaying time and the average public treasurer has more money than he has had for several months, there has been a decrease in one month of $1,450,884.50 in the deposits from the treasurers.

On March 15 the total of the deposits by the political subdivisions was $7,246,813.65, being made up of $3,687,648.42 in deposits subject to check and $3,558,165.23 in sinking funds on time deposit.

On April 15 these deposits had shrunk to $5,795,929.15. This included $2,860,129.54 of deposits subject to check and $2,935,799.61 on time deposit.

This shrinkage, representing as it does the decision of public treasurers no longer to do business with the bank, is more significant when it is realized that the deposits by the treasurers of the state decreased from $3,109,475.77 on March 15 to $3,658,027.37 on April 15. In other words, like the compulsory deposit clause which governs only state loans at this time tended to increase the state bank's deposits, treasurers over whom the bank has no control elected not only to decline new deposits, but they were successful in withdrawing approximately $1,800,000.00 already on deposit. These withdrawals were accomplished almost entirely, probably wholly so, through the fact that the supreme court refused to uphold the bank's position, taken in the Sargent county and other cases.

Referring back to the time prior to the passing of the initiated law, doing away with compulsory deposit of all funds in the bank, the total deposits of the bank from treasurers of political subdivisions and of the state were $14,924,587.67. These deposits have declined to $9,454,001.52 on April 15. The decrease is approximately $5,500,000.

All of this decline has been accomplished through withdrawals by treasurers of subdivisions. The deposit by the state treasurer was, in fact, greater on April 15 than it was on November 15.

Digitized by Google

The fact that the sinking fund deposits by public treasurers have declined from $3,559,165.23 on March 15 to $2,935,799.61 on April 15, a drop of $623,365.62 is further evidence of the fact that bank officials have given up the contention that the treasurers were without authority to withdraw the sinking fund deposits. This is the position taken during the investigation by the house of representatives' special audit committee. It was contended at that time that the Bank of North Dakota was in a fiduciary capacity and could not consent to any withdrawals of sinking funds, notwithstanding the fact that the compulsory depositary act had been vetoed by the people.

Still Finance Industries

Another phase of the report which goes to show that the bank still is engaged in the business of financing state departments and industries from funds raised by taxation and other purposes is found in the items due from state and public corporations.

Direct loans to the industries such as the mill and elevator and the home builders increased $5,000 in the month and are now $1,200,000.

In addition to this, under the head of "cash items due from the state and public corporations," there is $155,278.62 listed on April 15, as against $36,720.37 on March 15. This increase of $118,558.25 represents advances made by the bank for various purpose.

Heretofore this item has generally been transferred into the form of a direct loan to the state industry commission. It has been the custom to make an advance of money from time to time and then subsequently transfer these advances into a permanent loan.

Cash on Hand

Cash on hand in the state bank was fixed at $97,141.84 in April, as against $86,510.18 in March, an increase of $10,631.66. Deposits in correspondent banks outside of the state increased from $289,542.45 in March to $320,656.54 in April, or $31,114.09.

The summarized statement of condition issued by the bank follows:

RESOURCES

Bonds, United States, state and county	1,951,938.75
Loans to banks	2,222,856.22
Loans on warehouse receipts	70,001.06
Loans to public institutions and departments	1,200,000.00
Loans on real estate	2,810,134.71
Interest earned (net) and uncollected	223,696.58
Furniture and fixtures	52,340.40
Due from 573 depositary banks in North Dakota (redeposits)	3,474,959.29
Due from correspondent banks outside of North Dakota	320,656.54
Cash items due from banks in the state	246,321.15
Cash items due from the state and public corporations	155,278.62
Cash on hand and cash items	97,141.84
Total resources	$12,885,385.18

LIABILITIES

Capital	$ 2,000,000.00
Surplus	40,000.00
Reserve to repay legislative appropriation	24,108.87
Reserve for depreciation on furniture and fixtures	11,966.46
Net profits, 1920	121,483.17
Net profits, 1921	8,524.17
Appraisal fees	4,774.23
Individual deposits	247,937.32
Cashier's checks	234,004.89
Public deposits, sinking funds	2,935,799.61
Public deposits, general and other funds state treasurer	3,658,072.37
Public deposits, general and other funds, county, city, township and school treasurers	2,860,129.54
Due to depositary banks (reserves)	514,326.61
Collection items	25,060.76
Registered checks	139,705.18
Bills payable	None
Total resources	$12,885,385.18

STRAIGHT LINE METHODS

Profit

The life and vitality of all business is Profit.

Success depends upon it. It is the compelling interest in the simplest transaction—the dominant thought in the greatest commercial enterprise.

And yet, one-third of the three hundred thousand manufacturing concerns in the United States, it was estimated prior to the War, earned no profit above normal interest on their investment. And ninety per cent of that three hundred thousand did not even know what it actually cost to produce their products.

Blind business! Ignorance and guess work in the place of *knowledge*—so easily obtained thru the application of simple and sound methods of Cost Accounting, more necessary today than ever before.

With material and labor cost changing over night, sales volume fluctuating, prices indefinite, markets uncertain — *safeguard your Profits.*

Exact knowledge of costs, based on Facts and figures, and intelligently applied by an experienced and competent organization is *the only means of insuring Profits*—

The only basis on which *to increase Profits*—

The only *guarantee of Profits*—

ERNST & ERNST

AUDITS—SYSTEMS

TAX SERVICE

DIME BANK BUILDING, DETROIT

304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON
CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY
CLEVELAND, BUFFALO, PITTSBURGH
CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND
NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

Ohio & Michigan Coal Co.
Miners and Shippers of Coal

LONE STAR
Mined at Blair, W. Va., C. & O. R. R.
BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT
Mined at Big Creek, W. V., C.&O.R.R.
FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

MAY FRANKLINS SOLD OUT

The report comes from the Franklin factory at Syracuse that as early as May 10 the entire production for May had been sold out, with the exception of twenty-one cars. That means every one of the 920 cars to be built in May will be in the hands of customers or en route to customers by June 1. One of the most hopeful signs of the times, moreover, in the opinion of officials of the company, is that this business was widely distributed over the entire country. Since February 10 the Franklin factory has been running 100 per cent normal and has been turning out forty cars daily. During the month of April Franklin dealers placed in the hands of customers 944 cars.

WILLYS-OVERLAND ELECTION

The following have been elected directors of Willys-Overland, Inc., Toledo: John N. Willys, W. P. Chrysler, C. B. Wilson, J. E. Kepperley, J. R. Harbeck, E. R. Tinker, Elisha Walker, Edward F. Swift, Rathbun Fuller, C. B. Mertz, George R. Spencer and C. E. Killinger.

Mr. Willys, who presided at the meeting, said the company had $6,700,000 in cash and that inventories had been cut to $38,000,000. He explained also that the company owed $20,000,000 less today than it did a year ago. The annual report, he asserted, would show a nominal profit for the year.

The stockholders authorized elimination of the company's finance committee and an increase in the executive committee membership from five to seven. The work of the committees is to be combined, it was announced.

CHEVROLET ADDING 1,200 MEN

Announcement was made last week by C. F. Barth, general manager of the Chevrolet plant at Flint, that the factory force would be increased by 1,200 to 1,500 men within the next two weeks, with all departments operating on full time. The increase in operations, Mr. Barth said, was the result of a rush of orders following the recent price reduction.

JENKINS HEADS BIJUR SALES

The Bijur Motor Appliance Company, Hoboken, N. J., announces the appointment of S. S. Jenkins as general sales manager. Mr. Jenkins formerly was the Detroit district manager for the company.

COLLINS BUYS A PLANT

R. H. Collins, who resigned recently as president and general manager of the Cadillac Motor Car Company, Detroit, effective July 1, has purchased part of the old Cadillac plant in Cass avenue and will manufacture automobiles in it, according to announcement made last week. The Collins company will be allied with Durant Motors, Inc.

GOETHALS WITHDRAWS

The working agreement between George W. Goethals & Company and the Pierce-Arrow Motor Car Company, Buffalo, having been terminated, George W. Mixter has severed his connection with the former to continue as president of the latter. The Goethals company was employed to reorganize Pierce-Arrow production on a peace basis and revise the line of product. This task has been accomplished.

In explaining the deficit of Pierce-Arrow for the first quarter of this year, the Boston News Bureau says it was due principally to the decrease in truck business. Beginning early in April, the company experienced a decided improvement in demand for passenger cars and during the month received orders to keep its passenger division operating at close to capacity up through June. Within the last two weeks, however, increasing sales resistance has been felt and demand has fallen off considerably from the April average. In the motor truck end, while there was some improvement in April, it has not continued.

METZGER OPENS SALESROOMS

The Willis Sainte Claire Company of Michigan, distributor for the new Willis Sainte Claire motor car, opened its salesrooms in the former Ford branch building at Woodward avenue and Grand Boulevard, Detroit, Monday. William E. Metzger is president of the company and William B. Hurlburt vice-president and general manager. Mr. Hurlburt, who was associated with Mr. Metzger in one of the first automobile salesrooms opened in Detroit—in Jefferson avenue, in 1901—resigns as assistant to the director of sales of the Maxwell Motor Company, Inc.

ON A 75 PER CENT BASIS

The Michigan Brass & Iron Company, Lansing, which makes a specialty of automobile and truck work, reached a 75 per cent basis

GOODYEAR REINCORPORATES

The Goodyear Tire & Rubber Company, Akron, recently reorganized, has filed new incorporation papers with the secretary of state of Ohio. The capitalization is given as follows: $140,010,000 of preferred capital stock and 1,500,000 shares of non-par common. The plans further provide for $30,000,000 of 8 per cent, twenty-year first mortgage bonds, and $20,000,000 of eight per cent ten-year debentures. The preferred stock is divided into $100,000,000 of seven per cent ordinary preferred; $40,000,000 of eight per cent prior preferred and $10,000 of six per cent management preferred.

The new interests in charge of Goodyear have announced the completed permanent organization of officers and directors. E. G. Wilmer, Milwaukee, vice-president of the Steel & Tube Company of America, has been elected president; C. M. Sandstrom and Paul W. Litchfield remain as vice-presidents; H. H. Springford is treasurer, and C. A. Stillman, secretary. The board of directors incindes Ralph Van Vechten, vice-president, Continental & Commercial National Bank, Chicago; J. R. Nutt, president, Union Trust Company, Cleveland; J. B. Cotton, of Franklin, McAdoo & Cotton, New York; Grayson M. P. Murphy, New York; A. A. Schlesinger, president Steel & Tube Company of America, Milwaukee; Robert C. Schaffner, of A. G. Becker & Company, Chicago, and the Messrs. E. G. Wilmer, G. M. Stadelman, P. W. Litchfield, H. H. Springford and C. A. Stillman.

The new president of the company is said to have been selected by the bankers interested in the financing of the Goodyear company, after a list of twelve of the most prominent business leaders in the country had been investigated. Mr. Wilmer, is only 38 years old, but has been identified with the steel, mining and chemical industries several years.

REPRESENTED IN FRANCE

In a recent issue of the Review, published by the American Chamber of Commerce in France, there is a list of American automobile, motorcycle and tire manufacturers having either an agency or a representative in France. The list mentions the following: Buick, Cadil-

Digitized by Google

Immediate Delivery From Our Stock



"Elephant Brand"
PHOSPHOR
BRONZE
BUSHINGS
Solid and Cored

Also Drawn Phosphor
Bronze Rods, Wire
and Sheet.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

lac, Dodge, Packard, White, Case, Willys-Overland, Pierce-Arrow, Hupp, Nordyke & Marmon, Paige, Allen, Selden, Oakland, Studebaker, Nash, Garford, Locomobile, Mercer and Ford among the car makers; Firestone, Goodrich, United States Rubber and Miller among the tire makers and Indian and Harley-Davidson among the motorcycle producers.

HILLER LEAVES TRIANGLE

Glenn B. Hiller, who has been assistant general manager and director of sales and advertising of the Triangle Motor Truck Company, St. Johns, has joined the American Motor Truck Company, manufacturer of the Ace trucks, Newark, Ohio, as general sales manager.

NEW GASOLINE MOTOR PERFECTED

Muskegon, Grand Haven and Holland men have organized the Rupright Engineering Company to manufacture and market the Rupright gasoline motor invented by Frederick Rupright, Grand Haven, after 17 years' experimentation. The motor under the Pony brake test delivers 42 horsepower on a quart of gasoline in twenty-five minutes. Running 1,600 revolutions, the motor gained speed under this pressure. There is no compression on the crank against the ring cylinder. It is balanced centrifugally, firing four ways from the center. Its plan does away with vibration and uses less gas and two times the horsepower.

James A. Hoover, of the Heinz Pickle Company, Holland, is president; Frederick Rupright, Grand Haven, vice president; C. E. Miner, Grand Haven, secretary and treasurer.

BARTLETT RETURNS TO SPLITDORF

M. W. Bartlett, who since 1919 has been an executive of the Wire Wheel Corporation of America, and who from 1911 to 1919 was with the Splitdorf Electrical Company, Newark, N. J., has returned to the latter organization in the capacity of vice-president and general manager. During the six years previous to leaving this company he was acting secretary and in charge of the foreign business.

Michigan Auto Dealers Organize Association

Passenger car, motor truck and accessory dealers in Michigan are now organized in an association to be known as the Michigan Automotive Trade Association. The organization was accomplished last week during a two-day conference in Hotel Statler, Detroit, conducted under the auspices of the National Automobile Dealers' Association, of which Harry G. Moock is manager and P. F. Drury assistant manager.

Speakers at this conference were as follows: Harry Meixell New York, whose subject was automobile legislation; Albert A. Deane, vice-president of the General Motors Acceptance Corporation, financing automobile sales; Jesse A. Smith, Milwaukee, president of the National Automobile Dealers' Association; F. W. A. Vesper, St. Louis, past president of the N. A. D. A.; Guy S. Garber Saginaw, vice-president of the N. A. D. A.; P. E. Chamberlain, selling service; Wayne Hearne salesmanship.

Guy S. Garber, Saginaw, was elected president; Richard E. Fair, Kalamazoo, vice president, and Clark Graves, Lansing, treasurer. H. H. Shuart probably will be secretary. The directors chosen are G. E. Northrup, Grand Rapids; James Woodward, Battle Creek; J. J. Tompkins, Saginaw; George Simmons, Flint; F. E. Hathaway, Muskegon; Leslie Shearer, Benton Harbor, and Walter J. Bemb, Detroit.

INTERNATIONAL MOTOR TRUCK

During the quarter ended March 31, 1921, the International Motor Truck Company, New York, made a net profit of $4,396 after taking care of taxes, charges, interest, etc. Orders are said to be coming in steadily and indications are that sales during the second quarter will be the rate of 6,000 trucks a year. January was the low month of business, while the April trade was the best since September, with the exception of November.

ZUPPKE COMES MAY 27

Coach Zuppke, of the University of Illinois football team, and Dean Thomas Arkle Clark have been invited to meet with the Detroit alumni of the University at a dinner to be held May 27 at 7 p. m. at the Elks club. All alumni and former students of the University are urged to be present. Tickets may be obtained from W. F. Bollinger, 1205 Dime Bank building, or Phil S. Hanna, 611 Free Press building.

NEW POWER PLANT IN DETROIT

The Detroit city council has authorized the expenditure of $5,000,000 for the construction of a power plant to furnish power for the municipal electric street railway system, and between five and six acres of land have been set aside at the foot of Twenty-fourth street for the plant.

STEEL TREATERS HEAR WHITE

The annual meeting of the Detroit Chapter, American Society for Steel Treating, was held at the Detroit Board of Commerce today. The principal speaker was Prof. A. E. White, Ann Arbor, president of the national society. The Detroit chapter presented an honorary membership to Prof. E. D. Campbell.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—
Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.
Bulletin 3. Reducing Costs in the Boiler Room.
Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.
Bulletin 5. Saving Coal in Steam Power Plants.

Name .....
Business Address .....
Home Address .....
Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

COMMERCIAL HAULING

MORE PONTIAC STOPS ASKED

Extension of operating rights is asked of the Pontiac city council by Alvin S. Place and Oliver Fiddler, who have a motor bus line between Pontiac and Detroit. The council of the former city has restricted the stops at which the buses may take on and discharge passengers. The operators complain that their stops are commonly used as parking places by motorists. They ask permission to extend the number of stops in the city and also to have certain locations reserved to them exclusively. The council committee on transportation has the matter under advisement.

ILE WANTS A BUS LINE

A plan for closer co-operation between the city of Wyandotte and Grosse Ile was inaugurated at a meeting of citizens of the two municipalities at Grosse Ile, last week. The Ile residents asked the co-operation of the Wyandotte Board of Commerce in obtaining a six-train daily service to Detroit on the Michigan Central Railroad, a bus line from the island to Detroit and improvement in telephone connections and service

$6,000,000 MORE FOR ROADS

If the 1921 legislative trunk line mileage is to be improved it will be necessary for the state highway department to ask for $6,000,000 more or change its present $50,000,000 program. This is to provide for about 6,300 miles, of which 300 miles are within cities or villages. The legislature in four bills added 515 miles to the system.

One of the bills establishes the Philip T. Colgrove trunk line highway with a mileage of 428.7 miles. Its main line begins with the southern boundary of the state, running north through Three Rivers to Kalamazoo, thence to Hastings, Ionia, Stanton, Ithaca, St. Charles, Saginaw, and terminates at Port Sanilac, on Lake Huron. There are several small branches from this main line. The longest one begins at New Buffalo, runs to Niles, Cassopolis, Three Rivers, Union City and ends at Jackson.

The other bills provide for 50 miles of trunk line road from Ithaca through Alma and Mc Bain, connecting with the trunk line road between Cadillac and Lake City; twenty-one miles from Paw Paw to Allegan and fifteen miles from Monroe City to Ohio state line to help care for the heavy Detroit-Toledo traffic, which now goes over the one road which means a high cost for Monroe county in maintenance. This new road would be of concrete and the cost of construction and maintenance would be borne by the state. The construction cost would be $49,000 a mile, or a total of $600,000.

The remaining new mileage probably would be of gravel and cost an estimated total of $5,000,000. There are about 2,000 miles of improved roads, leaving 4,000 to be built by the 1919 bond issue. With the exception of the Monroe highway, the new roads authorized will probably not be constructed for two years, since no provision was made for maintenance in that time.

JACKSON TO IONIA

Hawkes & Porter, Jackson, announce the establishment of a motor bus line between Lansing and Ionia, making two round trips daily, including Sundays.

ANOTHER LANSING LINE

Lansing's fourth intercurban bus line has been started between that city and Howell, by Homer Tripp, Lansing. Three round trips are being made daily, the last being timed to accommodate evening theater goers. Buses now operate out of Lansing to Charlotte, Grand Ledge and Williamston, in addition to the destination of the new line. A resort service is also operated in summer to the suburban amusement parks.

DETROIT TO JACKSON

The McKinley Cartage Company, Detroit, has established a motor truck service between Detroit and Jackson. Trucks will make the trip every other day. The company expects to handle shipments of all kinds and volume.

TO CARE FOR PUPILS

The school authorities of Bear Lake, Manistee county, have called a meeting at the schoolhouse in that town, May 23, to consider purchase of equipment for six bus lines to transport school children to and from school, covering all the outlying district. Bus service for pupils has been in existence for some time and is now about to be revised, to overcome certain problems in connection with routings and to take care of increase in traffic. A number of school districts will be served by the lines.

CONSTITUTION COPIES READY

The constitution and by-laws of the Michigan Highway Transportation Association have been published and are now ready for distribution. Those desiring copies should apply to H. H. Hardy, secretary, at the Fireproof Storage & Transfer Company offices, Lansing. The Association is pushing its membership drive and meeting with success. There will be a meeting of directors next week to further membership efforts.

ASHLEY & DUSTIN SCHEDULE

The Steamer Put-in-Bay, of the Ashley & Dustin line, will make the first trip of the season to Put-in-Bay and Sandusky, Sunday, May 29, O. S. Dustin, traffic manager of the line, announced Saturday. The same trip will be made Monday, Memorial Day, and the following two Sundays, June 5 and June 12. Starting Sunday, June 19, daily trips will be made from Detroit to Put-in-Bay, Sandusky and return.

The Put-in-Bay will leave the wharf at the foot of First street, Detroit, at 9 o'clock in the morning, Eastern time, and will arrive in Put-in-Bay at noon. It will arrive in Sandusky on its return trip at 2 p. m. Starting from Sandusky on its return trip at 2:30, it will stop at Put-in-Bay at 4:30 and will arrive back in Detroit at 8 o'clock.

On Saturday evening, May 28, the first moonlight of the season will be given on Lake St. Clair. Moonlights will be run Sunday, Memorial evening, and daily each evening thereafter. The Ashley & Dustin line will run moonlights every Wednesday, Thursday, Saturday and Sunday. The steamer has been chartered for the entire season for moonlights by private organizations every Monday, Tuesday and Friday.

ESTABLISHES AD. DEPARTMENT

To aid printing houses, direct advertising concerns, advertising agencies and other businesses allied with the paper industry, the Seaman Patrick Paper Company, Detroit, is establishing a complete sales promotion and advertising department. The new division is under the management of Dan B. Jacobs as director of advertising. Mr. Jacobs has been associated for a number of years with several prominent direct advertising houses and advertising agencies.

Digitized by Google

P. M. President Issues Appeal to Buy Coal Now

President Frank H. Alfred, of the Pere Marquette Railway, has issued an appeal to manufacturers and coal dealers on the Company's lines with reference to the fuel situation for the coming winter. He advises summer delivery of next winter's supplies. The appeal is as follows:

"The Pere Marquette Railway has just completed contracts for company coal for the ensuing twelve-month period, and we are already storing fuel for next winter's operation, and this prompts me to appeal to manufacturers and coal dealers to begin to buy and store coal in adequate volume, rather than to wait until later in the year.

"The recent mild winter may make us a little negligent in this respect, but we have no assurance that similar conditions will prevail during the winter months of 1921-2.

"The coal-carrying equipment of the railways is only sufficient to carry an evenly balanced tonnage. It is not adequate to handle the movement when it is thrown upon the transportation machine in a comparatively short interval.

"There is another side to this question also. The mines have their limitations. They are able to make deliveries now. What they may be able to do later is a problem that only time will solve. We have, in the past, bent every effort to educate the public to lay in its stock of fuel and other supplies, such as raw materials, during the summer months— an appeal which in certain cases has produced an increased movement in those months when transportation conditions are at their best. Those manufacturers who have taken heed of the appeal have not suffered disappointments, delays or loss of business.

"So in again making an appeal for summer delivery of next winter's supplies we can point to concrete instances of good business in the case of those who heeded it in the past; likewise of disappointments and losses to those who failed to take advantage of the warning.

"There are economic advantages, too, in purchasing coal for winter use during the summer months and two of these are of the greatest importance:

"The usual lower prices that prevail during the summer months.

"The certainty of timely delivery.

"We are all hopeful of better business conditions returning shortly and so in moving every ton of freight possible during the summer months when the transportation machine is at its maximum of efficiency, we can then dispose of the worries about its adequacy to meet the demands of a returned prosperity."

REO TO BE HOST TO TOURISTS

The Reo Motor Car Company, Lansing, will be host to the members of the tour party of the Michigan Pikes Association, July 9, for the first night's stop of the annual good roads tour of the "Pikers." The tour will leave Detroit at noon Saturday, July 9, for a fifteen-day good roads campaign through Michigan, Wisconsin, Minnesota and Ontario, totaling 1,700 miles.

Lansing will also do its share toward entertaining the party, through the co-operation of the Lansing Chamber of Commerce and the Lansing Automobile Club. The two bodies are planning a good roads rally on the Capitol lawn.

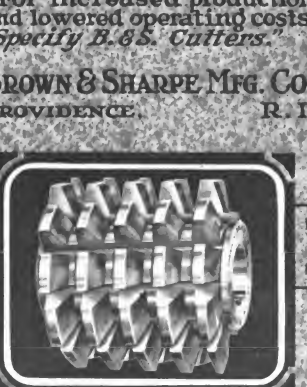
The tourists on the "Around Lake Superior" jaunt will not use tents as they did a year ago on their first International good roads campaign, but will carry folding cots and blankets and sleep in buildings. The Reo company will quarter the tourists in the Reo club house and the factory's driveway garage. Both dinner and breakfast will be served in the factory cafe. R. H. Scott, general manager, and R. C. Rueschaw, general sales manager, will represent the Reo company.

Brown & Sharpe Cutters



B. & S. Cutters are backed by fifty years' experience in the manufacture and use of milling cutters. For increased production and lowered operating costs "Specify B. & S. Cutters."

BROWN & SHARPE MFG. CO.
PROVIDENCE, R. I.



Brown & Sharpe Hobs

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:35 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:35 a. m. and every two hours to 7:35 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.



America's Headquarters for

Second Hand Electrical Machinery

Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

McMullen Machinery Company

Everything in Shop Equipment

GRAND RAPIDS, MICH.

MAIN 1491

SPRUNK ENGRAVING CO.

Commercial Artists and Engravers

700 MARQUETTE BLDG. DETROIT

Transportation

Detroit—Realizing the financial difficulties of the railroads at this time, representatives of the Masters, Mates & Pilots Association and the Marine Engineers Beneficial Association at a meeting held at Detroit May 12 with the Pere Marquette, Ann Arbor, Wabash and Grand Trunk Railway officials voluntarily accepted a reduction of 15 per cent from the present schedule, effective May 16. This reduction is accepted pending the settlement of the wage schedules for licensed officers which is to be settled by the agreement made by the Shipping Board and representatives of the Masters, Mates & Pilots Association and the Engineers Beneficial Association. All working conditions remain the same as in 1920. The agreement affects the masters, mates, pilots and engineers on the trans-lake ferries operating on Lake Michigan and the Detroit and St. Clair rivers. The unlicensed employes who include the deck hands, firemen, oilers, watchmen, wheelsmen, etc., had consented to a reduction effective April 15.

Saginaw—Through-car freight service for Alpena, Cheboygan, Onaway, Rogers City, Metz, Posen and other northern Michigan places has been arranged by the Pere Marquette Railway in co-operation with the D. & M. railway, according to word received by Donald MacDonald, traffic manager of the Board of Commerce.

Washington—The Interstate Commerce Commission has given the Detroit, Toledo & Ironton Railroad permission to extend its lines 15 miles in Wayne county, Michigan.

ROAD BIDS TO BE OPENED JUNE 2

Sealed proposals will be received at the office of the Shiawassee county road commission, at Corunna, on June 2, at 1:30 p. m., by Frank M. Rogers, state highway commissioner, for improving 3.532 miles of road in Shiawassee county as follows: Road No. 21-5, 1.803 miles in Corunna city; Road No. 21-11, 0.789 miles in Caledonia township, and Road No. 21-10, section B, 0.940 miles in Owosso city.

The work will consist of shaping the roads, constructing the necessary drainage structures and surfacing to the width of twenty feet with concrete. Alternate proposals will also be received for surfacing with bituminous concrete.

Plans may be examined and specifications and proposal blanks obtained at the office of the road commission at the court house in Shiawassee county, or at the office of the state highway department in Lansing.

Proposals will also be received at the same time and place by the common councils of Owosso and Corunna for the construction, in excess of the twenty feet in width, through part of these cities. A certified check of $500 must accompany each bid.

WALDON HEADS ROAD BOARD

Col. S. D. Waldon, Detroit, was elected chairman of the good roads board of the American Automobile Association at the final session of the annual convention, May 17. Col. Waldon succeeds George C. Diehl, elected president of the A. A. A. Mr. Diehl had been chairman of the good roads board ten years.

DETROIT AIR SERVICE PLANNED

The Great Lakes Seaways, Inc., composed of Detroit and Cleveland business men, will establish air service between Detroit, Cleveland and Pelee Island, June 1, according to announcement. Three heavier than-air machines of the seaplane-limousine type, with a capacity of five passengers and 1,500 pounds of freight each, will be used on the route. Rex L. Uden formerly a member of the British air forces, and member of the Ohio Air Commission, is vice president of the company. This is the second attempt to establish air service to and from Detroit.

CONSOLIDATED INSTRUMENT OFFICE

The Consolidated Instrument Company of America, 661 Eighth avenue, New York, has opened a Detroit branch office in the Empire building, in charge of J. H. Lytle. The company manufactures speedometers, tachometers, speed indicators and Tel Odometers.

MAXWELL SALE AFFIRMED

In federal court in Bay City, May 17, Judge Arthur J. Tuttle confirmed the sale of the Maxwell Motor Company, Inc., on the acceptance by the reorganization committee of a stipulation that they stand individually liable to preferred stockholders of the old company who have protested the sale, in the event the court finds the scaling down arrangement inequitable.

The suit of the intervening preferred stockholders was dismissed. W. Ledyard Mitchell will continue as president of the company and it is expected that the settlement as confirmed will result in placing the Maxwell and Chalmers companies on a very substantial credit basis.

Detroit Tigers' Home Dates for 1921

May 22, 23, 24, 25	Philadelphia
May 26, 28, 29	Chicago
May 30 a. m., p. m., 31	Cleveland
June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 13, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

1 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

AJAX PATTERN WORKS, Inc.

Manufacturers of High Grade

Wood and Metal Patterns

Service Our Motto

Cherry 4451 Main 6602 — 680 Fort St., E. DETROIT

The Bellefontaine Bridge and Steel Co.

Fabricators of

STRUCTURAL STEEL

Main Office and Works, Bellefontaine, O. Detroit Office, Ford Bldg. Cadillac 6858.

FOR SALE:—An exceptionally good used Buckeye Vertical Blue Print Machine, single lamp, glass about 30" in diameter, 60" long, A. C. current. Price only $50.

ADVANCE-RUMELY COMPANY
Battle Creek, Mich.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON CLEVELAND DETROIT

SALES OFFICES: New York Philadelphia Chicago Dayton
SALES REPRESENTATIVES: Atlanta Denver Portland
EUROPEAN: Columbia Steel & Engineering Co., Ltd., London, Eng.

Detroit Warehouse—1300 West Fort Street Cherry 6700

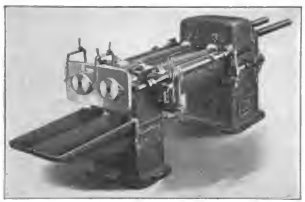


MOTH-EATEN methods are the tools of the lazy advertiser. Carefully conceived Engravings demand greater effort—but they pay you greater profits!

EVERTON ENGRAVING COMPANY

Second Floor Kerr Building
Fort Street East at Beaubien
One Block East of County Building
Phone Cherry 2821

SPEED UP YOUR BROACHING JOBS WITH A



LA POINTE MACHINE TOOL CO.
DUPLEX MACHINE

THE MOTCH & MERRIWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

THE Biblical studies of many electrical contractors ceased at the passage alluding to the man of means and the needle's eye. They never reached the Golden Rule.

We are a bit unorthodox. The owner still has a bank balance after we complete our contract.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

PHOTOGRAPHER
STUDIO BUILDING
4830 Woodward Ave.
NEAR WILLIS
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Grand Rapids—The high mark for permits for one week thus far this year was reached during the week of May 6, when 108 certificates were taken out. This is 17 in excess of the previous high weekly record. The cost of the buildings to be erected is $99,775. Of the 108 permits, 16 were for new construction and 53 for private garages or automobile sheds. Most of the more important permits were for dwellings.

Detroit—School and store buildings, a new clubhouse for the Detroit Yacht Club and some minor contracts figure in the weekly list of contracts awarded by architects as compiled by the Builders and Traders' Exchange. The list of projects in the hands of architects contains a variety of proposed construction, such as a market building, a church, four school buildings, a high pressure pumping station, a service garage and a number of stores and flats. Further information may be had at the Exchange's offices.

Berrien Springs—Excavation work on the new factory of the Calbert Company has been started. O. J. Carlyale, Chicago, one of the proprietors, is in the city to supervise the work, which is expected to be completed within thirty days.

Detroit—The Austin Company, contractor, began construction Monday of this week on a garage for the Detroit Motorbus Company, at the foot of Terminal street. The building will be 120 by 240 feet in dimensions, one story, and of steel and brick construction. The cost will be about $75,000. The Austin Company will put up the structure complete. The job will be done in forty working days.

Bessemer—The city shortly will begin work on a hotel to cost $100,000. Information regarding bids may be had from Levi S. Rice.

Laurium—Bids will be received by the Soldiers and Sailors' Memorial Association, of this city, up to June 1 for the erection of a hospital. The foundation of the building has been completed. For further information addre.s James T. Fisher, Laurium.

Detroit—During April the Detroit city department of buildings and safety engineering issued 1,509 permits for new buildings, as compared with 2,227 in April, 1920. Construction cost involved was $5,079,450, as against $11,189,325 a year ago.

Wyandotte—As the result of a "get-together" meeting of the Wyandotte city commission and the Ford Village council, the North Line road will be paved, making another line to Fort street. Bids for the work will be asked soon.

Cheboygan—The county road commission this week advertised bids on the construction of six and a quarter miles of paved highway on trunk line No. 10 between Cheboygan and Aloha. The first bid received for the work was made by a local contractor and called for $18,000. Others averaged between that figure and $48,000.

Detroit—Brandon & Hanna, Detroit, were the low bidders, among ten, this week, on the construction of the Bates street sewer, in Brush street between Alfred street and Canfield avenue. Their bid was $583,402, without compressed air equipment, and $616,138 if compressed air is used. The sewer is to be twelve feet, nine inches in diameter. Jenyes and Afield were the low bidders on the Seven-Mile road sewer, from Woodward to Parkview avenues, at $219,876.

D. A. D. A. SERVICE FORUM

The first of the series of service forums to be conducted by the Detroit Auto Dealers' Association on a plan provided by the National Automobile Dealers' Association, was held Tuesday evening in the new service building of the Cadillac Motor Car Company, Detroit. The subjects were rear axles, motors and clutches. The instructors on the proper care of these units were as follows: Engine, Paul Lundy, Continental Motors Corporation; rear axles, Harry K. Rotert, Timken-Detroit Axle Company; clutches, C. M. Ahlene, Borg & Beck Company.

DUTCH HEADS FIRESTONE BRANCH

J. H. Dutch, formerly in the manufacturing department of the Firestone Tire & Rubber Company, has been appointed branch manager in Detroit.

Bowen Becomes Secretary Of Associated Employers

Charles A. Bowen, who for eight years was secretary of the Detroit Builders' & Traders' Exchange, and for four years—until April 1, 1921—secretary of the National Retail Lumber Dealers' Association, has been elected secretary of the Associated Building Employers of Detroit. Since leaving the retail lumbermen's



CHARLES A. BOWEN

association—a connection he severed because he did not wish for personal reasons to remove to Chicago when the headquarters was transferred to that city from Detroit—Mr. Bowen had been manager of the bond department of Wynne & Kinsella.

The Associated Building Employers of Detroit is an organization of many of the principal contractors whose object is to further the American plan of employment. N. J. Kennedy is president. Offices are at 2002 Real Estate Exchange building.

Digitized by Google

New Sand and Gravel Freight Charges Fixed

The Michigan Public Utilities Commission late last week revoked its order of April 22, 1921, and established a new freight rate schedule for sand, gravel and crushed stone. The new rates are based on zone mileage and apply only to the Lower Peninsula.

While the original order made a flat reduction on all schedules of twenty-five per cent in the Lower Peninsula and twenty-two per cent in the Upper, the new reduction is from eleven to thirty-five per cent. In the Upper Peninsula the rates will revert back to their original figures prior to the last order, no complaints having been received from that region. However, the commission will hold a hearing at Marquette, Thursday, May 26, at 10 a. m., on the Upper Peninsula rates.

The new order became effective May 20, 1921, at midnight, and applied only to sand, gravel and crushed stone for certain purposes, and not for such products to be used in foundries or in the manufacture of glass, fertilizer, chemicals or cement. The Commission holds that the rates have been illogical and the forty per cent increase of August, 1920, made them more so, and that the only fair way to make a reduction was on the basis of a classification by zones. The Commission believes the new rates will result in a more uniform treatment of the population in the Lower Peninsula.

Only higher rates are reduced. Rates below the basis are to remain as they are. Where the freight is hauled over two lines, twelve cents shall be added to the one-line rate, and over three lines, twenty cents. Switching charges are not included in the order but will be covered in a supplementary one.

The new rates, in terms of cents per ton, one-line rate, is as follows: five miles and under, 55; ten miles and under, 60, and so on up to thirty miles and under, which is 80 cents. From thirty miles to 100 miles, in steps of ten miles each, the rate also increases five cents in each instance, at 100 miles being $1.15. From 100 miles to 145 miles in steps of fifteen miles each, from 145 miles to 205 miles, in steps of twenty miles each, and from 205 to 300 miles in steps of twenty-five miles each, there is the same scale of increase in the rate of five cents in each instance, at 300 miles the rate being $1.65 a ton.

In the zone for Detroit the new schedule means a reduction in the rate for the shortest haul from 84 to 75 cents a ton on silt sand and gravel from surrounding points transported into or near the city, this being a reduction of 11 per cent. A large part of all the sand and gravel freight for the Lower Peninsula is transported in the Detroit zone. The rate will determine by competition the rate for all longer hauls as is now the case.

For Grand Rapids, with hauls from seven surrounding points, the reduction in rates runs from twenty-three to thirty-five per cent. There are 4,000 different rates in the state, only a part of them being before the Commission, but on the basis of those in evidence the average reduction in these rates is twenty-two per cent. This does not mean, however, that the actual revenue to the railroads will be reduced twenty-two per cent, for it will not. The smaller reductions, for example Detroit, represent a huge portion of this business, and hence the freight charges will be cut down only a part of that twenty-two per cent on paper.

TO RESURFACE DIXIE HIGHWAY

A stretch of four miles north of the Ohio border on the Dixie Highway will be closed for about six weeks while the road is being resurfaced with stone. When this work is completed the highway will be reopened until the top dressing is laid next year. The contractors report that the roadbed shows comparatively little wear despite the heavy traffic over it.



Multiple Turning Tool

Turret Lathe Tools
at the Warner & Swasey Service Station
5928 Second Boulevard, Detroit

You can get standard tools
from our Detroit Service Station
for less than you can make special tools for,
and in much less time.
The practical men in charge there
can assist you
in determining the best tools for your work.

A good turret tool,
at very little expense,
often decreases production cost materially—
Call on us
or telephone us.

C. J. STILWELL, District Manager
WM. B. POPE

The Warner & Swasey Company
5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.
Branch Offices: Detroit.....5928 Second Boulevard
Boston.....Oliver Building
New York.....Singer Building
Buffalo.....Iroquois Building
Indianapolis.....Lemcke Annex
Dayton.....Mutual Home Building
Milwaukee.....Sycamore Building
Chicago.....618-628 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

STRANGE F

WHEN the Purchasing Agent or Master Mechanic says "No" to your representative, what is behind it? Just this: The President, General Manager or Treasurer—perhaps the banker—of the company has clamped down the lid and is sitting on it.

Still, there is business. We know of one concern here in Michigan which within one year has jumped from producing ten batteries a day to sixty, and making money. We know of another concern, though, that is grinding down drills it has in stock instead of buying new ones to meet its requirements. We know of a salesman who, upon being turned down, went to one of the higher executives and made him see the economy and value of the service he was selling.

Now the only reason these men higher up are holding down the placing of actual orders is "Money"—or rather the lack of it. This means that you have to sell the man who holds the money bag on the value of the investment, based upon its performance.

The war demand resulted in increased manufacturing facilities of about 25 per cent. When the factories are closed down or running on a very much reduced basis they are not wearing out the equipment generally. Instead they are placing "piecemeal" orders. There probably won't be a general buying demand for some time to come, but there are thousands of small replacement and new installation orders to meet the requirements of changed manufacturing conditions. This means stiff competition, because everyone is out with salesmen after business now.

What is going to help your salesmen get the advantage over your competitor?

There is more business in Michigan than in Montana for you. This publication is a business paper appealing primarily to executives. In fact, the executives of practically every plant in Michigan employing fifty or more men are its readers, as well as are the majority of bankers.

Since the first of the year we have been running articles on specific mechanical operations in the fabrication of metal and wood products, focusing the attention of the manufacturers of the state upon the equipment necessary to various lines of manu-

Manufacturer Pu

611 Free Press Building

Digitized by Google

SYCHOLOGY



facture. We have been laying the foundation for the consideration of the products you make.

One of the big points in our circulation is the fact that not only the executives but the men in the shop and the department heads are looking to our columns for information on subjects vital to them. That is why such concerns as Dodge Brothers, Detroit; Hayes Wheel Company, Jackson; Wilson Body Co., Detroit and Saginaw, and hundreds of other Michigan manufacturing concerns have individual subscriptions going to the homes of their department heads and executives.

We have received a good many cancellations of advertising contracts, but the old established concerns who intend to stay in business are not dropping out. The Brown & Sharpe Manufacturing Company, Providence; Warner & Swasey Company, Cleveland; Union Twist Drill Company, Athol, Mass.; National Twist Drill & Tool Company, Detroit; E. W. Bliss Company, Brooklyn; Geuder, Paeschke & Frey Company and Cutler-Hammer Company, Milwaukee, are still hammering home their messages each week to the men who are sitting on the lid—breaking down resistance by using advertising in our columns.

Strange psychology most every one employs—using double page spreads when they could not take an order, and dropping out when they need orders.

But the exceptions to this practice are meeting with success.

There are many peaks and valleys on the sales charts today, but they won't be flattened out by broadside methods. They will by sharpshooting.

Perhaps we take ourselves too seriously, but that may be the result of our constituency's taking our paper seriously, and we cannot help feeling that with our highly concentrated circulation among your constituency in Michigan and adjoining states, which is the area of influence of our paper, there is an economy and a directness of appeal offered to you through a campaign of advertising in our columns.

If you think so, too, we will be very glad to furnish you our advertising rates and make a further analysis as to the value our paper may have for your particular product.

lishing Company
Detroit, Michigan

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building Telephone Cherry 6010

DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, MAY 21, 1921

Tying Up Farm and City

IT IS RATHER a new idea which the Detroit Board of Commerce is trying to work out in its relations with the agricultural neighbors of the metropolitan city. A number of commercial bodies of this state have sought to enlist the interest of the agriculturalists located within range of their respective cities, but the point of contact has usually been some single material thing, such as good roads, the extension of rural free deliveries, or the like.

The program of the Detroit Board of Commerce has as its basis the theory that an industrial city cannot maintain its supremacy unless it is provided with an adequate supply of food at as large a rate as it is possible to supply it. Upon this theory the Board intends to place a super-structure of effort in the direction of the intensification of agriculture within a motor truck radius of the city, for the purpose of inducing the largest possible productiveness of food products from the soil, which can be brought to the point of consumption without having to be burdened with a high short haul railroad rate. Pursuing the theory that every acre available within reasonable distance of the city should be made to pay a tribute of food, a survey of waste lands, whether they be abandoned farms or marshy or swamp land, is to be made, so that the former may be put into use directly and the latter be made available for use by drainage and such treatment as is necessary to make these acres produce food.

Apart from the purely economic end of the program, there is a real demand in Michigan at this time for a better understanding of the industrial cities by the agricultural population. That a misunderstanding exists no one can deny. That the misunderstanding extends even into a spirit of antagonism is witnessed in the constant bickerings between farmers' clubs and the legislature and with the representatives of the industrial cities. The farmers have had their own way for lo, these many years, but the next re-districting of the state will be very apt to show that the industrial cities will have a majority, because the majority of the population lives therein, and it is not a pleasant prospect to contemplate, should the industrialists hand back to the agricultural areas something of the same treatment that the farmers have given the cities in time past.

As a matter of fact, there is no reason for antagonism between the two elements at this time. There may have been in the past when the industrial cities of Michigan could not consume all the farmers produced, and when the lush wheat, corn, oats, rye and barley crops of Michigan found their markets in Chicago and in Toledo, to be passed onward to the more intensely settled sections of the country for consumption. At this time the industrial cities of Michigan are quite competent to consume all the food that is raised on the agricultural areas of the state, with some in addition. This is as true of the flesh meat foods as it is of the cereal, vegetable and fruit types. Michigan is very largely supplied with western beef today, while a recent estimate showed that there are easily 12,000 square miles of land in the 32,000 of the lower peninsula of Michigan which are available for the production of flesh meat food cattle. Even under the present conditions the best beef raised in Michigan does not go to the great city markets in the state, but goes directly to Chicago, there being little demand for this class of food product in the large cities of Michigan. This the farmers themselves are correcting by having established in Detroit a packing industry of magnitude, to which they propose to send their cattle direct, avoiding the shrinkages of stockyards and the charges of commission men. Michigan is a very large producer of meat cattle, but it is not yet a large enough producer. In the states to the west of us a very active system of promotion of the raising of meat cattle is in progress all the time, the youngsters being induced to organize calf clubs, baby beef clubs, pig clubs and the like, all of which add substantially to the number of animals offered for slaughter for the usefulnesses of the meats.

The farmer and the city man in Michigan have a long future of co-operation before them if they will undertake it, and the proposition, which has been handled on a serious scale by the Detroit Board of Commerce, should attract similar organizations in the large cities of this state. It will pay them to watch its progress, note its successes, observe the defects of the plan if there be any, and correct them, and generally get a better understanding between the cities and the producers of food. With the determinate amount of money which has been invested in Michigan roads, and the facility with which movement over them may be accomplished with farm products carried in motor trucks, it will be necessary to have such co-operation in order to produce dividends upon the $50,000,000 which Michigan alone is investing in these roads, and the other millions which the counties and the road districts have invested already, and are adding to. These investments are not made either for ornament or comfort. They are made for utility and there should be a substantial profit realized upon them by the commercial usefulnesses which they should be made to yield.

The Federal Reserve Should Answer

THIS PAPER has been a consistent supporter of the personnel of the Federal Reserve Board at Washington. We have believed that, except for minor changes in functioning, the existing machinery of the Reserve Banks is about as near perfection as is possible to make it. But when a man who was Comptroller of the Currency for seven years makes positive allegations of abuse and partiality on the part of the Board, we think the Board should at least controvert such statements with the facts, or if unable so to do, should acknowledge its errors.

John Skelton Williams got "in wrong" with a great many people, yet the men who worked under him will tell you that he was a most efficient supervisor, that he was fair notwithstanding his overzealousness in some directions and that he returned to the Government in hours of conscientious study and effort many times that for which he was paid. But the vital point is this: he had access to the "inside" of national banks and it must be granted that when he makes statements such as are accredited to him in his Washington speech, April 15, before the Peoples Reconstruction League, it is time for an explanation from those he accuses.

This is not to be taken as an indorsement of his views, but here are two of the javelins which he throws at the Federal Reserve Board:

"The rate charged at one time by a Federal Reserve Bank, under regulations approved by the Board, in one exceptional case to a small bank in a farming section amounted to more than 80 per cent per annum."

"I gave them (the Board) one instance where a certain large bank last summer borrowed money from its Reserve Bank at about 6 per cent per annum, and about the same time loaned a customer, the head of a large manufacturing enterprise, $1,000,000, well secured by collateral, of which loan about $500,000 was passed on to correspondent banks (without liability to the selling

Digitized by Google

bank) at about 12 per cent per annum, and $500,000 of the loan retained on a basis of interest and commission which yielded the lending bank about 200 per cent per annum on its net outlay; the whole loan being paid in full in six months. When that 200 per cent transaction was referred to in a meeting of the Reserve Board, one member, to my amazement, was disposed to condone or defend it on the ground that 'the banks all charge such rates, more or less.'"

In the first case he says a Federal Reserve Bank charged a small bank interest at the rate of more than 80 per cent per annum. In the second case he says a large bank used its membership to earn about 200 per cent per annum on money borrowed from the Federal Reserve. We don't like the sound of this.

Mr. Williams says further: "My attention was called to a case where a bank was charged by its Reserve Bank under the progressive plan from six to 8½ per cent per annum. The average rate which it paid the last two weeks in September for the advance of $112,000 was about 45 per cent."

Of particular interest to the bankers in the agricultural districts is a statement to the Board in his letter of December 28, 1920, in which he said, among other things: "While there appears to be this scarcity of money and of credit in the great agricultural and producing sections of the West and Northwest and in the South and Southwest, we find that individual banks in New York city are borrowing from the Reserve System, in a number of cases, more than $100,000,000 each; and sometimes as much as $145,000,000 is loaned there to a single bank—twice as much as the total loans some of the Reserve Banks have been lending recently to all the member banks in their districts." Also: "I was further painfully impressed by the evidence of the official records that at the beginning of August, 1920, in crop moving time, the national banks in New York city were lending for correspondents on so-called 'Wall street' loans for stock speculations and operations, more than $500,000,000 coaxed from banks everywhere in the country by the high rates speculators would pay. This was more than the Federal Reserve banks of Minneapolis, St. Louis, Kansas City, Dallas and Atlanta were lending to their 1,000 or more member banks."

As the former comptroller sees it from his experience in the office, "Congress should so amend the Federal Reserve Act as to make it not only fool-proof and crook-proof, but immune from the diseases which I coin a word to describe as 'bureaumania.'" In his opinion, the Board has run the System strictly as a machine and has been severely technical regardless of changes of policy of operation which unforseen conditions might dictate.

Those who know the former Comptroller best will know how many pinches of salt to take with his opinions, but when he indulges in specific charges and quotes the figures, the accused should be heard from. In point of number of members the Federal Reserve system is still in its infancy. We hope to see the day when every eligible bank will become a member, but one of the cardinal attractions of membership is the right to participate equally in the benefits of the System. If Mr. Williams' allegations are true, these benefits have not always been impartially bestowed.

Doing Their Own Bargaining

A STATEMENT issued by the Michigan State Farm Bureau admits that the Michigan Sugar Beet Growers' Association has failed once more to sell the crop "collectively" to the manufacturers. Thus has collapsed another attempt on the part of the professional organizers to force the sugar makers to pay more for beets than they are worth; and it is fitting enough that the agitators were licked by the very men they said they were going to serve—the growers themselves.

In 1920, when the manufacturers declined to be stampeded, the association called a "strike." Several hundred growers, so it was claimed, refused to plant. Others signed agreements not to put the crop into the ground but got cold feet when they saw the factories were going to get enough beets from growers outside the association. The result was that nobody was made to look silly except the association itself.

This year the organizers, remembering the rebuke of last season, took another tack. They sent contracts to growers all over the state asking them to make the association the selling agent for the crop in bulk. Some signed but a good many more chucked the contracts into the waste basket or the kitchen stove. When the organizers approached the sugar manufacturers with their bunch of contracts they were met with the assurance that plenty of acreage had been contracted for and there would be "nothing doing" so far as they were concerned. So they have notified those who signed up that they have been released from their obligation, and to make the best terms they can, as soon as they can.

The weak link in the agitators' scheme is that the prices which the Michigan factories are and have been paying are fair and approximately the same as those paid throughout the beet growing districts the country over, and the growers know it. Having dealt with the manufacturers a good many years, they have every confidence in their ability to do their own bargaining, without outside interference.

Short Measure Stuff

FRIENDS, ROMANS, COUNTRYMEN, PLUG UP YOUR EARS

Now Nero was a naughty man,
By histories we're told,
A tyrant and a charlatan
And proud and overbold,
But possibly not wholly bad,
When Rome by fire was shorn,
At most he played a fiddle—
And he didn't toot a horn.
—From Line o' Type, Chicago Tribune.

And Cassius, too, of Roman fame,
Who helped bump Caesar off,
Whose pocket money mostly came
From out the public trough;
Who was the first great Bolshevik,
A traitor and a drone;
At least did not take lessons,
Upon a saxophone.

And Antony, another gnat,
Who left his wife and chile,
To play around with Cleopat'
Along the River Nile;
Who wasted all his precious wealth
Upon the cup that cheers,
Still can't be charged with writing
"My Four Egyptian Years."

"Nineteen twenty-one will reward fighters." Duet from the Dempsey and Carpentier headquarters. "Oh, very well."

* * *

Between the Newberry verdict and the Jewish fiasco, Henry Ford should now be left pretty free to build automobiles.

* * *

The mills will grind a little more freely at the University of Michigan now.

* * *

Have you held a little beauty contest yet? It's quite the rage.

* * *

If you don't like what you're doing, why not build automobiles? The "teach by mail" boys are overlooking a good bet.

* * *

The seaman's law is being swabbed to walk the plank.

* * *

But the British wish they were "Sinn Faint."

* * *

And now it remains only to declare a "Mother-in-Law's" day.

* * *

AMERICA

America's a better land
Than any land I know,
America's a land worth while,
God grant we keep it so!
—Detroit Free Press

America's a grand old land—
I love the U. S. A.—
It is the grandest place to live
In all the world, I'll say.
—Hastings (Neb.) Tribune

I, too, am glad I'm safe within
Our Uncle Sammy's gates;
Because this is the greatest land
In the United States.
—A. F.

Digitized by Google

FINANCIAL

The Business Outlook

By PHIL S. HANNA

THIS is no time to be feeling blue. It may come to pass that the automotive manufacturers will be obliged to cut down their present rate of production and there may be something to the theory that "this present improvement in business is due to the usual spring revival in automobile sales," but there are more than 45,000,000 people engaged directly and indirectly in the farming business of this country who have been "out of the market" completely these many months since Mr. Ford cut the price of his cars, and the time is almost at hand when we are going to hear from them. And when they begin buying again, be it ever so much less than their normal purchases, business is bound to feel the quickening effect thereof, and they will fortunately come about the time our automobile making friends are scheduled to "depart."

It is now about a year since deflation began. We have witnessed the most gigantic tumble in values the American people have ever known and it has been accomplished without materially injuring our banking fabric or seriously hurting confidence. Why, after witnessing the successful passage of hundreds through crisis which in former periods of liquidation have laid commercial houses and banks low by the hundreds, should we now let the cold chills run down our backs? There are undoubtedly more storms to weather before this thing is over, but with every storm the ship of business rides through with less strain and the skipper becomes a better financial navigator.

Dun's reports of business failures both in United States and Canada show clearly what we have weathered this time compared with 1893 and 1907. In the former year there were 15,242 failures in the United States, with liabilities totaling $346,779,939, and in 1908, the year following the 1907 difficulty, there were 15,690 failures, with total liabilities of $222,315,684. In 1915 there were 22,156 failures, with liabilities totaling $302,286,148, but in the last quarter of 1920 total liabilities alone were $128,544,324, or at the annual rate of about $500,000,000 a year. For the first quarter of 1921 total insolvent liabilities were $180,397,989 covering 4,572 defaults, or at the annual rate of about $750,000,000. We submit that there is much ground for confidence in the showing and when the 1921 insolvency history is fully written we may look back with profound wonder that so large a number and amount of business fatalities were weathered without a greater degree of direct injury to all of us. Canada's showing is similar, there being 566 failures, with liabilities of $22,245,520, for the first quarter of 1921, compared with 209 failures having liabilities of $4,327,174 for the same quarter of 1920.

The four instances of price cuts during the last week—Jordan, Marmon, Chevrolet and Oakland—passed off without half as much notice as the same events would have commanded last fall. And these probably are only forerunners of others which will follow. Three tire companies got in line, too, all of which will not immediately produce the desired results but it is contributing to the eventful swing back of the pendulum toward normal.

The borrowing public should not be misled by the reduction of Federal Reserve discount rate into thinking that money is thereby to be made automatically easier to get. The thing to watch is the liquidation of loans as compared with liquidation of deposits. There isn't a banker in the state of Michigan who wants to pile up a reserve just for the sake of having an abnormally large liquid fund on hand when those funds can be loaned profitably. Between February 21 and April 28 bank loans and investments in Detroit were reduced $12,511,154, while deposits went off $8,787,177; and if—with emphasis on the "if"—this ratio of reduction is kept up the local situation will correct itself. But in cases where a bank is obliged to increase its bills payable (borrowed money) to take the place of deposits drawn out which have not been covered by liquidation of loans and investments, a reduction in the discount rate has about as much effect as reducing the price of rice in Japan.

But notwithstanding the local bank condition we believe there is every reason for feeling cheerful about the future, for the general bank condition the country over, as shown by reports of more than 800 large banks to the Federal Reserve, is improving daily. There are bound to be "spotty" conditions here and there and too much emphasis can not be laid on the fact that if the Detroit banks had not stretched themselves, so to speak, to take care of business when it was offering, they had an average condition so far as bank statistics go. But more than likely average condition would have been passed in the sense of general business and there might not have been the splendid revival which we have witnessed the last sixty days.

FISHER BODY EXCHANGE EFFECTED

Otis & Company announce that the plan for the exchange of common stock of Fisher Body Ohio for common stock of Fisher Body Corporation has been declared operative. Under this plan the holder of each share of the Ohio company stock is entitled to $3 in cash and one-fifth of a share of common stock in the present corporation. Communications are now being prepared asking for the surrender of the receipts. Under the plan the Fisher Body Corporation guarantees the payment of current quarterly dividends upon the preferred stock of the Ohio company down to and including the dividend payable July 1, 1922. It also agrees to pay on or before that date the accrued unpaid dividends on the preferred stock for the year 1920. The dividend accruing April 1, 1921, is expected to be paid by the Ohio company and a meeting of board of directors for the purpose of declaring a dividend will be held before June 1, at which date the dividend is expected to be paid. Holders of the Ohio common had until May 15 to deposit their stock for exchange, when the privilege expired.

PONTIAC CLEARINGS INCREASE

Pontiac bank clearings for the week ended May 12 were $503,058.46, as compared with $428,489.65 the previous week.

G. R. SAVINGS HEADS LIST

It will be noted in the table of bank statistics which appears elsewhere in this issue that the Grand Rapids Savings Bank now heads the Grand Rapids banks in the matter of deposits. Between February 21 and April 28 deposits grew from $10,325,415 to $11,754,317.

Wallace Company Upheld in Injunction Proceeding

Judge Leland W. Carr, of the Ingham circuit court, Lansing, has sustained A. W. Wallace & Company, Detroit, in their injunction proceedings against the Michigan Securities Commission to prevent the suspension of their license because of the sale of certain stock of the Michigan-Colorado Copper Company. While the court held that the Commission had this power to suspend a license, the company was not given proper notice, charges were not filed and it had no chance for a hearing. The question of the ownership of certain stocks was a matter to be decided by court and not by the Commission, the judge held. The decision of the court, however, does not prevent the Commission from taking other proceedings against the Wallace Company in the matter of stock sales.

The resolution to suspend the license of A. W. Wallace & Company was proposed by the Commission but was stopped by the injunction June 24, 1920, which is now made permanent. It grew out of the sale of Michigan-Colorado Copper Company stock. The Commission had authorized the sale of 975,000 shares, but the Wallace company also disposed of a part of 500,000 shares, which is claimed had been placed with that firm for promotion purposes.

The court opinion ends the original proceedings and forbids the Commission's forcing the company to pay the Michigan-Colorado Company any money for the sale of stock. The Commission may start new proceedings for the revocation of license in case the Wallace firm has sold any stocks not authorized. The court also leaves the way open for the Michigan Colorado Copper Company, or receivers, to sue Wallace for the amounts derived from the sale of stock in controversy. Purchasers of the stock are also left free to sue to recover money paid for these stocks.

Relative to the 500,000 shares of stock, the court says: "The query naturally suggests itself as to why this stock was not placed in escrow as was the remainder of the issue stock. By so requiring the Commission might have prevented any misunderstanding whatever from arising as to the scope of its action."

The court calls attention to the fact that this stock was left free while 975,000 shares were authorized and 1,500,000 shares placed in escrow. It is apparent that the company thought that this extra stock, or proceeds therefrom, could be used for promotion purposes, the court says, intimating that the Commission was lax in not fixing the status of the 500,000 shares.

TALKING A NEW BANK

The Battle Creek News is authority for the report that there is a movement on foot in the food city to establish a fifth bank there.

I. B. A. ANNUAL OCTOBER 31

The tenth annual convention of the Investment Bankers Association of America will be held October 31, Nov. 1 and 2, at the St. Charles Hotel, New Orleans.

ALBERTZART MADE MANAGER

Roy R. Albertzart, who has been with the bond department, the Detroit office of Paine-Webber & Company since 1916, was appointed sales manager, effective May 16.

Digitized by Google

Comparative Bank Clearings

Detroit

Week Ended	1921	1920
January 5	$107,282,894	$121,433,204
January 12	96,173,447	130,817,003
January 13	101,893,388	131,841,037
January 26	76,315,397	97,641,658
February 2	87,998,925	91,772,632
February 9	75,609,402	103,804,808
February 16	70,621,833	101,899,770
February 23	87,711,031	98,588,767
March 2	88,825,632	127,086,854
March 3	75,782,353	106,011,689
March 15	98,836,483	133,176,053
March 22	80,158,496	143,337,383
March 29	89,091,871	148,431,058
April 6	78,185,871	104,306,351
April 12	81,621,367	108,831,867
April 20	86,777,883	161,949,443
April 23	80,888,880	113,856,876
May 3	81,644,099	114,788,787
May 11	79,615,963	107,493,938
May 18	128,141,704	115,794,713
Month of		
January	388,480,283	427,381,370
February	302,841,823	435,366,396
March	377,178,243	572,422,353
April	334,334,378	540,873,568
May	.....	464,356,869
June	.....	556,706,337
July	.....	332,324,143
August	.....	382,863,086
September	.....	361,533,340
October	.....	515,456,782
November	.....	405,088,440
December	.....	432,881,845
Yearly totals, 1920	.....	$6,103,823,308
Yearly totals, 1919	.....	$4,894,386,188

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	13	0 9⅜	13
Dow Chemical	360	360	300
Firestone Tire & Rubber	82	90	67
Do. pfd.	87	86	78
Fisher Ohio Body	15¾	20	13
Do. pfd.	75	75½	51
Goodyear Tire & Rubber	11½	29	3½
Do. pfd.	51	55¾	26
Miller Rubber	73	80	47
Murray Ohio	6	6	8
National Acme	21½	38¾	20½
Paragon Refining	15¼	20½	15½
Portage Rubber	17	27	15
Do. pfd.	36	44	30
Standard Parts	1¾	11	1
Do. pfd.	8¾	28½	2
Victor Rubber	20	20¾	15
Youngstown Sheet & Tube	71½	75	57
Do. pfd.	104½	104½	102¾

Quotes by Otis & Co., May 14.

Detroit Listed Bonds

Name	May 17, 1921	Bid	Ask
Cons. Pow. Co.—5s, 1936	.....	80	81
Detroit & Flint—5s, 1921	.....	86½	88½
Detroit, Ft. W. & B. L.—5s, 1927	.....	80	87
D., M. & T. Short Line—5s, 1933	.....	...	81
Detroit & Pontiac Ry.—5s, 1922	.....	98	99
Detroit & Pontiac—4½s, 1928	.....	...	84
Detroit & Port Huron S. L.—5s, 1950	.....	68	75
Detroit Railway—5s, 1224	.....	...	82
Detroit, Ypsi. & A. A.—6s, 1924	.....	...	100
D., Y. & A. A., Jackson—6s, 1926	.....	79	85
Det. United Ry.—4½s, 1931	.....	...	61
Detroit Edison Co.—5s, 1933	.....	87	89
Det. Ed. Co.—1st & ref. 5s, 1940	.....	79¾	80
East Mich. Edison—5s, 1931	.....	81	86
Detroit Edison Deb. 7s, 1928	.....	83½	...
Detroit Edison deb. 7s, 1929	.....	95	97
Detroit Edison deb. 7s, 1930	.....	95½	96
Detroit Edison deb. 8s, 1931	.....	101½	102¾
D. C. Gas Co., 1. M.—5s, 1913-33	.....	...	31
D. C. Gas Co., 1. L.—5s, 1928	.....	87	95
Detroit & Sub. Gas Co.—5s, 1928	.....	18	86
Mich. State Tel. Co.—5s, 1924	.....	87	...
By-Prod. Coke Corp.—6s, 1930	.....	...	...

Grand Rapids Stocks

American Public Utilities, Common	7	11
American Public Utilities, pfd	18	21
Commonwealth P. R. & L., com	10	12
Commonwealth P. R. & L., pfd	24	30
Citizens Telephone Company	4	4½
United Light & Railways, com	25	26½
United Light & Railways, pfd	69	33
Cities Service, Bankers' Shares	28½	28¾
Cities Service, com	224	228
Cities Service, pfd	66	66¾
Cities Service, Debenture "B"	185	189
Cities Service, Debenture "C"	82	85
Cities Service, Debenture "D"	89	93

Quotes by Howe, Snow, Corrigan & Bertles, May 16.

Business Meets New Conditions

American business has been clearing decks. Budgets have been revised. Every buying, selling and production unit has been overhauled and made ready for intensive service. Economy has been the test—economy of time and effort.

In any study of functions and readjusting of methods, the work done by your bank balance should not be overlooked. Has it been merely a checking account and a basis for commercial credit? Or has it brought to the aid of your organization other constructive services? Are you making use now of all the help it should provide?

Many business men who carry deposits with the Irving or with Irving correspondents have discovered broader service possibilities in their banking connections. The Irving investigates markets as well as credits, expedites deliveries of merchandise as well as collections, supplements the information resources of its customers both in domestic and foreign fields. Every transaction it undertakes, either at home or over-seas, is handled with a clear understanding of business essentials as well as careful attention to banking requirements.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

1851-1921: SEVENTY YEARS A BUSINESS BANK

MUNICIPAL BONDS

Free from Federal Income Taxes.

Yielding 6% to 7% Per Annum.

We will register with County Treasurer any bonds purchased and pay ½% fee, making them

FREE OF ALL STATE TAXES.

The Hanchett Bond Co.

INCORPORATED 1910

Municipal Bonds.

CHICAGO.

Dime Bank Bldg., Detroit

W. E. Dunham, Representative.

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank

City Trust and Savings Bank

GRAND RAPIDS, MICHIGAN

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MAY 18th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low 1920	Annual Dividend Cash	Annual Dividend Payable	Last Dividend When Paid	Last Dividend Cash	Last Dividend Stock	New Dividend Payable	New Dividend Ex.-Div. Date	New Dividend Amount Cash	New Dividend Amount Stock	Dividends Total This Year Cash	Dividends Total This Year Stock	Capitalization Outstanding
American Chicle, pfd	....	....	100	....	....	6%	Quar.	4- 1-21	1½%	....	....	....	3%	....	3%	....	$3,000,000
Am. Lt. & Trac. Co., com.	85½	85½	100	114 - 09	304 - 55	**4%	Quar.	6- 2-21	....	1%	....	....	2%	2%	2%	2%	$25,271,000
Do., pfd.	....	....	100	....	....	6%	Quar.	6- 2-21	1½	....	....	....	3%	....	3%	....	$14,526,200
Bower Roller Bearing Co.	....	....	10	17½ - 17	29½ - 10	....	Varies	7- 1-20	....	....	....	....	....	....	....	....	$600,000
Chas. Iron Co. of America, com.	1¾	2	10	2¾ - 1¾	5 - 1¾	....	Varies	7- 1-19	....	....	....	....	....	....	....	....	$2,809,350
Do., pfd.	2½	3¼	10	3½ - 2½	5 - 2½	....	Varies	7- 1-19	....	....	....	....	....	....	....	....	$5,217,350
Cities Service Co., com. XD	261	263	100	....	555 - 341½	156%	Mon.	5- 1-21	1½%	1½%	6- 1-21	5-14-21	1½%	1½%	2½%	6 3/4%	$43,440,987
Do., pfd. XD	85¾	86½	100	....	70 - 65	6%	Mon.	5- 1-21	1½	....	6- 1-21	5-14-21	1½	....	3%	....	$76,719,371
Coulsella Lead & Zinc Co.	5	20	10	16 - 6	50 - 10	....	Varies	11-15-17	....	....	....	....	....	....	....	....	$300,000
Columbia Sugar	9½	9¾	10	14½ - 10¾	25½ - 11½	12%	Quar.	4- 2-21	3%	....	....	....	....	6%	....	....	$3,000,000
Commerce Motor Car Co.	....	....	10	7¾ - 6¼	14½ - 6¼	....	Varies	7- 1-20	3%	....	....	....	....	....	....	....	$600,000
Com. P. R. & L. Co., com.	....	....	100	16 - 12½	31½ - 16	....	Varies	7- 1-20	3%	....	....	....	....	....	....	....	$18,585,900
Do., pfd.	....	....	100	34 - 29	45½ - 23	116%	Quar.	2- 1-21	1½	....	....	....	1½%	....	....	....	$17,952,000
Continental Motor Co., com.	6½	6¾	10	7¾ - 5¾	14½ - 5¾	....	Varies	12-20-20	3%	....	....	....	....	....	....	....	$14,997,250
Do., pfd.	81	84	100	....	100½ - 93	7%	Quar.	4-15-21	1¾	....	....	....	3½%	....	....	....	$2,151,700
Det. Br. & Malleable Wks	90	....	100	98 - 98	98 - 93	6%	Mon.	5- 2-21	1½	....	6- 1-21	5-26-21	1½%	....	2½%	....	$1,497,000
D. & C. Navigation Co.	....	71	50	75¼ - 71	100 - 67	8%	Quar.	4- 1-21	....	....	....	....	4½%	....	4½%	....	$6,038,000
Detroit Creamery Co.	20¼	21½	100	26½ - 20¾	38¾ - 16	8%	Quar.	4- 1-21	2%	....	....	....	4%	....	4%	....	$5,181,700
Detroit Edison Co.	95	95½	100	98 - 92½	114 - 92¾	8%	Quar.	4-15-21	2	....	....	....	4%	....	4%	....	$27,655,300
Detroit United XD.	....	....	100	....	....	8%	Quar.	3- 1-21	2	....	6- 1-21	5-16-21	2½%	....	4%	....	$15,000,000
Edmund & Jones, com.	....	....	None	14½ - 9¼	34 - 14½	....	Varies	1- 1-21	....	....	....	....	50c	....	50c	....	$40,000 shs.
Do., pfd.	....	....	100	70 - 70	78 - 70	7%	Quar.	4- 1-21	1¾	....	....	....	3½%	....	....	....	$800,000
Federal Truck	....	....	10	23 - 18	82 - 16¾	....	Varies	11- 1-21	....	....	....	....	1%	....	$2,000,000	....	$2,000,000
Ford Motor Co. of Canada	266	268	100	290 - 217	470 - 120	6%	Quar.	7-15-20	1½	....	....	....	....	....	....	....	$7,000,000
Gen. Al. & Br. Mfg. Co., com.	....	11	10	13½ - 10¾	28 - 11	....	Varies	10- 1-20	....	....	....	....	....	....	....	....	$1,158,850
General Motors	....	....	None	16 - 12½	42 - 12¾	$1.00	Quar.	3- 2-21	25c	....	....	....	50c	....	$0.75	....	20,317,005 shs.
Goldman Sugar, com.	....	....	None	....	59¾ - 39½	....	Varies	....	....	....	....	....	....	....	....	....	$70,000 shs.
Do., pfd.	....	....	100	....	....	7%	Quar.	4- 4-21	1¾	....	....	....	3½%	....	....	....	$2,140,000
Hanna Furnace, com.	....	27	10	26 - 25	....	....	....	....	....	....	....	....	....	....	....	....	$1,805,000
Do., pfd.	....	....	100	....	....	8%	Quar.	3-15-21	2%	....	....	....	2%	....	....	....	$750,000
Hall Lamp Co.	....	....	10	15 - 13	32½ - 16	....	Varies	12-24-20	....	....	....	....	....	....	....	....	$1,000,000
Hayes Mfg. Co., com.	2½	2¾	10	3¼ - 2½	8¾ - 2¾	....	Varies	3- 1-20	1½	....	....	....	....	....	....	....	$1,000,000
Holland-St. Louis Sugar Co	....	....	10	10 - 7	19 - 7½	....	Varies	1- 1-20	....	....	....	....	....	....	....	....	$1,500,000
Iron Silver Mining Co.	....	60	20	....	62 - 42	....	Varies	7- 1-19	10c	....	....	....	....	....	....	....	$2,500,000
K. B. Kresge, com.	140	143	100	141 -140	184 - 120	6%	Semi-Ann.	2- 1-21	3%	....	....	....	3%	....	....	....	$10,000,000
Do., pfd.	....	....	100	96¾ - 96¾	100 - 100	7%	Quar.	4- 1-21	1¾	....	....	....	3½%	....	....	....	$2,000,000
Lincoln Motor, Class A	18½	18½	50	21¾ - 17½	50½ - 12½	....	Varies	12-20-20	$1	....	....	....	....	....	....	....	$8,000,000
Lindeman Steel, Com.	....	....	10	....	24½ - 15½	12½%	Quar.	4- 1-21	30c	....	....	....	60c	....	$1.08	....	$1,098,000
Mexican Crude Rubber Co	61	63	100	65 - 61	120 - 61	....	Varies	3- 1-14	2%	....	....	....	....	....	$7.00	....	$700,000
Mexican Drop Forge, com. XD	....	38	None	....	50 - 38¾	$3.00	Mon.	5- 1-21	25c	....	6- 1-21	5-15-21	25c	....	$1.25	....	112,800 shs.
Do., pfd.	....	....	100	....	99 - 90	7%	Mon.	5- 1-21	1¾	....	....	....	1¾%	....	3½%	....	$350,000
Michigan Stamping Co., com. XD	....	....	10	18¼ - 17½	30 - 10½	9%	Quar.	4-25-21	2¼	....	5-25-21	5-15-21	2¼	....	4½	....	$1,000,000
Michigan Sugar Co., com. XD	7½	7¾	10	8¾ - 7½	16 - 7¼	6%	Quar.	4- 1-21	1½	....	6- 1-21	5-15-21	1½	....	3%	....	$7,447,100
Do., pfd.	8	....	10	8½ - 8	9¾ - 8	6%	Quar.	3-15-20	1½	....	6-15-21	6- 1-21	....	....	....	....	$3,703,500
Midwest Detroit Theater Co.	10½	....	10	10½ - 10	21 - 10½	....	Varies	5-15-21	....	....	....	....	9%	....	....	....	$350,000
Motor Products	50	55	None	52 - 37¼	60¾ - 47	....	Varies	5- 1-21	$1	....	....	....	$2	50	....	....	$2,885,000
Motor Wheel, com.	9	10	10	11½ - 8½	14½ - 8¾	....	Varies	3-21-21	2%	....	....	....	2%	....	....	....	$4,500,000
Murray Mfg.	....	....	100	....	....	....	Varies	10- 1-20	3%	....	....	....	....	....	....	....	$733,450
National Grarer Co	6¾	7½	100	9½ - 7	156 - 156	....	Varies	12-31-20	2	....	....	....	....	....	....	....	$2,000,000
Do., pfd.	....	....	100	....	115 - 115	6%	Semi-Ann	12-31-20	3%	....	....	....	3%	....	$1.50	....	$1,500,000
Packard Motor Co., com.	9¾	9¾	10	13 - 9¾	28½ - 9¾	....	Varies	10-30-20	2½	....	....	....	....	....	$1.00	....	$11,886,100
Do., pfd.	71	72	100	79 - 69½	90¾ - 67	7%	Quar.	3- 1-21	1¾	....	....	....	3½%	....	$7.00	....	$15,236,500
Paige-Detroit Motor Car. com.	11	17¾	10	23½ - 12	45½ - 12¾	....	Varies	12-10-20	1½	....	....	....	....	....	....	....	$2,080,000
Parke, Davis & Co.	79½	81	25	88¾ - 79	117½ - 79	20%	Quar.	4- 1-21	5	....	....	....	5%	....	$5.00	....	$3,000,000
Penberthy Injector, pfd.	....	....	100	....	....	8%	Quar.	4- 1-21	2	....	....	....	4%	....	$2.00	....	$500,000
Rex Motor Co.	18	18½	10	23 - 17½	29½ - 16¾	10%	Quar.	4- 1-21	2½	....	....	....	5%	....	$0.00	....	$6,947,250
Scotten-Dillon Co.	....	....	10	21 - 18	39 - 25¾	8%	Quar.	4-18-21	2	....	....	....	4%	50%	$2.00	....	$2,250,000
Timken Axle, com.	25	26	10	34¼ - 25¾	63½ - 26¾	....	Varies	12-31-20	2½	....	....	....	....	....	$3.00	....	$3,000,000
Do., pfd.	....	....	100	....	93 - 84	7%	Quar.	3- 1-21	1¾	....	6-1-21	5-20-21	1¾%	....	1¾%	....	$5,000,000
True Con Steel Co., com.	....	....	10	29½ - 19	29½ - 19	16%	Quar.	4-15-21	4	....	....	....	....	50%	$2.00	....	$2,000,000
Do., pfd.	....	....	10	9¾ - 9¾	9¾ - 9¾	7	Quar.	3- 1-21	1¾	....	....	....	1¾%	....	$2.50	....	$2,500,000
U. S. Radiator, com.	....	....	100	....	45 - 45	....	Varies	....	....	....	....	....	....	....	$4.00	....	$4,000,000
Do., pfd.	....	....	100	87 - 87	93¾ - 80	12%	Annually	1-25-21	12	....	....	....	7%	....	$2.80	....	$2,800,000
Warner Bit Co., com.	....	....	100	....	....	....	Varies	....	....	....	....	....	....	....	$0.00	....	$1,000,000
Do., pfd.	....	....	100	....	....	8%	Quar.	4- 1-21	2	....	....	....	4%	....	$1.00	....	$1,000,000
Western Knitting Mills	10½	11	None	11 - 8½	30¾ - 8½	....	Varies	11-15-20	50c	....	....	....	....	....	$1.00	....	$1,000,000
White Star Line	22	....	10	....	50½ - 50½	....	Var. & Nos.	8-23-20	3½	....	....	....	....	....	....	....	$750,000
Wolverine Port Cement Co	....	....	10	3 - 2	4¼ - 2½	....	Varies	12-15-17	....	....	....	....	....	....	....	....	$1,000,000

*Old 360-370; new 63¼, 26. 17% in 1911, 7% in 1920, 7½ in 1921. no Common dividends since organized. **1% Extra dividend. †Book value, $1,016,997. Ed. & J. ‡Book value, $3,219,347, Godchaux. †Incrpt. Book value, $2,622,795.00, Western Knitting Mills. †Book value $5,084,430, Motor Products. **Also 4% stock. ‡‡With Extras. ‡New. ‡‡1¾% monthly stock dividend.

Foreign Exchange

Country	Per	Jan. 5, 1921	Feb. 2, 1921	May 18, 1921
Canada				.8596
London	£	4.8655	3.6775	3.8500
Switzerland		1926	.1859	.1806
Italy		1926	.0659	.0476
Belgium		1926	.0625	.0743
Holland		1926	.3162	.3375
Paris		1926	.0365	.0653
Greece		1926	.0263	.0258
Spain		1926	.1328	.1376
Norway		1926	.0963	.0755
Sweden		1926	.2681	.2678
Denmark		1926	.1595	.1810
Austria		1926	.0052	.0046
Roumania		1926	.0105	.0110

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	May 17, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
1st Liberty 3½s	88.04	92.50	90.00	91.06	93.80	95.76	99.56	98.62
1st Liberty 1st 4s	87.50	85.80	85.32	85.66	93.06	94.80	95.00	94.12
1st Liberty 2nd 4s	87.30	86.30	84.10	85.00	91.58	93.84	92.04	94.10
1st Liberty 1st 4½s	87.61	86.35	85.50	85.18	93.46	95.14	92.80	....
1st Liberty 2nd 4½s	87.30	86.20	84.24	85.00	93.20	94.06	95.70	....
1st Liberty 3rd 4½s	90.74	90.01	87.20	88.22	91.85	94.70	94.44	....
1st Liberty 4th 4¼s	87.34	86.16	84.94	85.56	93.75	100.10	....	....
Victory Bonds, 4¾s	97.32	96.18	94.50	94.80	94.00	96.08	96.32	96.22

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	155	187
Columbia National Fire	16	19
Commerce Fin.	25	28
Detroit Mortgage, com.		2½
Detroit Motor Bus., pfd.	3½	5
Detroit Copper & Brass	16	20
Detroit National Fire	25	26
Detroit Life	64	68
Eureka Croesus	50	51
Federal Bakeries Co.	27	30
Federal Discount Co.	7½	8½
Fisher Body	87½	93
General Necessities Corp.	10½	11½
Gladys-Bell Oil, com.		27
Gladys-Bell Oil, pfd.	40	42
Great Lakes Engineering, new	11	12¾
Hoover Steel Ball	18	18
Hayes Wheel Co.	13½	14½
Interstate Fire	23	24
Invader Oil	110	120
Invader Oil (new)	65	65
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks	10	11
Jewett, Bigelow & Brooks, com.	6½	7½
Kelsey Wheel	55½	56¾
Little Wonder Stove	1¾	1¾
Monroe Binder Board	34	38
Detroit Motor Bus.	8	9
McCord Manufacturing, com.	8	8¼
McCord Manufacturing, pfd.	46	50
Michigan Copper & Brass	14½	15¾
Mich. Fire & Marine	78	80
Noble Oil, com.	36	40
Petoskey Portland Cement	18½	14
Peninsular Fire Ins.	21	21
River Raisin Paper	11½	12¾
Trippensee Mfg. Co.	5	6¾
Union Mines, 100's com.		7½
Union Mfgs., 90% com.	8	11

Motor Stocks	Bid	Asked
Briscoe Motors	15	17
Columbia Motors	4¾	4½
Chalmers	1½	1¾
Chevrolet	150	400
Cleveland	38	40
Curtis Aeroplane	4	5
Durant Motors	20½	21½
Elgin Motors	5	6
Haynes	150	175
Hupp	13½	13¾
LaFayette Motors	50	60
Liberty Motors	5	5¾
Liberty Motors, pfd.	40	60
Lee Tire	26¾	27½
Pierce-Arrow Trucks	26¾	30½
Mercer	3	5
Mitchell Motor	8	9
Motorbus	6	9
Nash	300	325
Pierce-Arrow Truck	41	41¾
Republic Truck	17½	18¾
Saxon Motors	4½	5¾
Scripps Booth	35	36
Stearns	27½	28½
Stromberg Carburetor	38½	39¾
Studebaker	83¼	83¾
Willys-Overland	8¾	9¼
Wilson Truck	2¾	3
Grant Motor	2½	4
Jordan Motor	25	30
Peerless Motor	28	28½
White Motor	40¼	40¾

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd.	90	100
Austin Machinery Corp., com.	2¾	3
Brunswick-Balke-Collender Co. com. A	80	
Brunswick-Balke-Collender Co. com. B	58	
Brunswick-Balke-Collender Co. pfd.	87	97
Continental Motors Corp., com.	6⅝	7⅛
Continental Motors Corp., pfd.	82	85
Linderman Steel & Machine Co. com.	11¾	12¾
Muskegon Finance Co., pfd., with 100% bonus of common	90	100
Occidental Hotel Co., pfd.	80	90
Shaw-Walker Co., pfd.	9¾	10
United Home Telephone Co., com.	4	6
United Home Telephone Co., pfd.	5	8

Quotes by Allen G. Thurman & Co., May 3.

Michigan Bond Items

The Lansing Fuel & Gas Company has applied to the Michigan Public Utilities Commission for an increase in valuation of approximately $600,000. The present valuation is $2,175,000. The company is bonded for $1,653,000 and has outstanding notes of $150,000, according to the figures submitted to the Commission. The first bond issue of $910,000, due April 1, has been extended for ten years at 7 per cent. The second issue of $743,000, due October 1, 1927, and draws 5 per cent. The outstanding capital stock is $700,000, a greater part of which is owned by C. E. Gelst, president. The company wishes to issue more bonds for extensions, and to do so says it must decrease its indebtedness in the form of notes.

The citizens' committee of Alpena has submitted its report to the council as to a filtration plant. It recommends it unanimously. The council has in turn accepted the recommendations of the committee by a unanimous vote. It is probable that a bond issue will be floated to defray the cost.

The city of Buchanan has $200,000 of school bonds for sale. The issue was voted by a majority of 10 to 1.

Halsey, Stuart & Company and the W. C. Compton Company has been awarded the $350,000 of paving and sewer bonds of Lansing at a discount of $13,440. There were several bidders, all being below par.

A. B. C. Hardy Named Manager of the Olds

The General Motors Corporation authorizes the announcement that Edward Ver Linden has been relieved of his duties as general manager of the Olds Motor Works, Lansing, and that A. B. C. Hardy has been appointed acting general manager to succeed him.

THORPE-HAWLEY SALE POSTPONED

Owing to the conflict of the date of the sale of the Thorpe, Hawley & Company assets, heretofore set for May 26, with the convention of the National Confectioners' Association on the same day, at Atlantic City, the Detroit Trust Company, receiver for Thorpe, Hawley & Company, has given notice that the sale will take place Thursday, June 2. An announcement of the sale as originally planned appears on page 40 of this issue.

Price Range Detroit Bank Stocks

Name	Detroit Stock Exchange					
	Range 1921 High	Low	Range 1920 High	Low	May 17,'21 Bid	Ask
American State	221	215	226	200	*218	...
Detroit Savings	260	256	260	250	*255	...
Dime Savings	258	258	259	258	*258	...
First and Old Detroit Nat'l	273	271	278	268	*273	...
First State	181	181	...	...	*181	...
Highland Park State	260	259	268	263	*259	...
Merchants National	161	149	163	161	153	...
Nat'l Bank of Commerce	210	210	210	190	210	...
Peninsular State	215	215	220	215	*220	...
Peoples State	360	355	335	300	*355	...
United States	225	208	215	208	*225	...
Wayne County Home	...	...	347	306	347	...
American Loan and Trust	...	...	155	138	*153	157
Bankers Trust	...	...	...	...	...	...
Guaranty Trust	...	...	148	148	1	160
Detroit Trust	295	255	...	...	*275	300
Security Trust	...	...	...	...	*300	...
Union Trust	180	180	197	195	*180	190
Commonwealth-Federal	...	...	130	...	1105	107
Bank of Detroit	...	...	...	...	1192	200
Continental Bank	...	...	...	...	1125	...

*Last Sale.
†Nominal Quotation.

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.	...	...
American Box Board, pfd.	...	...
Bardeen	15	16½
Bryant	13	18½
Eddy, com.	8	8¾
Eddy, pfd.	...	10
Hawthorne	10	10¼
Kalamazoo	10	12½
Kazoo Veg. Parch.	11¼	12¾
King	17¾	18¼
Lee, units	100	150
Mac Sim Bar	10	11¼
Michigan	16¼	18¾
Monarch	11	18¾
Rex	16	18
Northern Michigan Pulp	100	126
Standard	28	30
Sutherland	10	12
Watervliet	...	30½
Western Board	...	89¼
Banks		
First National	225	...
Home Savings	170	180
Kalamazoo City Savings	190	200
Kalamazoo National	150	168
Miscellaneous		
Barley Motor, com.	26	60
Barley Motor, pfd.	66	84
Hayes Wheel	...	...
Kazoo Laundry	13½	14½
Kazoo Corset	...	10¾
Utah-Idaho Sugar	...	...
Kalamazoo Sanitary Mfg.	...	16¾
Limousine Body	...	18¾

Quotes by Olmsted & Mulhall, May 17.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co.	25	28
Auto Body, com.	...	7
Auto Body, pfd.	...	8
Bates & Edmonds Motor Co.	...	12
Federal Drop Forge Co.	8½	10
Fort Street Mortgage Co., Lansing Company	36	42
Michigan Mortgages Co.	8¾	9½
Michigan Screw Co.	18	20
Motor Wheel Corporation	9¾	10¼
Novo Engine Co.	22	26
Reo Motor Car Co.	31	31¼
Lansing Gear & Tool	...	17

Quotes by G. M. Murchey & Co., May 3.

Detroit Listed Bonds

Sales Week Ended May 18

Detroit Edison 7s, 1920, 1,000 @ 96.
Detroit Edison 7s, 1910, 1,000 @ 95¾.
Detroit Edison 8s, 1924, 2,500 @ 101¾.
Detroit Edison 7s, 1929, 500 @ 93¾.
Detroit Edison 7s, 1923, 1,000 @ 96¼.

Sales Bank Stock

10 First State @ 181.
Listed stocks, 33,432 shares.
Unlisted stocks, 184,564 shares.

Pontiac Stocks

	Bid	Ask
Airlite Baking Co.	11	12
Am. Fork & Socket	4	6
Michigan Drop Forge	36	38
Pontiac Mortgage & Investment Co.	95	100
Van Auken Top	5	10
BONDS		
Detroit & Pontiac Ry. 5s, 1932	96	99
Detroit & Pontiac Ry. 4½s, 1928	82	84
BANK STOCKS		
Pontiac Commercial Savings	168	170
Oakland County Savings	150	155
American Savings Bank	145	160
National Bank of Pontiac	120	140

Quotes by Hughes, Burke & Co., May 9.

Motor Stocks
Wm. A. Neer & Co.
Members Detroit Stock Exchange

Digitized by Google

The
Public Accounting Department
of

THE MICHIGAN TRUST COMPANY

PREPARES Income and Excess Profits Tax and other Federal Tax Returns;

INSTALLS General and Cost Accounting Systems;

MAKES Audits and investigations for any purpose desired.

Pearl St. and Ottawa Ave., Grand Rapids, Michigan.

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.
Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

RESOURCES	May 11, 1921	May 4, 1921	May 14, 1920
Gold and gold certificates	217,410	364,244	171,206
Gold settlement fund—Federal Reserve Board	456,581	482,200	389,149
Gold with foreign agencies	.....	.....	113,781
Total gold held by banks	673,991	846,444	673,136
Gold with Federal Reserve agents	1,374,138	1,326,087	1,115,902
Gold redemption fund	161,321	170,827	150,101
Total gold reserves	2,363,553	2,843,358	1,939,141
Legal tender notes, silver, etc	174,239	176,540	139,252
Total reserves	2,537,773	2,519,898	2,078,393
Bills discounted:			
Sec. by U. S. Government obligations	917,697	893,266	1,508,104
All other	1,117,660	1,173,879	1,943,196
Bills bought in open market	76,637	94,392	412,392
Total bills on hand	2,111,994	2,160,547	3,964,582
U. S. Government bonds	25,685	25,689	26,796
U. S. Victory notes	23	19	69
U. S. certificates of Indebtedness—			
One-year certificates (Pittman Act)	337,875	239,375	259,375
All other	3,258	1,009	20,058
Total earning assets	2,479,135	2,426,639	2,370,910
Bank premises	32,007	21,998	12,530
5% Redemption fund against F. R. bank notes	11,274	10,856	11,787
Uncollected items	532,776	524,651	806,332
All other resources	11,886	13,430	6,119
Total resources	5,495,951	5,518,412	6,186,071
LIABILITIES			
Capital paid in	102,933	101,457	93,107
Surplus	302,036	302,036	130,130
Reserved for Govt. Franchise Tax	32,528	.....	.....
Deposits—			
Government deposits	13,799	23,509	44,153
Due to members—reserve account	1,667,004	1,667,004	1,874,145
Other deposits, including foreign government credits	21,660	24,128	93,659
Total deposits	1,733,413	1,738,941	2,011,957
F. R. notes in actual circulation	2,804,923	2,828,586	3,087,324
F. R. bank notes in circulation—net liability	149,894	153,859	176,805
Deferred availability items	441,981	441,969	634,813
All other liabilities	39,133	60,064	66,005
Total liabilities	5,495,951	5,518,412	6,186,071
Ratio of total reserves to deposit and F. R. note liabilities combined	55.9%	55.3%	*42.2%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	48.8%	47.7%	*16.6%

*Calculated on basis of net deposits and F. R. notes in circulation.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	9½	10¼
Commonwealth Power	9¾	10⅜
Lufkin Rule, pfd.	9¾	10¾
Michigan Sugar, com.	7½	7⅝
Michigan Sugar, pfd.	8	8¼
National Grocer, com.	7	7¼
National Grocer, pfd.	82	85
Saginaw Shipbuilding Co.	7⅛	8¼
Symons Bros.	9½	10
Valley Home Tel. Co., pfd.		45
BANK STOCKS		
Second National	785	815
American State Bank	200	210
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	205	225

Quotes by Phippe, Williams & Beeson, May 16.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	6	10
Economy Baler Co., com.	9½	
King Trailer Co., pfd.		15
Hoover Steel Ball, com.	7	7¼
Mich. Milling Co., com.	7½	
Motor Products Corp., com.		8½
Prod. Foundries, com.		
C. A. Sauer Co.		

Quotes by Langley, Hildner & Co., May 16.

WEBB, LEE & CO. EXPAND

Offices in Grand Rapids, Jackson, Saginaw and Flint have been opened by Webb, Lee & Company, Detroit, members of the Detroit Stock Exchange and the Chicago Board of Trade. These branch offices are connected with the Detroit office by private leased wire. L. E. Chapple, formerly of the National Union Bank of Jackson, is in charge of the Jackson office, which is the one formerly operated by Allen G. Thurman & Company. Harry H. Williams, formerly of Phipps, Beeson & Williams, will be in charge of the Saginaw office.

GRAND CHEMICAL PRODUCTS CO.

The election of officers of the Grand Chemical Products Company, Grandville, resulted in the selection of John Rowson as president; William E. White, as vice-president, and H. George Nutting as secretary-treasurer. R. A. Caldwell, Grand Rapids; H. Ooro Bera and the officers make up the board of directors. The Chemical company has taken over the French chemical plant and will manufacture spraying materials.

Current Investment Offerings

FENTON, DAVIS & BOYLE, DETROIT

Name	Rate	Maturity	Price	Yld.
U. S. of Brazil	8.00	6-1-41	97.50	8.25+
Eddy Paper Co. 1st mtge.	7.50	5-1-31	98.25	7.75
Wayne Co., Mich., Ir. sch.	5.50	Serially	....	5.60
Muskegon, Mich., school	5.50	Serially	100.00	5.50
Nor. Texas Elec. Co.	6.00	7-1-36	90.50	6.87
British Columbia	6.00	4-25-26	93.84	7.50

BOLGER, MOSSER & WILLAMAN, DETROIT

Three Rivers, Mich., school Dist. No. 1	5.50	2-1-26	....	5.75
Plainwell, Mich., Allegan Co., Gun Plains Twp. sch. Dist. No. 2	6.00	1926-31	....	5.75
Hattenburg, Mich., school	6.00	1932-46	....	6.25
Tipton, Ind., Light & Power	6.00	1922-26	....	6.00
Montgomery Co., O., road	6.00	1923	....	6.00
Upshur Co., Tex., rd.	5.50	1934-55	....	6.00

Digitized by Google

Reserve City Bankers Assn. Meets in Buffalo, June 2-3

The ninth annual convention of the Association of Reserve City Bankers will be held at the Hotel Lafayette, Buffalo, June 2 and 3, according to announcement just issued. The opening session will be held at 10 a. m. and the speakers will be Dr. J. T. Holdsworth, vice-president of the Bank of Pittsburgh, N. A., and Oscar Wells, president of the First National Bank of Birmingham. Dr. Holdsworth's subject will be "Acceptance Syndicate Plan for Financing Exports," while Mr. Wells will discuss present conditions in Cuba.

The annual banquet will be held the evening of June 2, the speakers being John H. Puelicher, vice-president of the Marshall & Ilsley Bank, Milwaukee, and John D. Wells, city editor of the Buffalo Times. Mr. Puelicher's topic is announced as "Dollars vs. Citizens."

There will be two sessions the second day, the speakers at the first being Charles M. Marfield, vice-president of the Seaboard National Bank, New York; David C. Wills, chairman of the board of the Federal Reserve Bank of Cleveland, and J. H. Herzog, vice-president of the National Commercial Bank & Trust Company, Albany, N. Y. Mr. Marfield will discuss commercial letters of credit and repudiation of contract under letters of credit; Mr. Wills, "What is the Federal Reserve?" and Mr. Herzog, "What Change, if Any, Should be Made in the Distribution of Earnings of the Federal Reserve Banks?"

For the afternoon meeting two addresses are scheduled: "Conversion of National Banks into State Banks, and Vice Versa," Joseph H. Kraus, vice-president, Union Trust Company, Cleveland, and "Recent or Contemplated Changes in the Federal Reserve System," Walter W. Head, president Omaha National Bank, Omaha.

VANDER MEULEN MOVES UP

Coincident with the election of Alvah D. Crimmins, of Charlevoix, as cashier of the Grand Rapids National City Bank to succeed Ira B. Dalrymple, Bertram Vander Meulen has been elected assistant cashier.



B. VANDER MEULEN

Mr. Vander Meulen has been with the bank continuously since 1914 except for service in the war, having begun as a clerk in the transit department and advanced through different departments to manager of the same department. He was born in Grand Rapids November 30, 1896, attended the public schools and the Creston Christian school and then obtained a business education at one of the commercial colleges.

IRVING NATIONAL'S NEW SERVICE

With a view to facilitating the business of its correspondents and customers, the Irving National Bank has installed a direct wire service between its New York offices and Chicago, Detroit, Pittsburgh, Cleveland and Buffalo. This service will eliminate delay in transactions involving foreign exchange, securities and other banking operations, and will make it possible to do business without loss of time.

The Detroit terminal is in Room 705, Dime Bank building, and is in charge of Julius B. Wood. William M. Chamberlin, district representative of the Irving, has general supervision over the operation of the Chicago terminal, which is in Room 712 of the New York Life building, 39 South LaSalle street.

Financial Passport to Foreign Credit

Commercial Letters of Credit issued by the National Bank of Commerce in New York not only provide a means of payment but are accepted throughout the world as evidence of financial standing and responsibility.

Through them, our friends share our helpful association with the great banks of foreign countries.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits
Over Fifty-five Million Dollars

THE OLDEST HOUSE IN MICHIGAN

BRAZIL STERLING BONDS

We advise the purchase of Brazil Government bonds, *payable in Sterling*. They can now be bought to yield *8% to 12% annual income.*

Furthermore, as Sterling Exchange returns to normal, they will show a profit as high as 100% on the invested capital.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

Smith, Hinchman and Grylls

Architects and Engineers

Detroit, Mich.

Digitized by Google

WE sincerely believe that our First Mortgage Bonds secured by Detroit improved property offer the best investment opportunity in the present market. These bonds are offered on a basis to net the investor 7%. They possess all the tax-exemption features found only in high class issues.

We will be pleased to answer any inquiries you may wish to make concerning this unusual investment offering.

Resources Over $7,000,000

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

Values

BRAZIL---ARGENTINE---CHILEAN

Sterling 4% and 5% Bonds

Now available at 39c to 59c on the dollar, constitute THE outstanding "VALUES" of the Bond Market today.

They pay an **Annual Cash Income** at present of 7% to 8.20%.

They should give a profit up to 150% in addition.

Write or telephone for circulars.

HOWE, SNOW, CORRIGAN & BERTLES
Investment Bankers

Grand Rapids Savings Bldg.
Grand Rapids, Mich.

872 Penobscot Bldg.
Detroit, Mich.

The above information while not guaranteed, is taken from sources we believe to be reliable.

President Alfred Explains the Pere Marquette Report

President Frank A. Alfred authorizes the following statement to correct an erroneous impression in connection with the publication of the annual report of the company for the calendar year 1920:

"Some confusion has arisen in the publication of extracts from the report of the Pere Marquette Railway Company for the fiscal year 1920. This was due largely to the fact that during the first two months of that period the railroads of the United States were operated by the Government. During the remaining ten months they were operated by the corporations. For six months of the latter period nearly all the roads accepted an extension of the standard return of the Government. The Pere Marquette did not do this.

"Its report for the 1920 period contains the corporate results and also the combined returns of corporate and government operation. The latter, as given in the report, do not give a correct idea of the purely corporate results.

"The final outcome was a surplus of $1,393,973 for the corporation. This was derived from the total operating revenues of $35,022,787. Out of that amount were taken operating expenses amounting to $30,350,542, leaving net operating revenues of $4,672,244. Adding non-operating income of $1,761,120 gave a gross income of $6,433,365. Deducting taxes, hire of equipment and rentals amounting to $2,801,100 left a balance applicable to interest of $3,632,265. Interest requirements totaled $2,238,292, which deducted left the surplus of $1,393,973 already mentioned.

"The profit and loss statement as of December 31, 1920, showed a balance brought forward as of December 31, 1919, of $3,985,791. This amount, together with the balance for the 1920 period and other small items, made total credits of $5,534,167 at the end of 1920. From this amount there were deducted $560,000 for dividends on the prior preference stock and other smaller items, which, taken from the total credits, left a credit balance to be carried forward as of December 31, 1920, of $4,825,297.

"The foregoing outline sets forth roughly the position of the company both as to its operations for 1920 and as of the close of that year."

$90,000 OF STOCK OFFERED

The Producers & Consumers' Company, Cheboygan and Detroit, incorporated and recorded with the state securities commission on February 2, 1921, has just received its papers of incorporation for $400,000, which is the capital stock authorized. The paid-in stock amounts to $200,000; stock for sale totals $90,000 and $110,000 is deposited in the county treasury. R. L. Francis, Detroit, is president; S. A. Gain, Cheboygan, vice-president, and John A. Owens, Cheboygan, secretary and treasurer.

FIFTY-FIRST BIRTHDAY

Officials of the Webber State Savings Bank, Portland, had a sign on the door, Tuesday, May 19, which read: "Open House Today. Our Fifty First Birthday." The bank was thronged all day with well-wishers.

APPLICATIONS TO LIST

Applications have been made to the New York Stock Exchange to list the following:

Mariand Oil Company, 954,043 shares common stock, no par; $10,000,000, 8 per cent sinking fund gold coupon bonds, Series A, maturing April 1, 1931.

Steel & Tube Company of America, $10,000,000 general mortgage sinking fund 7 per cent gold bonds, Series C, due January 1, 1951.

The Stock Exchange has admitted to list E. I. du Pont de Nemours & Company $35,000,000, 10-year, 7½ per cent gold bonds, due May 1, 1931, when issued.

Digitized by Google

New Corporations

FOR WEEK ENDED MAY 14, 1921

Hadley Telephone Co., Lapeer; E. S. Terry, Elba; George Bush, Melamora; W. D. Greene, Hadley ..... $ 5,000

S. & O. Sheet Metal Works, Detroit; to manufacture and erect buildings; erect, buy, sell and deal in sheet metal, etc; Otto Schwartz, 2549 La Salle Gardens, Alma E. Schwartz, Frank C. Pillerton, Detroit 12,000

Detroit Savings Safe Deposit Co., Detroit; safety deposit business; Pt. C. Delamater, John M. Dwyer, George S. Baker, Detroit 100,000

J. E. Dockendorff & Co., Inc., New York; William J. Moore, 836 Book Bldg., Detroit, Michigan agent..... 500,000

Hurley Sales Corp., Wilmington, Del.; principal office at Flint; George W. Moore, Campau Bldg., Detroit, Michigan agent, 10,000 shares without par value.

CHANGE OF NAME

Kellogg Food Co. (name changed to Battle Creek Food Co.), Battle Creek 200,000

INCREASES

Worcester Lumber Co., Ltd., Chassell, from $500,000 to 800,000

Detroit-Greenville Gravel Co. (F.) (O.), Greenville, O., Brighton, from $200,000 to 400,000

Consolidated Paper Co., Monroe, from $1,000 to 7,500,000

Buehme & Raich Co., Monroe, from $1,000,000 to 4,500,000

Monroe Binder Board Co., Monroe, from $2,500,000 to 3,500,000

Bantine-Mac Co. (F.) (O.), Toledo, O., Detroit, from $500,000 to 1,000,000

E. Higgins Co., Grand Rapids, Milwaukee, Wis., from $50,000 to..... 75,000

CHANGE OF OFFICE

Glerholtt Gas Motor Co., office moved from Detroit to Marine City 100,000

NOTICE OF CHANGES OF ATTITUDE

Oakland Laundry Co., Pontiac 10,000

NOTICES OF DISSOLUTION

Meisenheimer-Burke Corporation, Detroit 10,000

Michigan Realty Co., Lansing 10,000

Jackson Stocks

	Bid	Ask
Hayes Wheel Co.	12½	14
Jackson Corset Co.	10	12
Hayes Motor Truck Wheel	70	80
Reynolds Spring, com.	9	11
Reynolds Spring, pfd.	55	65
Sparks-Withington		

Quotes by Jackson office of Webb, Lee & Co.

ANACONDA COPPER REPORT

The annual report of the Anaconda Copper Mining Company for the year ended December 31, 1920, shows that gross sales totaled $100,296,167, as compared with $100,713,499 in 1919; $147,618,801 in 1918, and $156,205,157 in 1917. After deduction of taxes, interest and depreciation the net surplus available for dividends was $2,691,661, as compared with $5,103,641 in 1919; $20,802,870 in 1918 and $34,333,751 in 1917. There was a deficit of $4,302,089 after taking care of dividends, as compared with a deficit of $4,221,359 in 1919, a balance of $3,318,495 in 1918 and of $14,518,126 in 1917. The net profit and loss surplus at the end of 1920 was $84,753,462 as compared with $62,011,125 in 1919; $66,232,484 in 1918 and $62,913,988 in 1917. Total assets of the company were $294,795,732, or $40,601,098 in excess of the 1919 assets.

P. R. R. REVENUES

During the first quarter of 1921 the Pennsylvania Railroad Company's gross operating revenue totaled $124,594,916, which was $8,727,241 in excess of the revenue for the corresponding period in 1920. Expenses for the period this year amounted to $118,675,112, a decrease of $7,878,931 from the 1920 total.

NIPISSING MINES REPORT

For the calendar year 1920, Nipissing Mines Company, Ltd., reports net income of $1,800,246 after deduction of charges. This is equal to $1.50 a share on the $6,000,000 of capital stock, par value $5, the same as for the preceding year.

THRIFT INSURANCE

Thrift in buying is not measured by the PRICE PAID, but by the VALUE RECEIVED.

It is poor economy to sacrifice VALUE for a saving in PRICE.

Although the Michigan Mutual has saved insurance buyers of Michigan more than a million dollars in premiums, its real claim to YOUR consideration is less in this saving than in the greater VALUE given for the money.

There is a growing recognition of the fact that in compensation insurance financial protection alone is only a part of the real value which every buyer of such insurance has a legitimate right to expect in return for his premium.

The other part—and a most important part—of the value lies in the constructive service which the insurance company may and should perform for its policyholders.

For example, all rates for compensation insurance are based on the number and cost of accidents which have happened in the past. Now it is obvious that if the same number of accidents, at the same expense, continue to occur, these rates can never be lowered. Therefore the single means of radically lowering rates is the prevention of accidents.

Actual experience has proven that more than 70% of industrial accidents are preventable. Only by the prevention of these accidents can the insurance rates be lowered.

Therefore, irrespective of the price charged, the insurance company which gives the greatest assistance in the elimination of these preventable accidents, gives also the greatest VALUE for the premium charged.

For this single purpose—the elimination of preventable industrial accidents—the Michigan Mutual maintains the most extensive and complete organization of any insurance company operating in Michigan, and it is to this service, quite as much as to the great saving in premiums, that our company owes its present position as the largest carrier of compensation insurance in Michigan.

This service, combined with absolute financial security, makes the compensation insurance provided by our company the greatest insurance VALUE offered to insurance buyers of our State.

Let us prove to your own satisfaction that compensation insurance in the Michigan Mutual is not an expense but an investment—that it is truly THRIFT insurance.

Write NOW—today. A postal will do.

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — Michigan

President

Home Office-Cherry 2620 — Grand Rapids-Lansing and Saginaw — Hospital-Cadillac 2676

Digitized by Google

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Your Banking Needs

in this part of the country, in all of the great district which is essentially Detroit territory, are attended to with dispatch when placed with THE DIME, which serves hundreds of ont-of-town banks and business houses as well as local institutions.

Capital and Surplus $3,750,000

Who's Who In Michigan Finance

Archie L. Livingston, Cashier, Charlevoix State Savings Bank, Charlevoix

Archie L. Livingston, for the last eight years assistant cashier of the Charlevoix State Savings Bank, has been elected cashier to succeed A. D. Crimmins, who resigned to accept the cashiership of the Grand Rapids National City Bank, Grand Rapids.



A. L. LIVINGSTON

Not only is the election an honor to Mr. Livingston because of the well-merited promotion of which it is evidence, but because he becomes thereby head of one of northern Michigan's best financial institutions.

Mr. Livingston was born at Mount Pleasant Febrnyr 27, 1890, graduated from high school in that city and later completed a business course at Ferris Institute, after which he accepted a position with the Exchange Savings Bank of Mount Pleasant, spent a year with the American State Bank of Detroit and after that went to Charlevoix on July 1, 1912, as assistant cashier of the Charlevoix State Savings Bank.

MATTHEW FINN
High Grade Municipal and Corporation Bonds
Bought—Sold—Quoted
716 Penobscot Bldg. Detroit, Mich.

W. J. PEOPLES & CO.
STOCKS
BONDS
FOREIGN
EXCHANGE
First Floor Penobscot Bldg. Phones Cherry 8640
We solicit your inquiries

We have active markets in all Detroit securities.
JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.
THE DETROIT SAVINGS BANK

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

Recent Dividends

Company	Rate	Date	Stock of Record
Ampico Mining	1¾% Q	May 10	April 20
Angle Steel Stool	1½ Q	May 20	May 10
American Acceptance Corp.	2% Q	June 15	June 10
American Acceptance Corp., pfd.	2% Q	June 15	June 10
Bethlehem Steel "A"	1½% Q	July 1	June 15
Bethlehem Steel "B"	1½% Q	July 1	June 15
Cities Service, bankers shares	3½ sts M	June 1	May 16
Canadian Pacific	2½% Q	June 30	June 1
Detroit United Ry.	2½% Q	June 1	May 16
M. H. Rumbley, Mfg., pfd.	1½% Q	May 15	April 20
Illinois Central Railroad	1¾% Q	June 1	May 6
Lee Tire & Rubber, com.	50 cts Q	June 15	May 16
National Biscuit, com.	1¾% Q	July 15	June 30
National Biscuit, pfd.	1¾% Q	May 31	May 15
Pressed Steel Car	$2.00 Q	June 1	May 15
Pressed Steel Car, pfd.	$1.75 Q	June 1	May 15
Pennsylvania Railroad	1½ Q	May 31	May 2
Pratt & Whitney, pfd.	1¾% Q	May 20	May 4
Studebaker Corp., com.	1½% Q	June 1	May 10
Studebaker Corp., pfd.	1¾% Q	June 1	May 10
Timken-Detroit Axle, pfd.	1¾% Q	June 1	May 15
United States Steel Corp.	1¼% Q	June 20	May 31
United States Steel Corp., pfd.	1¾% Q	May 20	May 2
Wells-Fargo Express	$2.50	June 20	May 20
F. W. Woolworth	$2.00 Q	June 1	May 2

The Standard Oil Company of California has declared its first dividend of $1 a share on the new $25 par value stock. This amounts to 4 per cent. or at the rate of 16 per cent a year. In 1920 the regular rate was 10 per cent and 4 per cent extra, on the stock of $100 par value.

The Otis Elevator Company has declared a stock dividend of 50 per cent on the common. The dividend will be in the proportion of a half share on each share of stock held.

The American Brass Company has voted a distribution of $3 a share, payable May 14 to stock of Record April 20, from its accumulated surplus.

The American Smelting & Refining Company has passed the quarterly dividend of 1 per cent on the common stock but has declared the regular quarterly dividend of 1¾ per cent on the preferred stock.

The Timken-Detroit Axle Company has passed the common stock dividend now due, but has declared the regular quarterly dividend on the preferred.

SHATTUCK-ARIZONA

The Shattuck-Arizona Copper Co. for the first quarter of 1921 reports a deficit of $86,112 after taxes and all expenses. In the first quarter of 1920 a surplus of $55,740 was reported after all expenses and reserves for depreciation.

Digitized by Google

Michigan Wage Readjustments

(*Continued from Page 4*)

developments. A Detroit manufacturer writes: "Our belief is that a further reduction is inevitable. Our men, we are sure, expect this and would register no objection to it. We have postponed doing this for the reason that we feel that general living costs have not been reduced to the point that they should, and until that time comes, the rate we are paying is influenced more by sentiment than by figures that the selling price of our product warrants.

"Right in this connection we might say that we believe that this condition is responsible, to a large extent, for holding back normal business. The raw product that we buy is at the present time selling below pre-war prices and at figures which represent an actual loss to the producer. We in turn fabricate this and sell it at a price that is lower than pre-war prices and lower than our costs. One reason for our product costing us more than we get for it is the price we pay for labor. We feel we have to pay this price for labor on account of the prices that labor has to pay to the retailer for the items that go to make up a bare living. The prices asked by the average Detroit retailer are still very much out of proportion to the prices we manufacturers and wholesalers have set on our goods, and much higher than are being asked in other cities."

An Adrian manufacturing executive writes that he fears his company will have to cut its working force still further in June and July "if our product piles up, as we do not feel safe in accumulating any stocks under present conditions." He says nothing, however, about cutting the pay still further.

A Battle Creek writer makes a like prediction, as does another in Marquette, two or three in Flint, and two in Saginaw. The manager of a Detroit enterprise allied with the paint industry says he hopes additional wage reductions will not be necessary, "although conditions are not looking very bright just now." "We are not planning on further wage reductions at present, but if the cost of living is reduced materially we will no doubt be forced to make another reduction in order to be able to compete successfully with other manufacturers in our line," a furniture maker writes. The chairman of the board of a food producing plant writes that he and his associates are "discussing" the probability of additional wage cuts, although "we are naturally hopeful that no further reductions may be necessary."

Saving America's Dye Industry

(*Continued from Page 6*)

other chemicals needed in the new warfare. How well this country succeeded is indicated by the fact that at the end of the war the United States was producing more gas and war chemicals than Germany, Great Britain and France combined. Is such creative energy and patriotic endeavor to be sacrificed that a former ruthless enemy may continue to profit by her ruthlessness?

It may be asked why a high tariff wall would not be as effective as either the licensing system or the embargo. The nature of the product to be barred provides the answer best. As shown before, there are four fundamental coal tar by-products, benzol, naphthalene, toluol and anthracene, from which are derived thousands of other by-products including any number of dyes and synthetic drugs. It is argued that no tariff wall, no matter how high, would prevent Germany from shipping her coal tar products to this country for the reason that the very nature of the by-products would make it possible for evasion of the tariffs, while, on the other hand, Germany would be perfectly willing to sacrifice profits to almost any degree to put her dyes into American hands.

Coal tar products from bituminous coal are treated with acids or alkalies to bring out the four fundamentals mentioned, after which the

(*No. 8 of a Series of Examples*)

What is the duty of a corporation when stock is presented for transfer by an executor?

It must have record evidence of the will, its admission to probate, the appointment and qualification of the executor and that his appointment is still in force. Specific disposition may have been made of the stock to a beneficiary or trustee, and the transfer must be made in strict accord with such provisions.

"It has been ruled that where a transfer of stock is made by an executor, the corporation is fixed with a knowledge of a will and is chargeable with a knowledge of its contents."

Technical matters regarding transfers of stock are handled by our Transfer Department daily. Our charges are reasonable.

Security Trust Company

Fort and Griswold St. Detroit

Capital and Surplus, $1,000,000.00

COAL C. C. COREY COKE

1304-4 MAJESTIC BLDG. DETROIT, MICH.

Digitized by Google



Mono Rail and Electric Hoist Systems

Installed by "Northern" Engineers will yield wonderful savings in many factories.

We would like to tell you more about

NORTHERN HOISTS

labor saving products if you are interested. Are you? Ask us--

NORTHERN CRANES — NORTHERN HOISTS

Northern Engineering Works

DETROIT, MICH.



The Luxeberry Painter Says:

"Varnish is what varnish does—when you specify BERRY BROTHES varnish you have said all there is to say on the subject of the best varnish you can buy.

It not only brings out the rich natural beauty of the surface but protects it from harm during long service."

BERRY BROTHERS

World's Largest Makers Varnishes and Paint Specialties

Detroit, Michigan. Walkerville, Ontario.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

four essentials are subjected to numerous other elements, and these in turn can be again subjected to chemical action. The extent to which these reactions can be applied and the number of by-products possible are as yet unknown. It is reported that in one German plant where 11,000 different colors were successfully produced, more than 50,000 by-products were obtained for which it was necessary to find a market.

One American manufacturer who has been experimenting for years was able to get a yield of only 10 per cent on a certain dye process, where he expected at least an 80 per cent yield. Accidentally he discovered that by decreasing the revolutions of the vat paddles from 65 to 60 revolutions a minute he was able to obtain the 85 per cent yield. In other words, a difference in speed of five revolutions of a paddle converted his process from hopeless loss to profit. Such details are not found in books. They must be learned by studious and tireless research. Indigo is an important dye, but if a tariff was put on indigo it would be possible to import indoxyl, an intermediate from which indigo is obtained, by blowing air through it. Mr. Choate said in his address that indoxyl was no more like indigo than he was like a chair, but the simple process of blowing air through it made an important dye. Is is such simple reactions that turn worthless materials into valuable products, and while many of the German secrets are now known in this country through the sale of German patents to the Chemical Foundation, Inc., there are many others to be learned only by research. By the way, it might be mentioned that the valuable German patents sold by the Alien Property Custodian are held by the Chemical Foundation for use of manufacturers, and are not reserved for exclusive use by any present, or future monopoly.

Why Monopoly Is Impossible

The argument that the embargo on German coal tar products would result in unreasonable price advances on American-made dyes and chemicals was answered by Mr. Choate, who said that dye costs in manufacture are negligible. For instance, the dye in the average suit of clothes costs about thirty-two cents, and that used in a fine pair of socks would not amount to more than a cent and three-quarters for each dozen pair. He mentioned also that American textile manufacturers were competing with French and British goods which were colored with domestic dyes.

France has established a license system against German dyes, while Great Britain has declared a ten-year embargo. From France comes the report that German storehouses are packed with dyestuffs, which that country hopes to send into the United States at prices guaranteed to knock out any attempt to develop an American dye industry. Germany must dominate foreign markets, particularly that of the United States, or one of her most lucrative industries will become a liability instead of an asset. In one month recently Germany produced 12,000 tons of dyestuffs, which was an increase of 750 tons over the preceding month. The heavy reparations which Germany must pay is another powerful incentive for the development of a dye market greater than what she enjoyed prior to the war.

Any and every factor tending toward the readjustment and further development of American industry is of importance in the general movement necessary to a return to normalcy. The co-operation of all manufacturers will be necessary to make this forward movement the more rapid and effective. Whether the Michigan manufacturer may or may not be directly interested in the production of dyestuffs, he is affected indirectly by the success or failure of any large industrial activity, especially one as vital as that of coal tar by-product reclamation.

(Continued on Page 36)

Digitized by Google

B. of C. Compiles Revised Detroit House Organ List

On account of the many inquiries regarding house organs published in Detroit, the following revised list has been compiled by Christine H. Haller, librarian, Board of Commerce business branch of the Detroit Public Library:

American Blower Co., "Sirocco Shop Talks."
American Syndicate Corporation, "Main Era."
Artcraft Letter Shop, "The Hook."
Backus, A. Jr. & Sons, "Bridgemaker."
Bearings Service Co., "Bearing On Us."
Bird, S. L. & Sons, "Smartness."
Burroughs Adding Machine Co., "Business."
Burroughs Clearing House," "The Burroughs" Business Institute, "Success."
Cadillac Motor Car Co., "Cadillac Clearing House."
Caille Perfection Motor Co., "Caille Compass."
Concrete-Cement Age Publishing Co., "Concrete."
Curtis Press, "After Five O'Clock."
Derby Motor Truck Co., "Derbyman."
Detroit Association of Credit Men, "Credit Digest."
Detroit Athletic Club, "D. A. C. News."
Detroit Automobile Club, "Detroit Motor News."
Detroit Board of Commerce, "Detroiter."
Detroit Board of Education, "Detroit Educational Bulletin."
Detroit Boat Club, "Bulletin."
Detroit Bureau of Governmental Research, "Public Business."
Detroit Community Fund, "Community Fund News."
Detroit Convention and Tourists' Bureau, "Bulletin."
Detroit Council of Boy Scouts of America, "Scout Signal."
Detroit Creamery Co., "Velvet Brand Tips."
Detroit Edison Co., "Synchroscope."
Detroit Engineering Society, "Bulletin."
Detroit Federation of Women's Clubs, "The Club Woman."
Detroit Golf Club, "The Detroit Golfer."
Detroit House of Correction, "Progress."
Detroit Institute of Arts, "Bulletin."
Detroit Insurance Agency, "Reminder."
Detroit Public Library, "Library Service."
Detroit Real Estate Board, "Real Estate."
Detroit Rotary Club, "The Rotoscope."
Detroit Steel Products Co., "Detroit Steel."
Detroit Tuberculosis Society, "Bulletin."
Detroit United Railway, "Electric Railway Service."
Detroit White Lead Works, "Roger Co-Operator."
Detroit Yacht Club, "The Main Sheet."
Detroit Young Women's Christian Association, "The Blue Triangle."
Diamond Power Specialty Co., "Power Notes."
Dickinson Real Estate Exchange, "Dickinson's Monthly Realty Catalog."
Distcel Wheel Corporation, "Distcel Bulletin."
Dodge Bros, "Sales Bulletin."
Drake, G. A. & Co., "The Office Economist."
Eureka Vacuum Cleaner Co., "Volume and Velocity."
Evans-Winter-Hebb, Inc., "Three Circles."
Federal Motor Truck Co., "Federal Traffic News."
Fellowcraft Athletic Club, "The Fellowcrafter."
Ford Motor Co., "Ford News."
General Necessities Corporation, "Abadocer."
Gregory, Mayer & Thom, "Good Method Talks."
Hudson, J. L. Co., "The Big Store."
Koss, O. H. Co., "The Koss Book."
Hudson Motor Car Co., "The Hudson Triangle."
Kresge, S. S. Co., "The Kresge Chain."
Lalley Light Corporation, "Lalley Light Magazine."
Lane, H. M. Co., "The Foundry World."
Liberty Motor Car Co., "Liberty Bell."
Lincoln Highway Association, "Lincoln Highway Forum."
Lincoln Motor Co., "Lincolnian."
Maxwell Motor Sales Corporation, "The Maxwell-Chalmers News."
Michigan Bankers' Association, "The Michigan Banker."
Michigan Mutual Liability Co., "Employer and Employee."
Michigan State Auto School, "Auto School News."
Michigan State Telephone Co., "The Mouthpiece."
Melkey Sales Co., "Jack Frost News."
National Association of Purchasing Agents, "Detroit Purchasing Agents' Monthly."
National Team & Motor Truck Owners Association, "National Team and Truck Bulletin."
Packard Motor Car Co., "Freight Transportation Digest."
Paige-Detroit Motor Co., "Paige-Radiator," "Paige Truck Age."
Parke, Davis & Co., "Modern Pharmacy," "Therapeutic Notes," "Veterinary Notes," "Dental Practice."
Peoples State Bank, "Happenings."
Power, Alexander & Jenkins Co., "The Link."
Saturday Night Press, "S-N-P."
Solvay Process Co., "The Solvay-Ite."
Speaker-Hines Printing Co., "Co-operation."
Stearns, Frederick & Co., "New Idea," "Stearns' Optimist," "The Score Board."
Studebaker Corporation, "Studebaker Co-operator."
Square D Co., "Dotted Line."
Superior Sand & Gravel Co., "Builders' Blue Book."
Timken-Detroit Axle Co., "Timken Magazine."
Under-Feed Stoker Co. of America, "Combustion (Chicago)."
United Motors Service, Inc., "Contacts."
U. S. Tire Co., "The Entire News."
Vortex Club, "The Vortex."

ENGINEERS IN CIVIC AFFAIRS

At the annual convention of the American Association of Engineers, in Buffalo, last week, the delegates outlined a program of constructive work for the 200 chapters throughout the country for the coming year. Featuring the program is a clause calling for more active participation in public affairs, such as assisting local chambers of commerce and the municipal authorities with current problems. The primary purpose of the Association, and which will not be lost sight of in the midst of the other work, is to maintain the ethics of the profession on a high plane. The Association has about 2,000 members in Michigan, the leading chapters being in Detroit, Ann Arbor, Lansing, Grand Rapids and Flint. The state headquarters are in the latter.

B. OF C. OFFICERS MOVE UP

Owing to the resignation of George H. Hannum as president and J. B. Kirby as secretary of the Saginaw Board of Commerce, John Jeffers, second vice-president, is acting as president, and Assistant Secretary Chester M. Howell as secretary.

MUST GUARANTEE THE CAPITAL

The mayor of Detroit has notified John C. Frost, who is backing the Middle States Elevated Company, a concern which wishes to build an elevated railway in Elizabeth street, from Woodward avenue to the Michigan Central terminal, Detroit, that the company must give a guarantee of having enough capital to proceed with construction before the city will consider a grant of operating rights. The mayor said the municipality did not wish to lend itself to any promotion scheme. The elevated company is capitalized at $3,000,000 in an eastern state. Mr. Frost promised, the mayor said, to furnish the guarantee.

W. H. ADAMS' NEW LOCATION

William H. Adams, consulting engineer, and his associates, Luther D. Beckley, civil engineer, and John E. Roth, contracting engineer, have removed their offices from the Vinton building to 2134 Cadillac building. Detroit. Associated also with Mr. Adams is Robert J. Cummins, consulting engineer, Houston, Tex.

A CORRECTION

On page 14 of the May 14 issue of this paper it was incorrectly stated that F. T. Schreiner was secretary-treasurer of the Howell Foundry Company. Claude B. Stowe is secretary-treasurer of the company and Mr. Schreiner is vice-president and general manager.

STAMPING FACILITIES INCREASED

The interest in the Lake Milling, Smelting & Refining Company owned by the Hancock brothers has been purchased by the Seneca Copper Company. This gives the latter immediate facilities for stamping from 1,000 to 1,200 tons of rock daily and increasing its stamping capacity as desired.

GOLDBERG HAS GARDNER AGENCY

The Detroit agency for the Gardner motor car has been given to Harry N. Goldberg by the Westerdale Motor Sales Company, Cleveland, the Michigan distributors. Mr. Goldberg's salesroom is in Davenport street. He was with the Tellotte-Hulek Company formerly.

Unique Tractor Wheel To Be Made in Detroit

A new industry that has decided upon Detroit as a logical location for its headquarters is the Midwestern Tractor Wheel Company, manufacturer of a patented wheel for tractors.

The Midwestern Tractor wheel is provided with adjustable lugs or cleats which can be arranged so that they can be adjusted to any desired depth from nothing to four inches. They can also be set so that they do not operate at all, and the wheel then becomes simply a plain tread tractor wheel, fit to run over any country road or restricted section.

With Midwestern wheels, the tractor owner is thus enabled to regulate the gripping ability of his tractor to meet any soil condition. In addition, a Midwestern equipped tractor can be driven from field to field and over roads prohibited to all but plain tread tractors. Wagons and other machinery can be hauled from place to place, and the utility of the tractor multiplied several times.

The entire operation, adjustment and manipulation of the lugs or cleats on Midwestern wheels is automatically controlled by one lever movement, which can be changed at will, without leaving the seat and while the tractor is in motion.

To date the Midwestern Tractor Wheel Company has not manufactured any wheels for actual sale. The last few months has been given over to experimental work in the refinement of certain mechanical details essential to efficient and profitable quantity production. Arrangements are now being formulated to manufacture the initial order of stock wheels, and official incorporation of the company, under the laws of Michigan, is likewise taking place.

Detroit men are backing the venture and their plans call for a popular subscription to a small block of running treasury stock, after the originators of the business have been given an opportunity to subscribe any reasonable amount. Further information regarding the company's progress will be given from time to time in these columns.

ENGINEERS' JOINT MEETING

Messrs. Clarke and Galusha, of Dwight P. Robinson & Company, New York, were the speakers at Friday's meeting of the Detroit Engineering Society, which was held jointly with the Detroit Section, American Society of Mechanical Engineers, and the Detroit-Ann Arbor Section of the American Institute of Electrical Engineers, at the Detroit Board of Commerce. The subject discussed was "A Mine-Mouth Super Power Station" and referred to the new Colifax plant of the Duquesne Light Company, Pittsburgh.

PURCHASING AGENTS' DINNER

The Purchasing Agents' Association of Detroit at its monthly dinner this week at the Board of Commerce had as the guests of honor a number of manufacturing executives of the city. The principal speaker was A. O. Backert, vice-president and general manager of the Penton Publishing Company, Cleveland, whose subject was "Signs of the Times." Dr. F. A. Perry, of the state coalition committee, discussed "That Long Lost Normalcy." Charles T. Kingston, first vice-president of the association, was the toastmaster. There was a musical program.

GO-CART CAPITAL INCREASE

Stockholders of the Sturgis Steel Go-Cart Company, Sturgis, held their annual meeting this week, and in addition to changing the name of the corporation to Sturgis Go-Cart Company, voted to increase the common stock from $500,000 to $3,000,000. Norval A. Hawkins is president and general manager of the company and Dwight L. Seymour secretary.

Digitized by Google

For Increased Production

THE TILTED TURRET

A CLEAR TRACK FOR THE STOCK

Will increase your production on bar or chucking work from 10 to 12% over any other make Turret Lathe.



A tool that is made right and is right. We will tool it up complete for your work.

THE WOOD TURRET LATHES are made in any size for handling bar stock from ¾" to 2"

Let us send our representative who will show you its advantages.

Riverside Machinery Depot

251 St. Aubin Ave. **Detroit, Mich.**

(*Continued from Page* 34)

This first article has had entirely to do with the industrial side of this important subject, but there is a national defense side, the importance of which will be realized when it is known that every dye plant can be converted into a high explosive plant in less than three weeks and that a few extra turns of a paddle wheel will turn sulphur black dye into picric acid, a most important element in high explosive shells. Also, if you happen to sport a new green suit, the dye which colors it can be turned into poison gas with a few changes in the process of manufacture and without any addition of machinery or added expense. This phase of the subject will be considered in the next article.

GREEN GOES TO SYRACUSE

Andrew H. Green, Jr., for several years general manager of the Delray works of the Solvay Process Company, has been transferred to the company's general headquarters at Syracuse, N. Y., to be vice-president in charge of operations and engineering. E. M. Bingham, who has been Mr. Green's assistant in Detroit, has gone to Syracuse to occupy a like position. W. C. Shailcross, who has been manager of the caustic soda department at Delray, succeeds Mr. Green as local manager.

FARM POWER MEN ORGANIZE

The Michigan Farm Power Machinery Club has been organized in Lansing by managers of various tractor and implement companies in the state to maintain and conduct exhibits, demonstrations and generally aid in improving business. Frank E. Miller, manager of the Lansing agency of the J. I. Case Threshing Machine Company, has been elected president, and Albert E. Burd, manager of the John Deere Plow Company's local office, secretary treasurer

New Publications

CUTLER-HAMMER BOOKLET

"The Cutler-Hammer System—Safest in the World," is a title of a sixteen-page, 8½ by 11 booklet with a two-color cover, recently published by the Cutler-Hammer Mfg. Co., Milwaukee and New York. The booklet illustrates and explains the new line of control apparatus which has recently been developed by this firm for use with high speed newspaper presses.

The booklet also takes up briefly the C-H Dispatch Conveyor for conveying folded papers from the press to the mailing room; the Electric News Bulletin which gives a simultaneous announcement of news in a bulletin form at one or several different points under control of a keyboard at some central location; the C-H automatic paper splicing machine, which splices news printing paper without marring the printed sheet; the Type H drive for paper calanders, electric linotypes and monotype pots and heating equipment for matrix beds.

THE GOLDEN YEAR OF GOODRICH

The B. F. Goodrich Rubber Company, Akron, which originally was incorporated under the name of Goodrich, Tew & Company, on December 31, 1870, and which celebrated its fiftieth anniversary at the end of last year, has issued an illustrated booklet entitled "The Golden Year of Goodrich," which, in addition to giving a complete history of the house of Goodrich is a history of the rubber industry as a whole. There are four symbolic illustrations in color, representing Earth, Air, Fire and Water, which were specially painted by W. T. Benda, while the story was prepared by Willard D. Nesbit. A fact not generally known is brought out in the book—that Alanson Work, father of the present chief executive of the company, became superintendent of the plant in 1879.

ATLAS DROP FORGE ELECTION

The Atlas Drop Forge Company, Lansing, made several changes in its executive staff and directorate at its annual meeting, last week. Samuel H. Carpenter, secretary, was chosen president and general manager. His place was filled by J. P. Hopkins, who also continues as vice-president. Earl W. Goodnow was elected to the board and will become assistant secretary. The directors are R. E. Olds, R. H. Scott, S. H. Carpenter, J. P. Hopkins, R. Bruce McPherson, H. A. Haze and Earl W. Goodnow. The treasurer is Bertha L. White.

Attention was directed to the fact that a ten per cent cash dividend was declared April 12. The company is now operating on a 50 per cent production basis, with 140 employed. It is expected production will begin to gain by early September. The company has just installed a heat treating plant.

NOW IN FULL OPERATION

The United Engine Company, Lansing, passed its low ebb in January and is now back on a 100 per cent production basis, according to Charles L. Sprinkle, president and manager. The full force is working on full time. Foreign business is improving rapidly, with orders from Canada, Australia, New Zealand and South America approaching normal.

RATIGAN JOINS HANNAN

William A. Ratigan, for some time sales and advertising manager for the Braun Lumber Company, Detroit, has resigned to become manager of the improved property department of the Hannan Real Estate Exchange, with offices in the McGraw building, Detroit.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



MAY 28 1921
UNIV. OF MICH.

Fifteen Cents a Copy

Five Dollars a Year

Making the Railroads a Closed Shop

Studebaker and Its Men

Punch and Power Press Operation

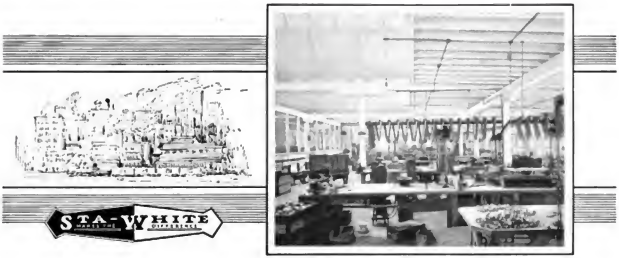
Durant Begins Building in Lansing

(Financial Section Starts on Page 22)

DETROIT, MAY 28, 1921

Volume 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *Number 22*

Digitized by Google



What's Back of the Paint You Buy?

Quality in paint is something you cannot see—you must trust to the reputation and integrity of the manufacturer whose name is back of the product—and the service records of the paint.

If you buy ***Sta-White***—the pure white oil paint for walls and ceilings you have double assurance of service and satisfaction. Its service records in every type of industrial plant over a long period of years are proof of its high quality and durability. It is backed by the reputation of the Detroit Graphite Company as makers of good paint for thirty years.

There are cheaper mill white paints than ***Sta-White,*** but none with greater durability or lower ultimate cost.

Sta-White has established a recognized reputation for leadership in the mill white field. It is one of the dependable line of ***Degraco Paints*** and can be used without the hazard of experiment.

Write for sample panel and copy of our book "Lighting Industrial Interiors."

Detroit Graphite Company

Makers of
Paints in all Colors for all Purposes
520 Twelfth St. Detroit, U. S. A.
Sold through Branch Offices with warehouse stocks in all Principal Cities
Mfd. in Canada by Dominion Paint Works, Ltd., Walkerville, Can.

(61)



DEGRACO PAINTS

All Colors for All Purposes

Digitized by Google

MICHIGAN AND FINANCIAL RECORD

Making the Railroads a Closed Shop

What Principles Laid Down by Labor Board Mean; What the Manufacturers' Associations Intend to Do



By F. W. HERSEY

ONE of the greatest struggles between organized labor and the industrial and transportation interests ever witnessed in this country is impending. Upon its outcome will depend to considerable extent the much desired return to the much discussed "normalcy."

Industrial management has taken the stand that transportation costs must be lowered considerably before manufacturing can be resumed upon a basis conforming to the new economic conditions; that the price of labor used in mill and factory has been or will be reduced, but the cost of materials for fabrication and the cost of distribution of the finished product cannot be appreciably lowered under existing freight rates.

Railroad management has taken the stand that present high freight rates are the result largely of increased labor costs and uneconomic working conditions forced upon the railroads by unionism supported and encouraged by the former Administration.

Financial management has taken the stand that until all costs have been materially lowered the credit of the country will continue to be strained to the point where restrictive measures will remain necessary.

Deflation has been in progress for some time, but the depression in business still is with us and will be, according to all evidences, for the rest of the summer and well into the fall. If we emerge from this sub-normal condition next winter it will be because deflation has been successfully accomplished in freight rates as well as in every other item on the economic list.

The Hearing in Chicago

The Railroad Labor Board has been conducting a hearing in Chicago to ascertain if a reduction in wages can and should be made. The committee on interstate commerce of the United States Senate has been trying to find out why the railroads have not been able to make ends meet even under the existing freight and passenger rates. At both hearings the railroad managements have declared that while the present wage and working conditions exist they will not be able to lower passenger or freight rates, but on the other hand will have to ask for further increases.

Representatives of the railroad brotherhoods have replied that the reason for high rates is not wages or working conditions, but extravagance and mismanagement; that in the operation of the railroads management has neglected to adopt more modern and efficient machinery and equipment.

While these hearings have been in progress the National Association of Manufacturers has held its annual meeting and gone on record as being in agreement with the railroads that high wages and uneconomic working conditions are largely responsible for present freight rates, and that these conditions must be remedied. The Association is opposed to the Railroad Labor Board as it is organized and is determined to ask for its removal on the ground that it does not represent public interest, but is dominated by organized labor. The idea of a national railroad labor board is not disproved, but the Association believes it should be organized as a judicial body, composed of men of judicial mind representing the public, rather than of members drawn from the employer and employe classes and the general public.

Michigan Manufacturers' Resolutions

The attitude of the manufacturers may be gauged by the following resolutions adopted by the Michigan Manufacturers' Association at the annual convention in Detroit recently:

"WHEREAS the Railway Labor Board has been conducting a hearing in Chicago during the past month or more, with a view of determining whether railroad wages shall be reduced; and

"WHEREAS said Board has served notice upon the carriers and also upon railroad labor, organized and unorganized, that the agreements that were entered into by the United States Railroad Administration with labor of various classes are cancelled, and that new agreements must be negotiated prior to July 1, which plan if followed out will have the effect of cancelling all railroad labor throughout the country into a closed shop, and

"WHEREAS an investigation is now being conducted by U. S. Congress through Senator Cummins, of Iowa, having for its object the development of the facts relating to the railroad situation as it exists today.

"IT IS HEREBY RESOLVED that the directors of this Association be instructed to utilize its forces and energies toward bringing this matter to the attention of the farmers, the merchants, the manufacturers and the public generally throughout the country in an endeavor to prevent the unionizing of employes engaged in the conduct of handling the transportation of the country, and

"WHEREAS in the judgment of this body the present high freight rates and industrial depression now upon us as a result of the war, cannot be relieved except through a return to normal conditions which involve the lowering of wages paid on railroads, along with decreases in all other classes of industry, and the abolishment of the onerous working conditions that were forced upon the railroads during the government control period, and the return of the power to the management of railroads to operate the properties without undue interference on the part of the labor unions.

"THEREFORE BE IT FURTHER RESOLVED that a committee consisting of three be appointed to take any action that may be necessary for the purpose of presenting the views of this Association to the Congressional Committee and to any other public body or officer which may have the subject matter under advisement."

It will be noticed that this resolution does not follow the spirit of the American Plan, the subscribers to which are not opposed to labor organization, but to interference by labor organizations and labor leaders in the conduct of industry. The Michigan Manufacturers' Association has gone further and registered opposition to the "unionizing of employes engaged in the conduct of the handling of the transportation of the country." This is the attitude of the National Association of Manufacturers, and of state associations affiliated with the national body. This is nothing short of presenting a united front against the existing railroad brotherhoods with a membership of 2,000,000 and assets of more than $40,000,000.

John L. Lovett, manager of the Michigan Manufacturers' Association, sent to all its members a folder explaining the railroad wage and rate situation and asking each one to take an active interest in the fight about to be made. The reasons for the opposition to the present National Railroad Labor Board as organized may be summarized as follows:

Although its decision of July 20, 1920, granting wage increases retroactive to May 1, 1920, to all railroad employes was cancelled April 14, 1921, because even the Board found many of them unreasonable, unjust and therefore burdensome, the Board requires that railroad employers and employees shall make new rules and agreements acceptable to both, if such is possible. Thus the burden of setting up rules and regulations to govern wages and working conditions on the rail transportation system of the country in the future is placed upon the carriers and their employes, with the understanding that an agreement shall have been reached by July 1. The Board reserved the right to continue the existing rules and working conditions beyond July 1 if there seemed to be undue and unjustifiable delay in making these agreements. Should the parties concerned fail to reach an agreement the Board will promulgate such rules and regulations as it deems reasonable and make them retroactive to July 1.

Unionization Guaranteed

The kind of "agreements" the Board would be likely to put into force may be judged by the following sixteen principles set up by it as a basis for these rules and regulations:

1. An obligation rests upon the management, upon each organization of employes and upon each employe to render honest, efficient and economical service to the carrier serving the public.

2. The spirit of co-operation between management and employes being essential to efficient operation, both parties will so conduct themselves as to promote this spirit.

3. Management assuming the responsibility for safe, efficient and economical operation, the rules will not be subversive of necessary discipline.

4. The right of railway employes to organize for lawful objects shall not be denied, interfered with or obstructed.

5. The right of each lawful organization to act toward lawful objects through representatives of its own choice, whether employes of a particular carrier or otherwise, shall be agreed to by the management.

6. No discrimination shall be practiced by management as between members and nonmembers of organizations or as between members of different organizations, nor shall members of organizations discriminate against nonmembers or use other methods than lawful persuasion to secure their membership. Espionage by carriers on the legitimate activities of labor organizations or by labor organizations on the legitimate activities of carriers shall not be practiced.

7. The right of employes to be consulted prior to a decision of management adversely

Digitized by Google

affecting their wages or working conditions shall be agreed to by the management. This right or participation shall be deemed adequately complied with if and when the representatives of a majority of the employes of each of the several classes directly affected shall have conferred with the management.

8. No employe shall be disciplined without a fair hearing by a designated officer of the carrier. Suspension in proper cases pending a hearing, which shall be prompt, shall not be deemed a violation of this rule. After a reasonable time prior to the hearing he is entitled to be apprised of the precise charge against him. He shall have reasonable opportunity to secure the presence of witnesses and shall have the right to be there represented by counsel or other adviser, if the judgment shall be in his favor, he shall be compensated for the wage loss, if any, suffered by him.

"Proper" Classification Provided

9. Proper classification of employes and a reasonable definition of the work to be done by each class for which just and reasonable wages are to be paid is necessary, but shall not unduly impose unnecessary requirements upon the carrier.

10. Regularity of hours or days during which the employe is to serve or hold himself in readiness to serve is desirable.

11. The principle of seniority long applied to the railroad service is sound and should be adhered to. It should be applied in such a way as to cause undue impairment of service.

12. The board approves the principle of the eight-hour day, but believes it should be limited to work requiring practically continuous application during eight consecutive hours. The hours' pay, eight hours' work should be performed by all railroad shop employes and road and train service employes regulated by the Adamson Act who are paid generally on a mileage basis as well as on an hourly basis.

13. The health and safety of employes should be reasonably protected.

14. The carriers and the several crafts and classes of railroad employes have a common interest in the competency of apprentices or persons under training. The number of any craft or occupation shall not be unduly restricted.

15. The majority of any craft or class of employes shall have the right to determine what organization shall represent such craft or class. Such organizations shall have the right to make an agreement which shall apply to all employes in such craft or class. No such agreement shall infringe the rights upon the right of employes not members of the organization representing the majority to present grievances either to the carriers or representatives of their own choice.

16. Employes called or required to report for work and reporting, but not used, shall be paid reasonable compensation therefor.

What Lovett's Analysis Shows

Mr. Lovett's analysis of these principles shows the following three outstanding facts:

1. The organization of railroad employes is recognized and encouraged.

2. A majority of employes in any craft or class has the right to determine what organization shall represent the members. A majority has the right to make an agreement to apply to all employes in such craft or class. While it is specifically stated that no agreement shall infringe upon the right of an employe not a member of the organization representing the majority, to present grievances either to the carriers or by representatives of his own choice, yet the minority must work under the agreement determined upon by the majority. Such a nonunion employe is bound by union rules.

3. Complying with these decisions means the unionizing of all railroad employes in every department. The railroad is to become a closed shop.

Prior to government control of railroads the carriers had agreements with approximately 35 per cent of their employes. Now, however, the Railroad Labor Board desires to force the railroads into agreements with twenty classes of labor organizations, which agreements must be consummated before July 1. The railroads must recognize new unions that were developed during the period of government operation, and which cover every branch of service from water boys and apprentices to clerks and even subordinate officers. Such a ruling plays directly into the hands of labor leaders who are determined to force the closed shop upon not only the transportation system but the whole industrial organization of this country.

No longer would the railroads have any right to select their own employes, establish wages and working conditions in accordance with the conditions under which they are operating, and with due consideration for the many other details and expenses of railroad administration, unless one great union approved their judgment. We say one great union because the railroad brotherhoods are to all intents and purposes one great union, and inasmuch as a successful attack upon any one unit, whether operating under a different name and independent constitution and by laws, would weaken the whole structure of organized transportation workers. Therefore, we must consider the railroad brotherhoods as one unit in the final analysis.

Why the national agreements recently abrogated worked a hardship is shown in a few illustrative cases presented by Julius Kruttschnitt, chairman of the board of directors of the Southern Pacific Railroad, at the Senate hearing in Washington. He gave only ten but said they could be multiplied indefinitely.

Four hostlers at Ogden, Utah, whose rates were paid back pay amounting to $9,364 because their titles had been changed by the decision of the Director General, although neither the character nor the volume of their work was changed.

A car repairer on a Virginia railroad, who was laid off because there was no work, was re-employed where there was work, and under the seniority ruling he received $1,000 in back pay for work he never did.

One clerical agreement provided that when employes were required to check in or out on their own time they should be paid for one hour extra per day per week, no matter how few hours they worked. During the first six months of 1920 this ruling cost the railroads $6,500,000, or at the rate of $13,000,000 a year.

When the fixed minimum hourly rate for car repairers was put into force on the Chesapeake & Ohio who were working on piece work the efficiency decreased 41.4 per cent and for air brake repairers it decreased 33.4 per cent.

Addition of piece work in the wheel shops of the Union Pacific at Omaha increased the time required for a job 31.9 per cent and decreased the output 24 per cent. In the coach cleaning yard at Denver the output decreased 38.8 per cent and the production decreased 28 per cent.

An employe in the Southern Pacific shops at Tucson, Ariz., was paid $5.60 for three days' work because he was sent 214 miles to repair a gas engine, 45 1-2 hours being punitive overtime spent in travel or waiting. As a result of several such instances he was allowed only 377 1-2 hours in a 23-day working month, earning $272.16. A pipe fitter from the same shop was allowed 393 hours in a 23-day month, earning $281.52, most of which was punitive and double time allowed while traveling in addition to expenses.

In the yards of the Southern Pacific a gang of men is employed to place blue flag signals and couple and uncouple air brake hose on trains. When any member of this gang were absent it was customary to put car cleaners on their jobs. The Director General changed the classification of the substitutes from watchmen with laborers' pay to car men and allowed them back pay amounting to $14,436 distributed among fifteen unskilled men.

On the same system stationary engine watchmen were changed to electrical workers by reclassification, although they knew nothing about electricity or electrical equipment, with the result that one man on the Salt Lake division received back pay of $2,381; another, $2,094; another, $2,009; another, $2,003, and six others, from $1,500 to $1,900 each.

Existing Shop Craft rules require in changing the nozzle tip on the front end of a loco motive that a boiler maker and his helper be called in to open a door, that being boiler maker's work; a pipeman and helper to remove the blower pipe, that being pipeman's work; a machinist and helper to remove the tip, that being a machinist's work. The same gang is required to put on the new nozzle tip.

The simple process of coupling or uncoupling air hose between cars earns a man, under union rules, 80 cents an hour, time and a half for Sundays and holidays, or $215 a month for a day of seven hours and forty minutes

Why Discriminate?

These advantageous working and wage conditions were obtained from the government during the period of the greatest emergency by organized labor and they were in force when the railroads were returned to their owners. Since that time the brotherhoods have worked diligently to keep these agreements in force. Finally they were cancelled, but the manufacturers as well as the railroad owners contend that so long as the labor organizations dominate the Labor Board any new agreements made will be equally as burden some. They also ask why they should not be allowed to make their own agreements with labor without interference by a third party, as is the case in all other industries.

Whether or not the contention of the railroads that wages are largely responsible for the increased freight and passenger rates may be decided after a perusal of Mr. Kruttschnitt's analysis on wage increases since 1917. Labor costs are in two classes, direct and indirect. Direct labor cost is the compensation paid employes; indirect costs are the labor charge against materials bought by the railroads. The table shows the upward movement.

Year	Wages	Increase over Previous Year
1917 (before Adamson Law)	$1,468,576,294	.....
1917 (after Adamson Law)	1,739,482,142	$270,905,748
1918	2,013,313,351	274,331,209
1919	2,343,138,481	329,825,091
1920 (Labor Board Grants)	2,690,316,251	$35,087,919

The labor costs of switching and terminal companies are not included in these figures for the reason that they are not available for years prior to 1919. Since 1916 the aggregate increases, exclusive of switching and terminal costs, have been $2,229,639,957. Since 1917, the last year of private management and the beginning of federal control, the increases have amounted to $1,868,734,209. For 1920 the labor costs, including those of switching and terminals companies, were $3,742,486,936. Thus the labor costs to first class carriers were greater in 1920 than in 1917 by more than 115 per cent, while during the same period the gross revenue of the carriers was increased less than 40 per cent. Additional railroad labor costs were due entirely to government action.

The theory of organized labor was that the railroads should pass the increased costs of labor on to the users of the railroads, which was done at the most critical period in the country's history, and at a time when the demand was for decreased costs to encourage a resumption of business confidence, credit and production. Wage increases pending when the Government turned back the railroads were passed on to the Railroad Labor Board to grant or deny.

Figures on Operating Costs

Mr. Kruttschnitt's figures on the operating revenues are as follows:

1920	$6,325,462,742
1919	5,184,064,321
Increase	$1,041,238,541
Railway operating expenses, taxes and rents were:	
1920	$6,163,128,341
1919	4,667,774,131
Increase	$1,495,264,210

After making allowances in each year for railway tax accruals, uncollectible railway revenues, equipment rents and joint facility rents, the net railway operating income was for

1920	$ 62,864,471
1919	$1,6,290,090
Decrease	$454,025,619

(*Continued on Page 34*)

Digitized by Google

Studebaker and Its Men

The First Detailed Story About a Successful Co-Operative Plan Affecting 20,000 Employes



At the left is shown a group of Studebaker Corporation employes assembled to receive their anniversary checks, which came due during the week previous to the date of this meeting. The group shown in this picture is somewhat smaller than the average, and is of employes working in the South Bend plants. At the right is a street view in "Studebaker Place." Final cleaning-up has been done since this photograph was taken.

AT THE RISK of seeming redundant, let us go hurriedly over a story which is familiar to every individual who has kept even remotely in touch with the industrial situation in this country during the last half decade.

The time of this story is so close that it seems only yesterday; and it is a story about markets. Markets, markets—they were everywhere, with buyers vying with each other in their cries for early deliveries. Sales organizations were finding themselves facing a new situation; and deep in the solution of a new and somewhat puzzling problem. It was no longer a problem of selling; rather, it was how to keep the sales ledger from getting too far in advance of the most optimistic production schedule.

And in the face of all this, seemingly to make the matter more complicated, it was discovered that the labor supply was sorely inadequate to meet the demands of forced production. Despite the fact that the unskilled citizen had joined the ranks of the worker to assist in coping with the emergency, it was found that the demand was yet far in excess of the supply. Workers evinced a tendency to go from place to place as employers were forced to competitive bidding in connection with wages. No concern could be sure of its employes in view of the fact that a more attractive field was likely to offer at any time.

The question of labor turnover, although it had always demanded more or less consideration as a continual menace, suddenly took the field in full armor and loomed up as the markets called forth more and more production. The markets became more insistent and production was goaded to its utmost. Labor reached a premium and was never more uncertain. Employers, awake to the situation, suddenly discovered that their labor turnover was increasing in that mathematical ratio which has to do with doubling the amount at each turn. Briefly, it was time for immediate action.

The term "Industrial Relations" was given a new prominence almost over night, with new

By JAMES R. ADAMS

Editor the Studebaker Co-Operator

plans and schemes being announced right and left. Systems of co-operation, intended to work for a better understanding between employer and employe, sprang into being. A number of these systems served, at least to a certain degree, the purpose for which they were intended, while others were more or less unsuccessful.

Conditions have changed. Today, business must again be conducted on the old basis, with the sales organization functioning as of old. Production with most concerns it no longer at a premium, while labor, with the usual Monday morning crowd once more at the employment window, can hardly be thought of as the cause of competition among employers. But—

Now that the emergency seems to be past, temporarily at least, are we going to do away with the schemes of co-operation which were successfully employed when the need was urgent?

Various employers doubtless will answer the question in the light of their individual circumstances. The Studebaker Corporation of America, employing on an average about 20,000 workers in the building of automobiles, answers the query in the negative and suits its action to its word by continuing its unique and complete co-operative plans as put into operation in its plants at South Bend, Ind.; Detroit, Mich.; Walkerville, Canada, and all branches, during the summer of 1919.

The Studebaker Plan

This system of co-operation, which has been operated so successfully that it has been deemed worthy of a year of trial under more normal conditions, is based upon the granting of certain benefits and privileges to the employes in exchange for prompt attendance, loyal application to duty and continuous service. It is a direct attack on the problem of labor turnover, and the employes are so informed plainly. It does not savor of paternalism nor purport to give something for nothing. In fact, it is simply a business agreement between the Studebaker Corporation and its employes, wherein the party of the first part agrees to give certain benefits and privileges to the party of the second part in consideration of continuity of service and loyal application to duty.

The first consideration in the transaction is necessarily an obligation of the employe, as the system fails to function without his first carrying out his part of the contract. As is definitely stated in the booklet copy of the plans furnished each employe in the language with which he or she is most familiar, the fundamental obligation of the employe is to stay on the job in good faith from day to day, and any absence on his or her part, for any reason whatsoever, for more than thirty days during the year serves automatically to forfeit the right of the employe to participation. Absence without leave for more than six full working days during the year works likewise.

The management interprets this restrictive clause somewhat liberally, and while it is the intention to stick to the letter of the agreement, certain circumstances and conditions occasionally are taken into consideration in passing upon an employe's eligibility to participation. But in no case is any wilful violaton on the part of an employe given countenance where he or she has not met the attendance requirements.

Probably the feature which has attracted widest attention among the employes, and among persons outside the organization who have shown an interest in the trial of the system, is the one which makes it possible for employes in good standing to purchase the company's stock under extremely liberal provisions. This feature is, of course, based on the assumption that a man shows greater pride and concern in the manipulation of any business in which he has a financial interest. It provides that an employe who has been with the company in good standing for three months or longer may purchase the stock, with a maximum annual purchase of $300, market value. Ten per cent of the purchase price is payable at the time of sale and 40 per

Digitized by Google

cent in equal quarterly payments over a period of four years. The remaining 50 per cent is paid by the Corporation over the same period in exchange for loyal and continuous service. At the end of four years the stock is delivered to the employe in his own name.

For the Employe Who Leaves

Interest at the rate of 6 per cent is charged the employe on the unpaid balance. All cash dividends and stock dividends paid on the common stock are credited to the accounts of the employe, and the excess of dividend credits over interest charges acts as a reduction in the amount of final payment to be made during the last year by the employe. Counting the present dividends to be standard, an employe who bought under this provision during the first three months of 1921, when the market value was between $60 and $70 a share, will at the end of his four years actually be out less than $10 for a share with a par value of $100.

As participation under this provision is entirely voluntary, the employe may withdraw from under it at any time. If he withdraws before he has been a participant six months, he will get back in credits only what he himself has paid in. If he withdraws after having participated six months or longer, he may either buy up the unpaid balance and receive the stock in his own name or authorize the company to dispose of it for him at the prevailing market price—in which case he will benefit by any increase in the market value at the time of sale over the price of ten when he purchase. Employes leaving the company for any reason have no alternative but to dispose of their stock holdings under this provision in one of the two specified ways.

That the employes are quick to take advantage of this proposition is attested by the fact that approximately 28 per cent of the total number now own the maximum amount of stock under this provision. There has been little effort on the part of the company to further sales of this sort among employes, the majority of sales having been made at the suggestion of the purchaser.

To anyone going thoroughly into the working of this provision it will be evident that there is nothing to prevent an employe from taking advantage of any sudden rise in the market value later by selling his holdings six months or longer to dispose of his holdings at a profit. But it has developed that a man who goes into the proposition is usually furnished enough to see that any such action on his part is nothing less than sacrificing a greater gain in the future for a little money at present. Then, too, while there is no such inference on the part of the company, the majority of the employes participating under this provision seem to feel that they are under a sort of moral obligation to keep the stock acquired in this manner as long as they are in the company's employ. There are, of course, some exceptions.

It is impossible to give any concrete results of the working of this particular provision to date, but the general effect is such that the management has expressed a desire to see each employe a partner.

The Anniversary Check Provision

Another feature which has been employed at great cost, and which has met with the heartiest approval of the employes, is the anniversary check provision. This feature, which while in a revision of the company's old bonus system, provides for the payment of anniversary checks to employes for a year of uninterrupted service, as defined in the paragraphs dealing with the obligation of the employe.

On the occasion of his first anniversary date an employe in good standing receives a check from the company equal in amount to 5 per cent of his earnings during the last year. The percentage which determines the amount of the check does not vary on the first four years



DR. C. A. LIPPINCOTT

of service, but on the fifth year it doubles, making the check equal in amount to 10 per cent of the annual earnings. It remains the same for all succeeding years. This provision, as is the case with all provisions of the system where there is a service period involved, is retroactive, giving all old employes in good standing the privilege of taking advantage of the larger percentage.

A meeting is held once a week for those employes whose anniversary checks have come due during the week previous. The manager of the Co-Operative Department makes a brief talk to the assembled employes in which he makes it clear that the checks about to be given out are not donations in any sense of the word—that the company can well afford to give such a check to the man who stays on the job in good faith. He also goes on to explain labor turnover and its cost to the company. The anniversary check provision in 1920 cost the company approximately $800,000, as 8,063 employes shared.

While it is known as the life insurance provision states that at the death of an employe who has been continuously with the company for five years or longer a check for $500 will be given to his or her family. During the last year a number of checks were paid out in this manner.

Employes who have been continuously with the company for twenty years or longer, and who have reached 60 years of age, are eligible to retire on a pension equal to 25 per cent of their average annual earnings for the five years immediately preceding the date of retirement, provided this average annual earning is less than $3,000. A minimum pension of $30 a month is provided for in connection with this feature.

This being retroactive, a number of the company's old employes are in a position to accept the privilege. Approximately 50 of them come regularly for their monthly check. It is, as a precautionary measure, a part of the agreement that no employe sharing under this provision may work for another concern or receive payment on any other payroll of the company while on the pension list, without the special consent of the company.

Studebaker also grants vacations with pay to its employes under a provision of the co-operative work. Factory employes are entitled to this vacation at the completion of their second continuous year of service. A vacation becomes due on the anniversary date, but must be taken at a time satisfactory to the foreman. When a man contemplates taking his vacation he takes the matter up personally with the foreman and the two of them arrange the matter so the absence of the employe will not interfere with the regular working schedule of the department.

This provision, with 3,541 participants, cost the company approximately $132,000 in 1920. While it is impossible to check the returns in connection with this expenditure, it is felt that the money is well spent inasmuch as numerous participants have expressed themselves as feeling morally obligated to make this expense up to the company through faithful and conscientious endeavor throughout the remainder of the year.

Aside from all this, the company has spent in excess of $2,000,000 in the building of artistic and thoroughly practical homes for its employes at the South Bend plants. The city of South Bend is no exception to the general condition in that it has been confronted during the last few years with a sharp housing shortage. When the company opened its new automobile plant in the city during the latter part of 1919 it became evident that it would be impossible to find suitable homes for the workmen who had to be housed in it. What homes were available were not suitable for the class of workmen, mostly skilled mechanics, who needed homes. The company executives had previously decided that a man to be at his best must be properly housed in a suitable neighborhood. So to combat this situation, the Citizens' Realty Company, financed by Studebaker capital, was organized in December, 1919, for the purpose of erecting suitable homes for Studebaker employes.

A tract of land was obtained on the outskirts of the city and named "Studebaker Place." Work on the development was started early in 1920. The company made use of its large buying power in getting materials and placing contracts, and informed the employes from the very beginning that the homes were to be financed on easy payments at cost.

It was the original intention to erect 1,500 houses and at the time of this writing more than 250 have been completed. Architects and landscape engineers who have watched the progress of the work have unanimously pronounced it the most complete as to detail of any similar undertaking they ever witnessed. Every utility possible to make the addition strictly modern has been employed. Improved streets, gas, electricity and other desired utilities are in use as well as storm and sanitary sewers, concrete curbs, gutters and wide sidewalks have been put in. City water and gas mains have been installed and are sufficient to care for any growth which the addition may experience.

How Homes Are Sold

Five distinct types of houses have been used in the construction. The division exteriors have, for the sake of diversity, been given different treatments to do away with any semblance of monotony. The streets are laid out in graceful curves, conforming to the general tendency in the architecture. Lots have been laid out with the idea of a garden plot in the rear and are roomy on the sides. No expense has been spared to make the homes the very latest thing in construction and design.

Under the co-operative plan which affects the sale of these homes to employes, the first allotment of 200 is being offered with an initial payment of 2½ per cent of the purchase price, with the balance payable in monthly payments equal to one-half of 1 per cent of the purchase price. This is understood to be in the nature of a lease extending over five years, with all payments during that period given as an evidence of good faith on the part of the employe. A sum equal to one-twelfth of the annual charge for taxes and insurance is also payable monthly. The lease is based on the theory that the tenant will become the ultimate owner of the property and it is expected that he will keep the property in a good state of repair.

If the tenant remains continuously with the company in good standing for five years he

(Continued on Page 38)

Digitized by Google

Punch and Power Press Operation

These Machines Are Very Simple in Principle But Perform Operations From the Smallest to Largest

By JOHN J. RALPH

THE essential definition of the power press is simple—just a ram moved by power, means to guide it in a fixed direction and return it to the starting place, and a solid base to receive the pressure. The base usually is joined to the ram by the guides.

They vary more than human beings; in fact the uninitiated would not feel that all were really members of the same family. There is the little hand paper punch you can put in your pocket, and the giant forging press that takes an ingot of steel, squeezes it, forms it and reduces it in size with the greatest of ease.

Power presses are an ancient proposition. Archimedes invented the screw. He used it to draw up water but it was not long before the old Greeks found that it was a most powerful mechanical element. Then there were lever presses for one purpose or another.

Of course nothing but hand or animal power was used until a short time ago. Boulton, of England, about 1770, has the credit of making the first power-driven press. He used a vacuum as the working force. A while later and the old blacksmith power hammer, operated by water power, developed into the gigator shear. The steam engine was inverted. They drove the fly-wheel by, power, put tools on the end of the cross-head, lowered the cylinder to an anvil—and the crank press was born.

About 1660 Pascal played with water and made a most peculiar discovery. If he took a closed tank of it and then pressed on a little piston he got the same pressure per square inch all over the tank. This on a big surface meant a great total pressure. By making such a surface movable he found that he could make one pound move 99 pounds when the big piston had a hundred times the area of the little one. He found also that he had to force the little piston a hundred times as far as the big one moved. This was the origin of our hydraulic press, the first practical one being built by Brahm in 1796.

By about 1835 we had developed all of the fundamental types, except perhaps the knuckle-joint type. By 1870 this last had been developed so that it was without a superior for fine, exact work, and was in fairly general use in the mints of the foremost countries of the world. Our own power press industry dates from about 1850.

Where does the power press touch us? Perhaps it might be better to ask where it does not touch us. That alarm clock that woke us up this morning is almost entirely a product of it. Parts of the bed we slept in were produced by it. The can or tube that holds the tooth paste, the eyelets in our shoes and so on ad infinitum throughout the day—practically everything we use has been produced wholly or in part by the power press and the tools which have been made to fit it.

It is rarely that the average man sees the finest finished products of the other machine tools. Put your hand in your pocket and pull out your change. Every coin in it is a perfectly good sales argument for the power press. So is the fork and spoon you use at breakfast. That tobacco can with its embossed letters is the product of a most highly developed press with triple action, automatic feed, and has about all of the refinements there are in presses.

The power press has made the inexpensive automobile possible. The breech-loading gun exists only because of its cartridge, and this is a product of the punch press. The price of instruments of precision, such as timepieces, cameras, typewriters and cash registers, would be entirely beyond the range of any but the wealthiest were it not for the press and its tools.

Almost every line of industry uses these machines. The book-binder would be lost without them. They have invaded the wood-working field and are used in making veneered work. In times past the printer used only a straight screw press. Today his machinery has departed from these lines but fine pictures are still printed by their means. The doctor's prescription is filled with power press-made pills. The electrical insulator and many other similar clay pieces are made on it.

Power presses may be roughly divided into two kinds—the individual operation machine, which is merely a method of applying enormous forces that cannot be applied in other ways; and the manufacturing machine, which uses special tools to do special jobs and turns out duplicate work in large quantities.

In the first class would be included the hydraulic forging presses, the shears, punches of various types, and wheel presses. The press for manufacturing purposes in some instances is precisely the same machine as the other but is tooled up differently.

In its larger sizes the non-manufacturing machine is very impressive. The big forging press stands high up in the air so that the mere man who operates it seems entirely insignificant. Enormous cranes carry the material to it and away from it. There is heavy machinery to handle the ingot being worked on. To see one of these at work, especially at night, is to carry away a picture that will never be forgotten, but to most it is of interest merely as a spectacle. There is little opportunity of our needing one in our factory.

The punch and shear also comes properly in this individual operation machine classification. These, especially in the small sizes, are very common and are made in a very great variety of shapes and sizes. They range from the little bench shear with a capacity for shearing perhaps a half square inch of soft steel or sheet, up to an eighth of an inch thick, to the enormous machines that will take the end of a billet off.

These machines have made the steel building of today a possibility. They punch the holes for the rivets for the plate girder and the steel ship. Another type rivets them.

Practically every metal working shop finds it necessary to have at least one to cut stock to length and size for further operation. They are comparatively simple and are made by many manufacturers.

Of at least passing interest is the peculiar fact that while the manufacturers of these tools made them for use in structural work they never realized that structural steel built-up frames were much more economical, lighter and in some cases more satisfactory than cast iron or steel. This was first realized abroad and in 1914 German manufacturers were competing very strongly for this business and taking it away from our builders, both because of lower prices due to the much smaller quantity of metal and because of the very much smaller floor space taken by that type of machine.

Today we build them with both structural steel, cast steel and cast iron frames. It remains to be seen whether foreign competition can again displace the domestic article. It may be that we ourselves may be able to compete in the foreign markets as we did but little more than a decade ago.

In buying these machines for the usual shop there is one thing to be borne in mind. There probably will not be many of them bought—usually but one, and this one will be expected to last a life time. Buy it big enough and good enough. Shearing metal is hard work and imposes very severe strains on the machine. Sometimes a piece of hot steel will come through by mistake from the mills. Its shearing strength may reach 150,000 pounds per square inch instead of the usual 60,000, and if it happens to be a piece almost up to the nominal capacity of the machine, something is going to break.

Very often it is desirable to shear a piece of metal much larger than the usual, and if the machine is not chosen sufficiently above the usual run of work in the shop this material must be cut in another and far more expensive way.

The manufacturing machine is by far the more fascinating of the two types. It must be considered in relation to the tools that it uses, for the press of itself is a fairly simple machine with but few refinements. With its equipment of tools it is almost human in ability to do complicated work, and quite superhuman in the amount it can turn out in a day, the evenness and smoothness of its operation and the tremendous power it exerts.

It might be called the "complete sheet metal worker," for such it really is. Its specialty is sheet metal, from the thinnest to about an inch in thickness. As a rule it works this metal cold, although there are cases where it is necessary to heat the stock.

The punch press and its products make one



This is a Bliss No. 410-D Double Crank Toggle Press. These presses are used for many kinds of stampings by many of the automobile manufacturing concerns. One of the E. W. Bliss Company's factories is at Hastings, Mich. Its general offices are in Brooklyn.

Digitized by Google

of the prettiest examples of competitive methods for attaining results. It has cut heavily into foundry, drop forge and machining lines. Except for a few places, it has entirely displaced spinning. Today it is reaching out for the field of wood. Its products in combination with concrete, threaten to displace the wooden partition in buildings and the wooden casing for dwellings. Sheet shelving and lockers, bins, tote boxes and trunks tend to eliminate the more perishable material.

There is a union of four parties—the press, the metal, the dies and the design of the product. About seventy years ago the manufacture of presses was started in this country. Ever since then these four have each alternately limited and spurred on the development of the others.

Sheet metal work is, of course, as old as the hills—one stone forming the anvil and another the hammer which first stimulated ancestors used to turn a nugget of gold or copper or tin into a vessel for cooking or a piece of ornament for the warrior or his wife.

The necessity for armor developed the sheet steel, which was hardened for protection of the soldier. This was forged to shape. The soft metals were beaten out into vessels and vases. When the power press first started to work it also used the primitive soft metals of the ancients—copper, brass, gold, silver and other cold working alloys then known. When Bessemer developed his process for making steel from cast iron there was then offered for the first time a metal which had a small cost per pound and which could be had freely.

A New Field Is Opened

Rolling mills had been developed long before for wrought iron. With this new steel, shortly there were cheap steel sheets available. The characteristics were not exactly right for press operation but a new field for exploitation was opened up. As the demand grew greater the sheet metal was refined, until today it is possible to obtain a raw product for the forming press than will permit of almost undetectable distortion without becoming unsound.

As the sizes of the finished articles grew, the presses grew larger and larger. As the pieces became more complex, shape and varied movements were added to the press, and the more rigid and powerful it was made.

The die makers added to their skill as the demands on them became greater. They learned how to make dies that gave exactly the product required, considering the limitations of the metal and the ways it must be handled to coax it into difficult shapes. As their skill increased they tackled more difficult metals, until today it is possible to have elaborate shapes made from very refractory metals.

They learned also that there were heat treating methods that would bring back to their original ductility and softness. This had been known to all of the old metal workers but equipment was not available until comparatively recently which would permit of properly treating large stampings economically.

Sheet metal probably will never be displaced from its position as the leading metal for stamping and forming but other metals are coming to the fore. There are new brasses and bronzes. Aluminum, nickel silver and monel metal are each reaching out for certain kinds of work for which they are peculiarly suited. Latest in the field is a new series of aluminum alloys which have almost the ductility of aluminum and the strength of steel. They will harden merely by the passage of time or they may be hardened as is steel. They require careful heat treatment before and during forming operations but will extend the available field for sheet metal products.

The tools are daily becoming more efficient. Where a few years ago the products of the power press was the raw material for finishing on other machines, today the sheet metal is fed into the press and the finished article is taken out. The standard of accuracy and finish has been materially raised. The average length of life of the tools has been increased. It is possible today to do economically kinds of work that even ten years ago would have been called absolutely impossible.

The last and equally important element of the problem is the design of the product so that it may be made with ease, economy and satisfaction from sheet metal. Very often a minor change in the design will permit of making a piece on the press at a very low cost with superlative accuracy and finish, with an abundance of strength and very low weight, which otherwise must be made of a casting or a forging with high machining costs and inferior results.

Progress in the use of stampings is perhaps most greatly held back by lack of knowledge of the essentials and the possibilities of this type of manufacturing than by all of the other elements combined. This making of the tools is a trade, an art, which is not generally known. Few designers have a close knowledge of what the requirements of the metal and the process are, and it is more usual to try to force the operation to a pre-conceived design than deliberately to design a product to take advantage of the economies and possibilities of this method of manufacture.

Perhaps no line of machine tools is so little known to the average mechanic or engineer. Certainly there are few who know what metals can be used, the characteristics of these metals after they have been cold worked and the methods of bringing them back to a condition where they will have the characteristics necessary for the piece being made.

The literature covering the subject is far from complete. The catalog of the press manufacturers and the makers of dies is a mere bald list of standard machines and is not such as to give a designer a clear idea of what the possibilities and limitations are. Technical magazines carry articles describing the making of dies for this or that part but there does not seem to be a general treatment of the entire subject. It is undoubtedly difficult because of the enormous number and variety of the parts turned out, but is for that reason more generally needed.

Those who are in lines where the power press has been greatly used probably need a more detailed and accurate knowledge than those where this type of machinery is already customary, for it is evident that the new uses will call for a greater knowledge to overcome the difficulties—practically all of the easy fields having already been conquered.

The Power Presses Themselves

The most important from the point of view of the number in operation and the kinds and amount of work done is the crank press. In the crank press, of which the cam press and the knuckle joint or toggle press may be taken as a sub-division.

This press receives mechanical power either direct from a motor or through a belt to a flywheel or pulley. This pulley is mounted on the crankshaft and connected through a clutch for machines requiring a moderate amount of power, or where the material to be worked is heavy through gearing, either single or double. The crankshaft applies the power to the dies through a pitman in the case of the crank machines, or through a cam or a toggle mechanism.

They vary as to size, from the little machine shown herewith, and which is working on small sewing machine parts and which weighs only a few hundred pounds, to machines two and three times the size of the other one here, and which is making mud guards for automobiles. They are made to take pieces only a few hundredths of an inch wide, to the machines which punch out the sides of automobile truck frames and take sixteen feet between housings.

The stroke also varies from an inch or less to perhaps two feet total. The cam an toggle presses have the smaller range of stroke but deliver by far the greatest pressure. The straight crank presses have the longest stroke, the maximum pressure delivered varying with the position of the moveable die.

The rate of operation of this type of press is far faster than that of any other type. Some of the presses are arranged to have two speeds—one when the belt runs from the flywheel, and another when the reducing gear is thrown in.

The types of frame vary greatly. In the smaller sizes the gap or "C" type of frame is more usual, as this permits of faster operation of feeding and of doing work on larger pieces. There is a rather low limit of rigidity possible with this type and as soon as the pressures increase it is necessary to provide some means of holding them stiff. This is done by making provision for long bolts across the opening to keep the frame from springing.

The larger sizes of machines are made usually with supports on each side, the work passing through from front to rear. The frames are made of cast iron or cast steel, depending on the total amount of pressure to be exerted. Where the pressure is excessive, built-up frames are used with wrought steel through bolts to take the tension strain. This is necessary because cast iron does not have sufficient evenness of texture and strength to prevent unequal distortion under great strain. It also is weak in its strength per square inch as compared with forged steel.

They Vary as to Pressure

Presses also vary in the total amount of pressure that they can apply. It will be realized that a somewhat heavier blow is given by one thirty-second of an inch thick, a much lighter machine will be satisfactory than where material of three-quarters of an inch is being worked. There are parts which are made of inch thick metal. These require very heavy machines.

As the size of the press increases it is necessary to reinforce the upper die. This is done by adding more cranks with supports in the upper frame. The large machines for forming the automobile frames may have as many as four cranks. Where the intensity of pressure is great even comparatively small machines are given two cranks.

The next complications come in the secondary movements which are added to the presses. Some of these movements require comparatively little power; others are main movements. The presses fitted with them are known as the double and triple action presses. As a rule they work from cams on the crankshaft, sometimes inside and sometimes outside of the frame.

These additional movements are what enable the press to perform such a complicated series of operations, in some cases blanking the piece, forming it and embossing it. There may also be provided automatic feed and removal features. These compound operation presses call for very complicated and expensive dies and are therefore used only on work manufactured in large quantities. They turn a single piece out for an unbelievably small sum, using only unskilled labor, which is mainly concerned in bringing up the raw stock and carting away the finished product.

The crank press finds its main field in the cutting, forming and drawing of sheet metal goods, such as tin cans and steelware utensils. The most complicated forms are made with almost no hand labor. They make possible our canned goods industry and the package system of distributing groceries.

There are two types of cans or vessels turned out—the seamed and the seamless. The first is composed of stock which is cut to size, then formed and fastened with seams which are sometimes soldered afterwards. The seams

Digitized by Google

are all made on punch presses. Where the goods are seamless, the stock is cut to a correct size to make the piece and is then drawn to shape. This is also done on the same press and often at the same time.

Pick up an ordinary tin pail and you will notice that the edge is turned over a wire which gives it the necessary stiffness. There are ears on the side of the pail to carry the bail. The bail is of wire closely folded over the ears. The punch press has done it all. The seams were closed on the horning press, the wire was inserted in the wiring die and the ears were placed and riveted with dies as was the handle.

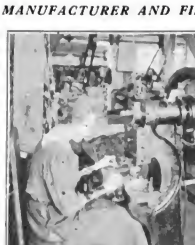
The toggle press works mostly on shallow material. It does all of the operations that the other does and in addition it does the finer kinds of embossing work. These are the presses that turn out our coins in the mint, that make medals, that are responsible for the legends on our can covers.

Of late years there has opened a new field for the crank press—the extrusion of metals. You put a slug into a die, the punch comes down on it and the solid metal is forced out as if it were a liquid—just as you force out grease from a grease gun when filling your differential on your automobile.

Using this method it is possible to make very small diameter thin walled tubes for cartridges, pencils and the like which it would be impossible to draw. The softer metals are used for this purpose. Block tin is used to make containers for tooth paste and shaving soap. Lead is used for the tubes for photo paste, greases and soap. Copper, aluminum and certain kinds of brass can be worked in this way. Steel cannot be so hard for any but the very simplest conditions.

The crank press has another field also—in the drop forge shop, where it trims the flash from the forgings and cuts them from the bar in the smaller sizes. In certain cases it is used for forging. The hull dozer and the upsetter are really crank presses.

To make deep pots a number of draws are necessary and for this purpose large machines have been designed with a number of punches. Blanked material is placed on the first die and



This photo shows an operator repunching sewing machine attachment binder frames at the rate of 12,000 per 9½ hours on a Bliss No. 1 "Stiles" type press. The material is cold rolled steel, .035 inches thick.

is drawn to a shallow dish. It is then moved to the next, and so on until the piece is finished. Where the material is light, there may be a piece on each die at the same time.

This press also uses mechanical power, the ram being actuated by a vertical rack operated through gearing. The stroke of this machine can be made considerably greater than that of the crank press. It usually is used for drawing. The speed is less than that of the crank press but greater than that of the hydraulic.

The operating characteristics of this press are considerably different from any of the previous presses. In the first place the pressure is adjustable and can be made as little or as great as desired at any point of the stroke. The speed of operation is much less than that of other types of presses. There is no limit but the crushing strength of hardened steel to the total pressures which may be obtained. There is scarcely any limit to the length of stroke that is practical.

The work movement of the press is accomplished by hydraulic pressure. Additional speed is obtained by providing quick means of returning the ram to its initial position. Mechanical means sometimes are used, in other cases counter-weights, and in still others, where the movement is from underneath, gravity.

The auxiliary mechanism usually is more elaborate with a hydraulic press than with the other types. Powerful pumps, accumulators, high pressure piping, valves and piston return mechanism all make for complexity. Still it is the only practical method of obtaining very high pressures and long strokes.

Its use in forging has already been mentioned. The field is mainly in the forging of large billets. Here its stroke characteristics, the enormous pressure freedom from hammer blow affects permit of the proper refining of large masses of steel. The pressures are not absorbed at the surface as is the case with the steam hammer but are passed right through to the center of the ingot where the metal is compressed and worked as is necessary to properly refine it.

In the machine shop it finds a considerable field in broaching and in presses for putting on locomotive wheels, flywheels, assembling built-up crank shafts and other pressing operations in which the great pressures and smoothness of operation are ideal.

In the drawing of metal for deep parts or for wire or tubing it is without a peer. It is the best machine for making large stampings of certain intricate shapes.

Perhaps more than any other type of press it finds a field in non-metallic lines. It is the machine used for calking and briquetting ores and fuels and other powders. It presses the oil from the cotton seed.

Continued on Page 38)

Henry Ford Asks Tom Edison for a Job

By H. I. PHILLIPS

[*In the Chicago Daily News*]

SCENE: Edison plant.
Time: Plenty.
Mr. Ford enters and asks Edison for a position.
Edison: "Well, Hen, what I do for you?"
Ford: "I'm looking for work."
Edison: "I'm looking for work! Why, Hen, I thought you had the biggest-paying business in the country."
Ford: "Well, it's like this: I'm sick of it; there's too much detail—too many little things to look after."
Edison: "Why don't you make a larger car?"
Ford: "No, I wants get into a new game, something more illuminating and with a brighter future in it."
Edison: "Whatcher gunter do with the flivver business?"
Ford: "Oh, I know a couple of nice young Jewish boys, and I'm gunter let 'em have it."
Edison: "Well, Hen, you're a friend of mine and all that, but I can't give any one a job here who doesn't pass my A-Z test. It's the rules, you know. Do you think you could answer a hundred questions on history, geography, etc.?"
Ford: "The last time I tried it I made an awful mess of it. Couldn't you lay off the history stuff—just as a favor?"
Edison: "No; history is very important in the electric light business. I man who doesn't know, for instance, how long Cleopatra was sick could never string a telephone wire properly; and just fancy employing a man to charge a battery if he couldn't tell offhand what colored vests Henry VIII. wore!"
Ford: "Well, shoot your questions, but I don't like the idea."
Edison: "Who was Paul Revere?"
Ford: "A jockey or something like that, wasn't he?"
Edison: "Correct. Who wrote 'The Star-Spangled Banner?'"
Ford: "George C. Francis Cohan, wasn't it?"
Edison: "Right! Now, who was John Quincy Adams?"
Ford: "He's the feller that writes 'The Conning Tower' in the New York Tribune."
Edison: "Gosh, Hen, you know everything!"
Ford: "Well, I've studied a bit in my spare parts—I should say, my eparc hours."
Edison: "Who was Moses?"
Ford: "Let's not get into any racial dispute."
Edison: "Now, Hen, tell me, who was Hendrik Hudson?"
Ford: "He invented the Hudson motor car."
Edison: "Who wrote 'The Barber of Seville?'"
Ford: "I dunno, unless it was Gillette."
Edison: "Correct, Hen. Tell me something about Mephistopheles."
Ford: "Mephistopheles are young mosquitoes, ain't they?"
Edison: "It's impossible to stick you. What Latin motto was on the original American flag?"
Ford: "F. O. B. Detroit."
Edison: "What is the capital of Soconv?"
Ford: "About $10,000,000."
Edison: "Where is Sedan?"
Ford: "I dunno; I came in a coupe."
Edison: "Name a famous general."
Ford: "General Motors."
Edison: "Where are the greatest tin mines located?"
Ford: "Detroit."
Edison: "Who discovered carbon?"
Ford: "Do you know any car owner who didn't?"
Edison: "How many miles to a gallon."
Ford: "Eighteen or your money back."
Edison: "What does the Monroe doctrine guarantee?"
Ford: "Ninety days' service at any of our service stations."
Edison: "Who killed Ben Hur?"
Ford: "Probably a garage bill for chariot repairs."
Edison: "Where do all the codfish come from?"
Ford: "I dunno. I just keep advertisin' the car and they just flock in from all sides to buy it."
Edison: "Oh, there's no sense going any further; you answer them as well as I could. Take off your coat and hat and go to work."

Digitized by Google

Durant Begins Construction of Lansing Plant

[By Staff Correspondent]

LANSING, May 23.—Two important developments in the automobile world during the last week have turned the eyes of motordom toward Lansing. This city is to become one of the centers of Durant Motors, Inc., with the construction of a $3,000,000 assembly plant here. It will be managed by Edward Ver Linden, who retires as general manager of the Olds Motor Works to become associated with W. C. Durant.

Durant Motors thus becomes a fact. The preliminary plans have been completed. The actual construction of the first big plant has been started and it will be hurried to completion. By the first of next year the new Durant cars are scheduled to make their initial appearance from the Lansing factory.

The announcement of the location of the Durant plant in Lansing followed the retirement of Mr. Ver Linden and the appointment of A. B. C. Hardy as general manager of the Olds. Mr. Hardy has assumed charge here and Mr. Ver Linden has turned his entire attention to the development of Durant Motors. This new situation makes Lansing the location of the large Olds unit of the General Motors, of the main assembly unit of the Durant Motors and of the great Reo Motor Car Company the big independent.

Lansing's newest automobile plant, the Ver Linden division of Durant Motors, will cost approximately $3,000,000. The excavation and construction work was started late last week. It is to be completed by November 1 and production is scheduled to start by January 1, 1922. Between 2,500 and 3,000 men will be employed, virtually increasing the population of Lansing about 15,000. The plant will be located on 135 acres of land in the west part of the city along the Manufacturers' Belt Line railroad, between Michigan avenue and Saginaw street. The Michigan Railway Company is expected to extend its lines to the plant.

The plant will have about 500,000 square feet of floor space. Besides the main assembling building there will be three supply units, 90 by 400 feet each, for all body processes, motor chassis, machinery, etc.; a wing, 80 by 260 feet, for enameling processes; a wing, 300 by 400 feet, and a warehouse. The buildings will be of reinforced concrete with brick trimmings and plenty of glass, and most of the plant will be two stories high. The plant will be operated by electric power.

The factory will be built by the Christman Construction Company, Lansing, under the direction of E. J. Ketterman, general superintendent, and with Engineer Harry L. Conrad in charge of the engineering details. A large force of men, chiefly Lansing labor, will be employed.

Mr. Ver Linden announces that the incorporation of this division is now under way. The Lansing plant will be the largest assembly plant of the Durant Motors and the only one



EDWARD VER LINDEN

in Michigan. The location of the unit will benefit many local factories, as all accessories and supplies purchased will be bought here. Among the local plants which are expected to be so benefited are the new Ryan-Bohn Foundry, which is located near the new factory; the Auto Body, Motor Wheel Corporation, Michigan Screw, forging concerns; Michigan Brass and Iron and Gerson-Garey, foundries, and smaller enterprises.

This diversity of manufacture was one of the reasons for the location of the unit in Lansing. Among the others were the central location of the city, the railroad facilities and the lack of labor troubles. However, probably the principal cause was the fact that Mr. Ver Linden's home is here and he insisted upon this city.

Mr. Ver Linden came to Lansing about nine years ago with the General Motors Corporation as general manager of the Olds Motor Works. He developed this plant from a production of 2,000 vehicles a year to that many every twenty-six days.

Besides the assembling plant in Lansing, it is expected that Durant manufacturing units will be located in Jackson, Detroit and other Michigan cities.

The other significant move, which is linked with the Durant-Ver Linden project, was the appointment of A. B. C. Hardy as manager of the Olds unit of the General Motors, following the retirement of Mr. Ver Linden. Mr. Hardy has come to Lansing and assumed charge of the Olds factory. His appointment assures a strong head for the local plant.

Mr. Hardy was born in Ypsilanti and after leaving the University of Michigan was with the Wolverine Carriage Company, established in 1892 in Davison, Mich., being secretary and general manager. In 1896 he went to Flint and became vice-president and general manager of the old Diamond Buggy Company, which was merged with the Durant-Dort Carriage Company. Following his return from a European trip in 1902 he organized the Flint Automobile Company, but after building and selling 50 cars, this concern went down under Selden patent litigation. He next manufactured buggies in Iowa. In 1909 he returned to Flint and became associated with W. C. Durant again. He managed the Welch Company in Detroit, the Pontiac-Welch Company and the Rainer Company, Saginaw, which were merged into the General Motors. He later became vice-president and general manager of the Little Motor Company, Flint, and vice-president of the Mason Company of the same city. The Little company was later known as the Chevrolet, and Mr. Hardy had complete charge of this organization when Mr. Durant regained control of the General Motors. In 1918 Mr. Hardy became assistant to Mr. Durant and held this position until Mr. Durant left the General Motors Corporation.

On January 1, 1921, Mr. Hardy was made a member of the operations committee for the General Motors, directing interests in outside companies.

WILLIAMS LEAVES LINCOLN MOTOR

The Lincoln Motor Company, Detroit, has just lost one of its first line executives in the resignation of Le Roi J. Williams as counsel and assistant to the general manager.

Although just over 30, Mr. Williams has made a notable record in the motor industry. He became associated with the interests of Henry M. Leland and Wilfred C. Leland six years ago, and since that time has been prominently identified with their enterprises, both at the Cadillac and at the Lincoln companies. During this period Mr. Williams has not only been a close personal advisor of the Messrs. Leland in their various activities and one of the largest stockholders in the Lincoln company, but also because of his special training as a corporation, patent and trade counsel has taken a leading part in many matters vitally connected with the Lincoln company.

During the war Mr. Williams took a leading part in all of the negotiations with the Government. It was at this time that the Lincoln company obtained the largest aircraft motor contract awarded by the Government. This involved about $17,000,000. Later he represented the company in its tax problems involving many millions of dollars, and passed upon the company's refinancing and reorganization in January, 1920, which was carried out to take up the development of the Lincoln car.

Mr. Williams feels that he has earned a brief vacation and is not prepared to announce his plans for the future.

FRANK H. MILHAM DIES

One of the best known men in the Michigan paper industry, Frank H. Milham, president of the Bryant Paper Company, Kalamazoo, died this week in Pasadena, Cal., of heart disease. Mr. Milham was director of the Home Savings Bank and of the Kalamazoo National Bank and was interested in a score of paper-making concerns but especially in the Michigan industry. He was president of the Eddy Paper Company, Three Rivers and White Pigeon; managing director of the Munising Paper Company, Munising; a director in the Kalamazoo Vegetable Parchment Company and the Illinois Envelope Company, Kalamazoo, and of the Nashwauk Pulp & Paper Company, St. Johns, N. B., and the Whalen Pulp & Paper Company, British Columbia. He was one of the organizers of the Birmingham-Seaman Paper Company.

DURANT ACQUIRES SHERIDAN

It is announced officially that W. C. Durant and his interests have taken over the Sheridan Motor Car Company's plant in Muncie, Ind. This was a General Motors Corporation unit—in fact, it was the most recent new unit in the GMC family. Complete details are lacking, but according to a special dispatch to the Detroit Free Press the deal involves more than $5,000,000 and the sale was completed at a meeting between the higher GMC officials and Mr. Durant. It is further stated that D. A. Burke, who was president and general manager of the Sheridan company, will join the Durant organization and become president of the new company, which will be incorporated under the laws of Indiana. It is said to be likely that several automobile parts concerns in Muncie will become affiliated with Durant due to the chance in ownership of the Sheridan.

TO RESUME OPERATIONS JULY 1

It is reported that the Ideal Furnace Company's plant in Homer will resume operations July 1.

Digitized by Google

Used Machinery at Attractive Prices

Metalworking and Woodworking

Below is a partial list of used machines that we offer at attractive prices. We invite you to inspect our stock.

METALWORKING

6" x 6" Ingersoll Rand ER-1 Air Compressor
No. 4 Gardner Disc Grinder
14" x 6" Bradford Engine Lathe
No. 2-B Foster Univ. Turret Lathe
No. 3 Carter & Hakes Hand Miller
Gisholt Belt Driven Tool Grinder
Barnes 14" Drill Press
No. 15 Lea Simplex Cold Metal Saw
No. 3½ Sloan & Chase Precision Lathe
No. 2½ Universal Grinding Machine

WOODWORKING

16" Crescent Round Cylinder Hand Jointer
No. 2 Crescent Saw Table
18" Crescent Planer, variable speed
No. 702 Sidney Auto. Hollow Chisel Mortiser
No. 7 Sidney Saw Table
21" Sidney Band Saw
12" Fay & Egan Moulder
No. 110 Fay & Egan Self Feed Rip Saw
12" Berlin Single Cabinet Planer
30" Whitney Double Cabinet Planer

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

The Weeks Reductions in Motor Car Prices

DURING the last few days more motor car producers have announced new prices. The reductions are far in excess of what had been expected.

It is known that several other manufacturers are preparing or have prepared new schedules of prices, which are likely to be announced at any time.

The Scripps-Booth Corporation, Detroit, cut its prices from $195 to $270, according to body style. Following is the new and the old price schedule:

	New	Old	Reduction
Five-passenger touring	$1,295	$1,545	$250
Three-passenger roadster	1,275	1,545	270
Five-passenger sedan	2,100	2,295	195
Four-passenger coupe	1,950	2,215	265

The Willys-Overland Company reduced prices on the Overland from $200 to $425, and on the Willys-Knight from $195 to $300, effective June 1. The revised prices are:

OVERLAND

	New	Old	Reduction
Five-passenger touring	$ 695	$ 895	$200
Two-passenger roadster	695	895	200
Two-passenger coupe	1,000	1,425	425
Five-passenger sedan	1,275	1,475	200

WILLYS-KNIGHT

	New	Old	Reduction
Touring	$2,195	$2,195	$300
Roadster	1,895	2,195	300
Coupe	2,850	2,845	295
Sedan	2,750	2,945	195

In conjunction with the announcement of Willys-Overland it was stated officially that the new price of Overland cars is $150 less than the lowest price for which this vehicle ever was sold. The present reduction added to the price cut of last September makes a total reduction of 33 per cent since September.

The Maxwell Motor Company, Inc., Detroit, reduced its prices $150, as follows:

	New	Old	Reduction
Five-passenger touring	$ 845	$ 995	$150
Roadster	845	995	150
Coupe	1,595	1,445	150
Sedan	1,695	1,545	150

In connection with the reduction of prices of the Willys-Overland cars, President John N. Willys in the course of a statement says:

"The public wants to buy automobiles but the buying public has hesitated in the hope that price cuts might be made. We have decided to anticipate every possible saving from material savings, and from the savings of volume production, and we are putting our prices at rock bottom June 1.

"We are going the whole route right now. The price is the low price which we have long anticipated we might some day reach on the Overland car.

"At the present we will take a loss on every Overland car we sell but we fully expect to make this up through increased volume and increased material savings."

In the course of a statement on the price situation, Guy Peasley, sales manager of the Olds Motor Works, Lansing, says: "In our model 43-A and model 47 cars we believe we are offering the most attractive values for the price today. When these cars were brought out they were priced at the market values of materials. Should we receive any reductions in the price of materials in the very near future, we would be only too glad to reduce our prices to the motor buying public, but from our experience and observations, it is our feeling that no reductions can be made on our product in the very immediate future, or for the balance of the present year."

BEGINS MAKING FLOORING

The Flexotile Floor Company, Birmingham, which some time ago acquired the Michigan manufacturing rights from the Flexotile Floor Company, Rockford, Ill., has started production. The concern makes a composition floor and other building materials, such as an interior stucco and fiber floor. J. R. Seabright is president.

TRACTION STRIKE THREATENED

As this was written, May 24, it appeared possible that a strike would be called by leaders of the employes of the Michigan Railway Company on the Jackson, Battle Creek, Kalamazoo and Lansing lines as well as on the interurban lines running between those cities. The report came from Jackson that the men had refused to accept the company's decision that when the present wage scale of 60 and 62 cents an hour expired, June 1, men would be paid at the old 1920 rate of 40 and 42 cents an hour. It was said that the company had declined to have the matter submitted to arbitration, nor was the company willing to reduce the present wage scale ten cents an hour only, as proposed by the men.

RENTAL FREE TO IDLE EMPLOYES

The Antrim Iron Company, which recently shut down its Mancelona plant for the summer, has given free rental of its houses to employes while the plant remains idle, says the Grand Rapids Herald. The only condition made is that the men agree to return to their jobs when the company is ready to reopen the plant.

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

TARDEN WITH FRANKLIN AGENCY

W. J. Doughty, Franklin distributor, Detroit, has appointed Frederick L. Barden sales manager with headquarters at the salesroom, 3745 Cass avenue.

MAXWELL-CHALMERS PRODUCTION

W. Ledyard Mitchell, president, is authority for the statement that the Maxwell division of the new Maxwell-Chalmers, Inc., will increase its monthly production from 2,000 to 3,000 cars after the reorganization has been completed. The Chalmers division will increase output from 500 to 750 cars a month.

F. A. SEIBERLING MAKES STATEMENT

Following a recent stockholders' meeting, F. A. Seiberling, founder and former president of the Goodyear Tire & Rubber Company, made the following statement concerning the change in administration: "My brother, C. W. Seiberling, and myself never our official relation with the company and control of the business passes into the hands of the bankers, as provided in the reorganization plan. Both of us continue our interests as the company's largest stockholders. My successor is E. G. Wilmer, a young man of fine legal training and broad experience in operating business. With the return of the world to normal business there is no reason why Goodyear cannot move forward to a higher plane than it has yet achieved."

OLDS CLOSED A FEW DAYS

The plant of the Olds Motor Works, Lansing, was closed a few days to investigate the manufacture of some rear axles which did not meet the requirements of Olds inspection, according to Manager A. B. C. Hardy. Mr. Hardy says the company is pressed with orders which will keep the plant at high production until at least August 1.

MOTOR WHEEL APPOINTMENTS

John C. Garient has been named factory manager for the Auto Wheel and Gler Pressed Steel units of the Motor Wheel Corporation. Mr. Garient formerly was factory superintendent of the King Motor Car Co., Detroit, and came to the Auto Wheel organization a year and a half ago.

R. S. Irvin has been made advertising manager of the Motor Wheel Corporation. This is a new position made necessary by the campaign to nationalize the corporation's products. He has been head of the sales promotion advertising department for the Evans-Ayres Company, Detroit.

The corporation has started an advertising campaign for the new pressed steel wheel, called the Gler Tuarc. It is manufactured in the Gler Pressed Steel Company's plant.

STEWART-WARNER SALES

Sales of the Stewart-Warner Speedometer Corporation for April were only slightly less than those for April, 1920, according to the president, C. B. Smith. Net profits, after all deductions, for the first quarter of the year were $50,927

FORD PLANT TO BE ENLARGED

It is reported that the Ford Motor Company's tractor plant at Hamilton, Ohio, will be enlarged to employ 5,000 men.

TO CONFER WITH HOOVER

Col. Charles Clifton, president of the National Automobile Chamber of Commerce, has appointed the following permanent committee to confer from time to time with Herbert Hoover, Secretary of Commerce: J. Walter Drake, chairman of the board of the Hupp Motor Car Corporation; Arthur Waterfall, vice-president, Dodge Brothers; E. A. Williams, Jr., president, Garford Motor Truck Company; Alfred H. Swayne, vice-president, General Motors Corporation, and Percy Owen, president, Liberty Motor Car Company. The committee was named at Secretary Hoover's request.

HURLEY DIRECTS McGRAW SALES

W. H. Hurley has been made general sales manager of the McGraw Tire & Rubber Company, succeeding C. E. Humphrey, resigned. Mr. Hurley has been district supervisor of western territory for Ajax Rubber, but previously had been with McGraw in several capacities.

ELGIN MOTOR CAR STATEMENT

The Elgin Motor Car Corporation, Argo, Ill., reports that its sales for 1920 were the best in its history, totaling $7,383,606, as compared with $6,479,100 in 1919. Net profits amounted to $191,086, as compared with $104,272. The balance sheet shows assets of $4,572,638 on December 31, 1920, as compared with $3,621,480 in 1919. Among the liabilities were notes and accounts payable of $1,000,000. Commenting in connection with the report the following statement is made to the stockholders: "Since our statement of December 31 we have reduced outstanding obligations $344,425, which is an unusually good record under the prevailing conditions."

MOORE MANAGES GOODRICH BRANCH

William H. Moore has been made branch manager in Detroit of the B. F. Goodrich Rubber Company, succeeding R. C. Hargreaves, resigned.

AMERICAN BROACH'S PROGRESS

Francis J. Lapointe, head of the American Broach & Machine Company, Ann Arbor, was the principal speaker at a recent luncheon given by the Rotary Club of that city. He said in part: "Broaching means greater production for the same outlay in a big reduction of time. It will only be a short time before we expect to broach cylinders. We are experimenting in that line now and have every reason to believe we will be successful. During the war we succeeded in broaching guns for submarine chasers in one hour and fifteen minutes, which previously had taken about 84 hours by other processes. The construction of broaches is a delicate operation and about 20 per cent of the tools are lost in the tempering and straightening process."

SKELDON OPENS DETROIT OFFICE

The Joseph L. Skelton Engineering Company, 242 Water street, Toledo, which makes a specialty of municipal and general power plant construction, has just opened a Detroit office at 1156 Penobscot building in charge of H. E. Heilman. The company has just finished a power plant for the Monroe Paper Products Company, Monroe, which it designed and built complete, and is installing an addition to the new plant of the River Raisin Paper Company, Monroe. It also acts as representative for the Ames Iron Works, Oswego, N. Y.; Houston Stanwood & Gamble, Cincinnati; the American Steam Pump Company, Battle Creek, and several other lines. It operates its own machine and pipe shop and does general machine repair work.

Digitized by Google

N. A. D. A. Speaker Makes 7 Tax Recommendations

Another effort to have some of the heavy tax burden removed from the automotive industry was made a few days ago before the U. S. Senate finance committee. This time it was the National Automobile Dealers' Association, for which H. B. Harper, Philadelphia, chairman of the association's tax committee, appeared. Much of the taxation levied on the industry, he said, was for the war emergency, but now that the war was over, it had the aspect of "highway robbery." His attempt to show how small the amount of the taxes collected was used for highways was cut short by Senator Penrose, chairman of the committee, who declared impatiently that all that information had been submitted by automobile manufacturers.

The interest of the committee was aroused, however, when Mr. Harper made seven recommendations relative to taxation. They were as follows:

Economy in federal expenditures.
Repeal of the excess profits tax.
Repeal of the higher brackets of personal income and ex-surtaxes.
Repeal of all special excises.
Moderate protective tariff.
Funding of war debt over a period of 50 years, and
Enactment of a gross sales tax not exceeding 1 per cent.

Mr. Harper closed his appeal with the statement that past experiences had shown that such taxation as is now in effect had discouraged industry, which was the effect excises taxes were having on the automotive industry.

WILDMAN PLANT CONTRACT LET

Award of the contract for the construction of the first unit of the Wildman Rubber Company's plant in Bay City is announced by President W. W. Wildman. The three-story and basement structure will be 365 by 161 feet in size. The Bay City Stone Company put in the foundations and will complete the building. There has been a rather long delay in getting the work started, but that was due, it is said, to the fact that prices of building materials were considered entirely too high and it was decided to wait a while.

The plant will be of such a size as to permit the making of 2,500 tires and 5,000 tubes daily, and when conditions make it necessary to expand, the company has sufficient land for plant extensions which will eventually make possible an output of 50,000 tires and 100,000 tubes a day.

FRANKLIN'S BUILDING PROGRESS

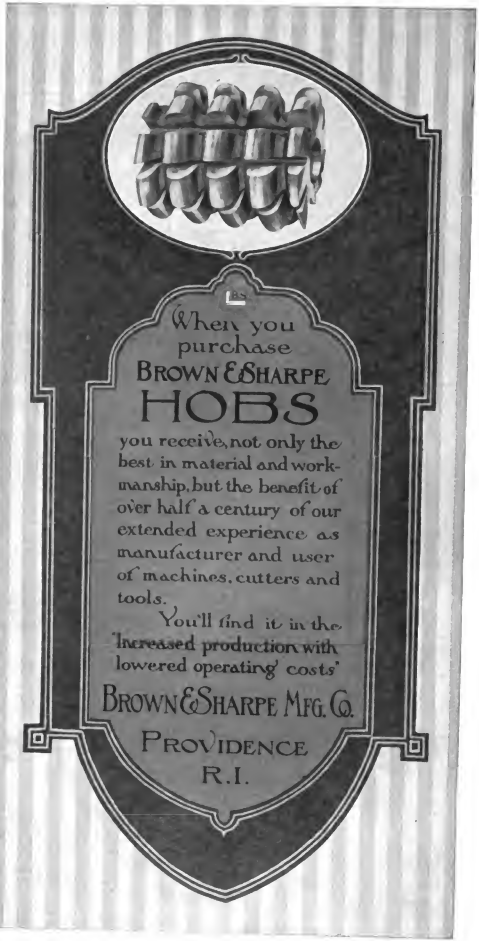
Announcement is made by the H. H. Franklin Manufacturing Company, Syracuse, N. Y., that its building expansion program, started last year, is going on to completion and that when the work is done the Franklin plant will be the largest in the city. The plans include a seven-story manufacturing and warehouse building which will have 360,000 square feet of floor space. The interior construction on a new power house is also being rushed. It is expected that the buildings will be ready for occupancy by September 1.

OAKLAND OUTPUT INCREASED

According to a report from Pontiac, production at the Oakland Motor Car Company plant was increased this week from 75 to 100 cars a day. George H. Hannum, the new general manager who succeeds F. W. Warner, took up his new post this week, while Mr. Warner will remain for a short time to help him.

BUICK DISTRIBUTORS' MEETING

Branch managers and distributors from forty sections of the country attended a conference on plans for the 1922 sales campaign held this week at the Buick plant in Flint.



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

MAIN 1491
SPRUNK
ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

TWO NEW MICHIGAN ROUTES

Every week sees the establishment of additional motor bus routes in Michigan. John Burke, Marquette, has established a line between Marquette and Ishpeming, largely for the accommodation of miners between these two cities. The route is proving popular also for residents along the way, who use it for buying expeditions.

Another lower peninsula route has been established by T. O. English, of Woodland, who will operate buses between Woodland and Ionia, making stops at Hastings, Coats Grove and Lake Odessa.

STARTS WITH 100 TRUCKS

One hundred motor trucks, to carry freight between New Orleans, Washington, St. Louis and Cincinnati, have been put into service by the South-Eastern Express Company, of which J. B. Hockaday, New Orleans, is president. Service began a few days ago. Most of the trucks are two-ton and all equipment will be standardized eventually.

SOME DATA ON OPERATING COSTS

A Chicago tire concern has been operating trucks of varying sizes between that city and Milwaukee, well loaded with all kinds of commodities, in order to test out the service that its tires would give.

The following figures are submitted on the performance of a three-and-one-half-ton truck, equipped with pneumatics:

"The record sheet shows fourteen round trips and a total mileage of 2,806. The truck consumed 352 gallons of gas a week or at the rate of 7.966 miles a gallon. It used 151.2 gallons of oil, or a mileage of 187.6 a gallon.

The gross weight of freight carried was 122,300 and the running time 168 hours.

Figuring truck depreciation at the rate of 31.3 cents a mile, including 6 per cent interest on the investment, hours of overtime, including several hours spent in assisting a five-ton solid tired truck through the sand and towing them in after burning out a bearing, the total weekly cost amounted to $405.47, or at the rate of $1442 a mile. The cost of shipping by freight would have been $457.80.

In compiling the weekly truck operating cost of $405.47 the tire company included the cost of cartage, inasmuch as this latter se under contract.

This, alone, would have effected a s $100 in favor of the truck operation wi matic tires

BUS SERVICE IN CALIFORNI

In its mere infancy only a few yea the automobile transportation industry a huge one, carrying more than 5,000 sengers to various points in the cou year. The commercial traveler as we pleasure-seeker is beginning to deper Already it has materially assisted in up the famous "playgrounds" of Califo Nevada such as the Yosemite Valle Tahoe region, Rim of the World and National Park. More than 3,600 car daily passenger service.

More than 70 buses operate out o daily to all parts of California. Their s are so arranged that the 3,000 passen patronize them each day can make co without long delay at the terminals.

figures available showed an invest $350,000 in equipment in Fresno alo haps the most startling fact the inve uncovered was the unusual safety of t portation in comparison with other carriers. For the percentage of injur any cause whatsoever in handling people was less than .001 per cent.

In Stockton, too, bus lines have m strides forward. The records show March, 1921, the affiliated lines ser than 40,000 people. Most of these p were carried in twenty-six large buse accidents, in the last two years appro 75,000,000 passenger miles there has one fatality.

Out of Sacramento alone there are type buses arriving and departing dai ating on a two-hour schedule during year, they have handled approxim people a day to points within a 50-m of the city.

The greatest single impetus that given the motor stage lines was the ment of through routes and conne different motor companies and the c ing of terminals into union stations. was first perfected in Los Angeles rapidly extended over the larger pa state.

State Cartage Directors Hold Meeting in Lansing

[By Staff Correspondent]

LANSING, May 24—A drive for members and against unfavorable laws was launched by the directors of the new Michigan Highway Transportation Association at a meeting in the Hotel Kerns, Monday, May 23. It was decided to contest the village ordinance of Watervliet which provides for a special license for any vehicle being used for hire.

The proposed state bill covering the weight and size of trucks using the state highways was generally discussed and the Association went on record as favoring a bill which would limit the weight to fourteen tons. A resolution adopted also states that when the Michigan license is fixed the law should not permit any city or village to assess an additional license for inter-city hauling.

With the Detroit and Grand Rapids local associations, the state organization now has a membership of about 600. It is the aim of the Association during the campaign for members to increase this number to at least 1,000. Henry H. Stevens, Flint, chairman of the membership committee, will have charg drive. Other members of this comm Guy P. Downing, Lansing; A. H. Sha Rapids; J. C. Dowding, Flint, and D nerrette, Ann Arbor. The state will b into districts, with a captain and sub- for each district. It is intended to v commercial truck and bus owner in explain the purpose of the Associ endeavor to enlist his support. The membership fee is $5, with annual d For local associations the fee is $25, capita tax of 50 cents, a minimum c maximum of $100.

The Watervliet ordinance, which h provides that the trustees may deci tain places where vehicles for hir stationed to solicit business, with a $ fee for the transportation of passe further says:

"Section 11. No person shall use o be used or caused to be kept on the the village of Watervliet, on or alo the village depot grounds in said vi dray, cart or wagon for the purpose porting or hauling any freight, baggag hold goods, merchandise or other ar hire, or rent or loan the same to be h ou first having obtained a license the the village of Watervliet; and no lice

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio **General Offices: Youngstown, Ohio**

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

cart, wagon or automobile shall occupy, while waiting for employment, any other stand than such as may be designated by the trustees of said village, which stand may be changed by said trustees when deemed expedient. There shall be charged and collected for the use of the village of Watervliet under this section for each dray, cart, wagon, automobile or other vehicle the sum of $25 per year or any part thereof."

The license number is to be plainly visible, the license may be revoked by the trustees for non-compliance and violations may bring fines not to exceed $100 or imprisonment in the county jail not to exceed 60 days, or by both fine and imprisonment. No license may be transferred. The ordinance took effect May 15.

Under such a measure it is figured that a truck owner delivering goods in the village from another city might be required to have a license. O. L. Alden, a member of the Association, runs a bus line from Benton Harbor into Watervliet but charges nothing for riding in the village. Backed by the Association Mr. Alden will decline to pay the license and abide by the ordinance, and the matter will be carried to the courts. Secretary H. H. Hardy was instructed to inform Watervliet officials of the decision of the Association.

By-laws were adopted for the local associations. It was voted to apply for membership in the National Team & Truck Owners' Association. An invitation was received to attend the national convention and boat trip at Detroit, June 13, and several members of the executive board will be present.

The bonds of the secretary and treasurer were fixed at $500 temporarily.

Those present at the meeting were President E. Foster Moreton, Detroit; Secretary H. H. Hardy, Lansing; Treasurer H. G. Beebe, Jackson, and O. L. Alden, Benton Harbor; E. F. Raseman, Kalamazoo; W. F. Stevens, Sr., Saginaw; H. H. Stevens, Flint, and W. J. Le Strange, Mount Pleasant.

New Safety Campaign in Progress This Week

Detroit's sixth public safety campaign opened Monday with 25,000 persons engaged in promoting propaganda and education through every channel of the city's life. Governor Alex. J. Groesbeck issued a proclamation making the week one for safety promotion, and Mayor Couzens issued a similar proclamation for the city. Campaign flags, consisting of green cross on a white field, have been displayed prominently, and at prominent corners large metal signs have been erected. The slogan of the campaign is "Safety First Always."

Monday morning the safety campaigners marched from Grand Circus park to the city hall, where they were received by the Mayor. This ceremony was followed by safety meetings in various parts of the city. A phonograph, said to be the largest ever made, and mounted on a motor truck, was driven along Woodward avenue from the river to Highland Park and records containing lectures on safety used on it during the days and evenings. Eight trucks carrying the wreckage of automobiles were driven about the streets to arouse motorists to the importance of safe driving.

Judge John Faust addressed the noon luncheon of the Exchange Club, Hotel Statler, and Mayor Couzens, W. S. Gilbreath, manager of the Detroit Automobile Club, and George A. Walters, deputy commissioner of police, spoke at open forum meetings in the Real Estate Exchange building. Other meetings were held in schools, churches, in Cadillac Square, the Y. M. C. A. and other public places. Literature was distributed by the Girl Scouts and the Campfire Girls.

Sixty or more communities throughout the state are interested in the campaign also.

ANOTHER KNIGHT CAR

The Sterling-Knight Motor Company has been organized in Cleveland to manufacture a motor car which will have a six-cylinder Knight engine. P. H. Withington, Toledo, president of the Sparks-Withington Company, is president of the new corporation; J. G. Sterling, for eighteen years chief engineer of the F. B. Stearns Company, Cleveland, is vice-president and chief engineer, and J. V. Thomas is sales and distribution manager. The enterprise is backed by Cleveland capital.

FEDERAL GUARANTEES TILL OCTOBER 1

Prices of Federal motor trucks have been guaranteed until October 1. A statement issued by W. C. Rowley, an executive of the company, says in part: "While there has been some slight reduction in the price of steel recently, the cost of manufacture has not been affected thereby, as labor and other items of cost do not warrant any reduction." The previous price guarantee of the factory, made November 18, 1920, was up to July 1, 1921.

Haynes' Resignation From Dodge Brothers Denied

The persistent rumor that Frederick J. Haynes, president and general manager of Dodge Brothers, had resigned and was preparing for an extended trip through Europe, has been emphatically denied at the plant. A. T. Waterfall, vice-president and assistant general manager, said that the rumor emanated from certain business rivals in New York city and should be given no credence whatever.

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 3:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 8:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

PLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
P. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

TRANSPORTATION NEWS

Rail :: :: *Water*

Washington—In the case of the Barnett Oil & Gas Company vs. the Director General of Railroads, as agent, the Chicago & North Western Railway Company, et al., the Interstate Commerce Commission has decided that the rates on gasoline and its products in carloads, from Blue Island, within the shipping limits of Chicago to nearby destinations in Illinois, Wisconsin, Michigan and Indiana, are not unreasonable, unjustly discriminatory or unduly prejudicial and has dismissed the complaint. The case, which was No. 10305 on the Commission's docket, was submitted October 13, 1920, and decided May 5, 1921.

Lansing—The structural steel work on the Prudden office building was started this week by the Rickman Construction Company. The footings are piers of cement, 10 by 12 feet, sunk below the basement of the old building, and sufficient to sustain the weight of ten stories.

Lansing—The footage sold in Lansing and vicinity at present is much larger than a year ago, according to Lansing lumber dealers. Hundreds of repair jobs, remodeling, additions, and garages are being done. The construction of houses is expected to receive an impetus by the announcement that the big assembling plant of the Durant Motors, Inc., will be located in Lansing. This factory is to cost $3,000,000, to employ 3,000 men and to be completed by November 1.

Washington—The Interstate Commerce Commission has found, in the case of the Steel & Tube Company of America, et al. vs. the Director General of Railroads, as agent, the Michigan Central Railroad Company, et al., that the rate on steel car-plates, in carloads, during federal control, from Indiana Harbor, Ind., to Michigan City, Ind., were unreasonable, and has awarded reparation. The case, which was No. 11052 on the Commission's docket, was submitted November 15, 1920, and decided May 3, 1921.

Lansing—The attorney general has filed with the Michigan Public Utilities Commission a petition on behalf of the public, asking a hearing on the rates charged by the Mackinac Transportation Company, St. Ignace, for carrying automobiles across the straits between Mackinaw City and St. Ignace. The attorney-general alleges that the rate is too high.

Why the Court Dismissed the Lucking-D. & C. Suit

The reasoning which prompted Judge Arthur J. Tuttle, of the United States district court, last week to dismiss the suit of Lucking vs. The Detroit & Cleveland Navigation Company to prevent the latter from discontinuing certain of its routes, is that the company, not being bound by franchise obligations, is at liberty to cut off such service as it desires. The company had raised, in its motion to dismiss the case, two questions, first that the court had no jurisdiction and, second, that the plaintiff was not entitled to the relief asked. The court overruled the first contention and proceeded to consider the second, as follows:

"The question presented is whether a common carrier by water, after establishing several regular routes for the transportation of passengers and freight by vessel, in both interstate and intrastate commerce, is under any legal obligation to continue to operate its vessels in such transportation over all of such routes in the absence of a franchise or other arrangement with the state, imposing upon it such an obligation.

"No authority, however, has been called to my attention and I have discovered none, to the effect that a common carrier such as the defendant here, not enjoying any public franchises or exercising any public powers or privileges, is bound, after commencing to operate vessels over a certain route, to continue such operation, if it finds it desirable to discontinue and abandon the same.

"It is true that common carriers, like rail road companies, which enjoy peculiar rights and powers at the hands of the state, are not permitted to discontinue at will the rendition of transportation services, for the performance of which they have been endowed with such special privileges and powers.

"The reasons, however, which underlie and prompt the imposition of this duty upon common carrier railroads do not apply to common carriers such as this defendant, because they have no privileges and rights other than those held by a private individual desiring to engage in the business of transportation of passengers and freight by water. It cannot exercise the power of eminent domain. In the eyes of the law it occupies no different position than that of a common carrier operating taxicabs or other vehicles on land, and it is under no greater obligation and I am clearly of the opinion that in the absence of some statutory provision applicable, the plaintiff is not entitled to the relief prayed."

STUDEBAKER PRODUCTION PLAN

Officials at the plant of the Studebaker Corporation announce that the June production schedule will call for 8,600 cars. During the first six weeks of the second quarter of 1921, sales are given as 10,000, and unfilled orders as 7,600.

SPEAKS GOES TO LONDON

The Firestone Tire & Rubber Company, Akron, O., has appointed Col. Charles E. Speaks European manager, with headquarters in London.

FOX TYPEWRITER RECEIVERSHIP

Although the company is solvent, the First National Bank of Chicago applied for a receivership for the Fox Typewriter Company, Grand Rapids, and Walter Papworth, secretary-treasurer of the company, has been appointed receiver. Publication was taken because the foreclosure of a mortgage and several creditors' suits were threatened. The bank says the company is solvent.

Detroit Tigers' Home Dates for 1921

May 26, 28, 29	Chicago
May 30 a. m.; p. m., 31	Cleveland
June 2, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON	CLEVELAND			DETROIT
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:	Atlanta		Denver	Portland
EUROPEAN:	Columbia Steel & Engineering Co., Ltd., London, Eng.			

Detroit Warehouse—1300 West Fort Street Cherry 6700

ELECTRICAL REPAIRS

WESTINGHOUSE ELECTRIC & MFG. CO. announce the opening of a repair shop in the Detroit Territory to take care of any electrical repairs.

RELIABLE REPAIR WORK, promptly executed at as low a cost as is consistent with the high standard of workmanship demanded in the main works and repair shops may now be obtained in Detroit.

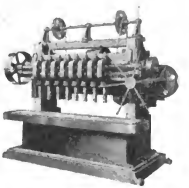
Westinghouse
Electric & Mfg. Company
Service Department
1535 Sixth Street, Detroit, Mich.

FOR HEAVY DUTY DRILLING, CYLINDER BORING, ETC.

INVESTIGATE

THE "HOLE HOG"

of spiral drive DRILLING and BORING MACHINES is especially adapted for multiple spindle straight line work.



Let us show you

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT
CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

THE Biblical studies of many electrical contractors ceased at the passage alluding to the man of means and the needle's eye. They never reached the Golden Rule.

We are a bit unorthodox. The owner still has a bank balance after we complete our contract.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

Need an Elevator?
Ask LEITELT
Modern Designs
Superior Construction
LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451
Main 6602
600 Fort St., E.
DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Battle Creek—The Purity Stamping Company, of which W. T. Hulcher is president, contemplates the erection of a two-story plant. The company manufactures milk strainers.

Detroit—Statistics from the city building department for April disclose that 1,509 permits for new buildings to cost $5,079,450 and 560 permits for alterations and additions to cost $465,301 were taken out. The total number of permits was thus 2,069 and the cost involved $5,544,751, as compared with 2,227 permits for new buildings to cost $11,189,325 and 640 permits for additions and alterations to cost $1,268,210, or a total of 2,867 permits involving an expenditure of $12,397,535 for April, 1920. The 1,509 new building permits listed during April were distributed as follows: 993 automobile sheds, barns, etc.; 321 single residences; 58 two-apartment residences; 41 stores; 19 stores and tenements providing 36 stores and 49 apartments; 11 tenements providing 96 apartments; 11 major garages; 10 factories and shops; eight storage or lumber sheds; six warehouses; three churches; one office building; one theater; one school; 25 miscellaneous buildings.

Grand Rapids—There were applications for 89 building permits during the week ended May 13. The expenditure involved was $79,065. The majority of the permits were for dwellings and garages.

Detroit—Among the contracts awarded by contractors during the week ended May 19, as reported by the Builders & Traders' Exchange, were the following: Three schools; a store and office building; a printing establishment; a garage and a large show stable, the latter for the Michigan State Fair. Among projects reported by architects are several stores, a market and residences.

Royal Oak—During March and April 53 building permits were issued involving in cost $457,965. The list is headed by the First State Bank building, to cost $225,000, and the Baldwin Theater, which is to cost $125,000.

Grand Rapids—A four-story addition, 40 feet wide, is being completed at the plant of the Hekman Biscuit Company, which will practically double the company's capacity.

Lansing—Work has been started on the new warehouse and offices of the Brick Supply Company, which, it is said, will be among the largest building material warehouses in the state. The buildings are to be completed in about five weeks.

Detroit—Samuel S. Kaplan has purchased the property at the northeast corner of Jefferson and Lakeview avenues, on which he will build a two-story public market building with stalls on the first floor and offices for the Economy Market Company on the second.

Detroit—The department of public works, lighting commission, water commission and the street railway commission will adopt the two-shift system on public work. This system will add 3,000 men to the payroll of the department of public works.

Grand Rapids—The Metal Office Furniture Company has awarded the contract for an addition to its plant to the Owen-Ames-Kimball Company. The structure will be two stories high, 150 by 150 feet, and will cost $50,000.

Grand Rapids—The high mark for a week thus far this year was attained during the week ended May 20, when 102 permits were issued involving an expenditure of $217,450, or in excess of $60,000 over the previous high week. The list of permits is headed by a three-story school building to cost $80,000. Next comes a permit for a four-story addition, 60 by 120 feet, to the plant of the Gunn Furniture Company, to cost $37,500. The American Seating Company is to put up an addition which will cost $10,000. A score of permits were for residences and frame houses to cost from $3,500 to $6,500 each.

Jackson—During the week ended May 21 a total of 18 permits were issued, of which three were for new buildings.

Detroit—The board of fire commissioners will receive bids until 4 p. m., June 6, on the construction of a ladder house to be erected at McGraw and Martin avenues.

Detroit—The common council Tuesday approved of the award of contracts for the construction of the Belle Isle bridge. All work except the steel superstructure will be done by Grelling Bros., Green Bay, Wis., who will receive $2,011,895, while the superstructure will be built by the Wisconsin Bridge & Iron Works, Milwaukee. The latter's bid was $354,135. The work is to be completed in twenty-seven months.

Each Accuses Other In Building Confab

When it became quite certain that no amount of "coaxing" investments in building operations this summer by "inflated" optimism was likely to create a resumption of building activities, the Detroit Board of Commerce adopted the only method of getting at the facts by calling a conference of all the interests concerned in construction work. The result was a meeting of 250 manufacturers and dealers in building materials, contractors, labor representatives and bankers, in the Board of Commerce, Tuesday.

The result of the meeting was nothing less than a "deadlock," because no representatives of any of the interests involved would assume responsibility, while some were inclined to shift the blame to other shoulders. The bankers, if any one, had the best of the argument, for when the four-hour conference was over, the only conclusion that could be reached was the real one—lack of finances. In turn, the lack of finances was shown to be due to lack of deflation in the prices of some building materials, and the lack of employment. This latter factor naturally reduced deposits from which building loans are made.

As shown some time ago in an article in the Michigan Manufacturer and Financial Record, on the building situation, the lack of such facilities as building loan associations and the absence of proper encouragement for those in existence (five) influenced the situation. The statement made in that article to the effect that Detroit did not appear able to finance its own home building and that outside money was sorely needed was borne out by the deliberations of the conference.

While a review of comparative prices of building materials and work for 1920 and 1921 indicated a drop of 30.8 per cent in a certain class of materials and seven division of labor, no evidence was given to show any appreciable approach to 1914 prices. The list of percentage reductions submitted at the conference follows:

Lumber and mill work, 51.8 per cent; mason work, 18.5; paint materials, 18.1 wall paper, 36.4; plumbing (limited), 26.5; plaster, 31.1; trimming, 14.5; wiring, 27.3; fixtures, 16.7; furnaces, none; glass, 23.4; hardware, 9.7; window shades, 14.9; curtain rods none; carpenter labor 20.5.

In 1914 a plumbing set for an ordinary home

Digitized by Google

such as a worker in moderate circumstances would build cost $165; in 1920 this cost went up to $570, and at present it is $380. The mention of Detroit brick selling at $19 a thousand as against $12 a thousand in Chicago brought the statement that Detroit brick was better than the Chicago brick and was being sold at "bottom" prices.

Contractors were represented as on the verge of bankruptcy as the result of the bids being made. Investors in building enterprises were accused of seeking too high returns. Banks were charged with being too niggardly with loans. Labor was charged with resisting wage cuts. Labor charged the contractors with being "parasites" on the industry. As nothing was to be gained by the orgy of charge and counter-charge, the conference asked the Board of Commerce to appoint a committee to do these three things:

Ascertain why the costs of certain building materials had not been cut in ratio with reductions in other items.

Ascertain the reason for the high cost of financing building.

Ascertain from manufacturers and employers the probable employment situation in the near future.

Michigan Purchasing Agents Condemn Printers' Strike

Through general policy, the various divisions of the National Association of Purchasing Agents have never been actively concerned with labor conditions. However, the action taken by the unions for the printing industry is deemed by the purchasing agents to be so contrary to the industrial welfare of the whole country that the district associations have felt called upon to take a definite stand.

The following resolution, originally wired out by the Purchasing Agents' Association of Chicago, has been indorsed by both the Purchasing Agents' Association of Western Michigan and the Purchasing Agents' Association of Detroit, which, together, comprise the entire state of Michigan:

"Whereas, the unions in the printing industry at this time are demanding a reduction in hours of work from 44 hours per week and whereas the employing printers are resisting the demands of the union with a view of bringing their industry back to a normal and reasonable basis, and as a result of such resistance, have had their shops closed by a strike of their employes, and whereas many users of printing represented by the purchasing agents throughout the country will be greatly inconvenienced through this action, and whereas, a reduction to a 44-hour week will raise costs of printing in the face of an economical demand for a reduction in prices, for this reason, be it resolved:

"That this association will advise its members of the commendable attitude taken by the printing industry and urge all buyers of printing to support in every way the employing printers in their efforts to co-operate with all other industries in returning business to a normal and economical basis.

"Be It Further Resolved, That this action of the Purchasing Agents' Association of Chicago be communicated to the National Association of Purchasing Agents and request that copies of this resolution shall be circulated to the different local purchasing agents' associations, also that it be communicated to the press and to the various employing printers' associations."

BUILDING BIDS SOUGHT

James S. Bicknell, cashier of the Citizens State Bank, Clare, writes that there will be an $85,000 hotel built in that city this summer, in addition to a school building, bonds for which have just been purchased by the Detroit Trust Company. He says the authorities would like to get into touch with contractors who would like to bid on the jobs.



A Machine Tool Service Station

In Detroit
where so many Warner & Swasey turret lathes are operating a Service Staton is imperative,
so we put on at 5928 Second Boulevard.

Two practical men are there to serve you—
Men who know Detroit and its vicinty
and who know Warner & Swasey Turret Lathes,
C. S. Stilwell, Manager, and Wm. B. Pope.

Turret lathes of each size are on exhibit there.
You can buy one right off the floor if you like,
and equip it with tools from the stock we keep there,
or you can buy tools for the machnes you have.
Our tools are adaptable to any make turret lathe.

Come and look us over—or telephone us.

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.		
Branch Offices:	Detroit	5928 Second Boulevard
	Boston	Oliver Building
	New York	Singer Building
	Buffalo	Iroquois Building
	Indianapolis	Lemcke Annex
	Dayton	Mutual Home Building
	Milwaukee	Sycamore Building
	Chicago	618-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grece, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, MAY 28, 1921

Henry Brockholst Ledyard

FROM 1818 to 1921 is a long period for any industry, especially in so new a territory as Michigan, to be ruled through the lives of two men. Yet that is exactly what has been the experience of the railroad industry in Michigan. These two men were James Frederick Joy, long since passed away, of grateful memory to those who have profited by railroad transportation in Michigan, and Henry Brockholst Ledyard, of equally grateful memory, who has this week passed to his reward.

With the death of Mr. Ledyard but one of the old-time railroad managers whose services have influenced the development of Michigan railroads remains, that one being Chauncey Mitchell Depew, the great New York railroad lawyer who has seen all the great associates of his lifetime pass on. He, too, was an influence in Michigan railroad development, though more remote than the two whom we have named. To Mr. Joy and Mr. Ledyard Michigan owes more than to any other men who were active in the laying of its great industrial foundations. Joy was the grim but dashing promoter, a promoter not in the modern sense of the word but rather in the purer one, a man who had vision, who had ability, who had the confidence of the capitalists of his period and who justified that confidence by seizing situations, improving them sufficiently for the time, and leaving to later comers the duty of putting the enterprises on firm and lasting foundations. Joy's genius reached out afar. He took the Michigan Central railroad from the state when it was a bankrupt enterprise, pushed it on from Ypsilanti to Lake Michigan, foresaw the possibilities of the great west and got his great capitalist associate, John Murray Forbes, to endow his ideas with money. He started the Burlington road westward from Chicago. He had to do with a railroad running southwesterly from the Missouri river. He was the first to give practical value to the idea of a canal around St. Mary's Falls, between Lake Superior and Lake Michigan.

In these daring enterprises he surrounded himself with many able young men. It is surprising how few of these became dominant in the industry to which their patron devoted his life. None was more dominant than the young man who came into contact with him, fresh from the army, in 1869, a youthful West Pointer, as superintendent of the Eastern Division of the Chicago, Burlington & Quincy Railroad. He drafted him into the service of the Michigan Central Railroad forty years ago as an assistant superintendent. This young man was Mr. Ledyard, who became successively superintendent and general manager of the road, until 1883, when he succeeded to its presidency.

Mr. Ledyard came to the direction of the Michigan Central railroad at a time of as great change in the railroad business as has been witnessed in any of the other public utilities which have become familiar since the development of the steam railway. In the first instance railroads were built to get them going. Questions of grade, of rail structure, of motive power, of permanent bridges and the like were left for the future, if they were even understood. One can appreciate the kind of a railroad that the Michigan Central was when Mr. Ledyard took hold of it as its practical manager from the report made to the state in 1872. In that report it is set down that there were two iron bridges between Detroit and Chicago. The rest were of wood. In that same report it is set down that an experiment had been made with the newly-devised steel rails, and that a quantity, less than 200 tons, had been laid in the previous year. There was a note of uncertainty as to their practical value in the report to the state. What this meant was that the entire railroad system constructed between 1848 and 1872 had become obsolete, and that complete reconstruction had to be accomplished. It is not quite certain to the writer when Mr. Ledyard's authority in regard to the disposition of corporate earnings became dominant, but it was very early. From its first day his financial policy was to provide corporate funds at low rates of return and to keep the dividends upon the company's stock down to a modest but constantly paid figure. The railroads made some money in those days and the practice of other managers had been to seek to earn and pay large dividends to attract new capital. Mr. Ledyard's policy became one of applying excess earnings to the rehabilitation of the property and its modernization according to the new standards of railroad engineering economics. The wooden bridges passed and were supplanted by metal ones. The iron rails passed and were supplanted by steel rails of successively greater weights. The grades were reduced. The motive power came up in efficiency. The rolling stock was replaced with newer, more capacious and more lasting freight cars. The passenger equipment of wood passed and was replaced by steel. It is noteworthy that, during all this period of replacement, renewal and reconstruction the capital stock of the Michigan Central railroad never appreciably increased in amount above what it was in 1872, an economic policy that was good no less for the owners of the property than it was for the users of the facilities which the railroad created. Mr. Ledyard's conservation of the large earnings of "fat" years for the necessities of the lean ones, and his well defined policy that maintenance and depreciation were proper charges to the beneficiaries of the service rather than against new capital brought into existence during his time a new Michigan Central railroad plant, fit to cope with any of the demands made upon it as a transportation unit, and strong enough to carry any normal burden placed upon it.

So much for his financial policy. This conservator and upbuilder was not lacking in vision. Where Mr. Joy forty years ago had looked to the West as the feeder of the Michigan Central, Mr. Ledyard looked to the East. Mr. Joy entered upon the construction of the Chicago, Burlington & Quincy road as "a feeder of the Michigan Central," to quote the language of John Murray Forbes, and intended it to be about 150 miles in length. Mr. Ledyard saw the possibilities of feeding from the East and his development of the Canada Southern division into a great railroad taking its share of the traffic west from Buffalo, was a lifework, which finally culminated in his realization of the Detroit River Crossing, the greatest engineering project of recent years which has been carried out for the benefit of the commerce and industry of Michigan. Even that work had taken a quarter of a century of study and effort, of decision between an overwater and an under-water crossing of the Detroit river, of modification of existing terminal facilities and of the creation of new ones, of additions to local trackage and a dozen other items. Once decided upon, it was put through in characteristic fashion, completing as one man's life-work, the provision of a true trunk line railroad between Buffalo and Chicago, of feeder divisions from all the great industrial cities of the state, and of a north

Digitized by Google

and south line through the eastern and central portions of Michigan to the straits of Mackinac.

This work was not carried out without opposition and criticism, but now that it is done, the important thing about it was that it was carried out at all. Mr. Ledyard's visible characteristics were those of command, austerity and modesty. He had no liking for the limelight or for public applause. The soldier that was in him at the beginning of his career remained in him until its end. Yet he was not a man to whom the amenities of life failed to appeal. Those who enjoyed his intimate acquaintance tell us that he was full of the wisdom of the books and that even the years of his age were devoted to the study of subjects quite apart from those of his profession or of the industry of which he was so long a directing head. Nor was he averse, under proper conditions, to the dissemination of the experiences of his career. So often as to have been frequent, this paper has enjoyed his confidence in this regard, a number of the articles on railroad management and necessities which have appeared herein, and which he only permitted to be ascribed to a railroad executive of experience, having been his contribution to the knowledge of his fellow citizens.

Some men build their own monuments and some others have monuments built unto them after their passing. Henry Brockholst Ledyard built his own in his own life-time. It is the Michigan Central Railroad system in Michigan, without which Michigan would not be the leader it industry that it is.

A New Bishop Speaks

AFTER one has pondered some of the ill-advised, ill-considered outgivings of certain leaders in the church as regards the latter's position on questiums at issue between capital and labor, it is refreshing to behold a churchman of high estate who believes the church should know whereof it speaks, before speaking, and then should speak with a dignity and a sense of fairness born of an appreciation of its position and its function in the human scheme of things. When one recalls some of the statements in the most recent address of the Episcopal bishop of Michigan—the Rt. Rev. Charles David Williams—in which he made it fairly plain that the church ought to compel its adherents to accept his ('the Bishop's) brand of economics, which is the labor union brand of economics, the following from the consecration sermon of Bishop William T. Manning, of one of the New York Episcopal dioceses, will bring a sigh of relief:

"There are great questions, social, industrial and economic, now before the world in which the church must play her true part. In the movement for social progress the church must not be a mere sympathetic onlooker but the great loving influence and power.

"In the very nature of things the church must feel keenly upon those questions and must be in deep sympathy with those whose lot is hardest and who are at most disadvantage from the present imperfections of our social system. But the church must include all within her sympathy and must minister to all alike. She must sympathize with the problems of the laborer and the wage earner, but she must recognize also the problems of the capitalist and the employer, and she must call upon all equally for right dealing, for the spirit of good will and brotherhood.

"Wherever there is a proved wrong and injustice the church, of course, may, and must, speak. But the church is not commissioned nor endowed with special wisdom to pronounce upon specific political and economic programs. It is the function of the church to inspire men and women to right social actions, to bring the spirit of Christ into all social relationships and into every department of life, but it is not the function of the church to prescribe the economic views which men shall hold, nor the economic systems which they are to adopt. It would, I think, be unfortunate if all of us in the church thought alike on these subjects. I hold it to be the most wholesome and important that all social views which are reconcilable with the Ten Commandments should have their representation within the church and among the clergy. In the church there should be, and there is, freedom of opinion upon these questions to the full limit of consistency with the principles of Christ."

"The church," he says, "is not commissioned nor endowed with special wisdom to pronounce on specific political and economic programs. It is the function of the church to inspire men and women to right social actions, to bring the spirit of Christ into all social relationships and into every department of life, but it is not the function of the church to prescribe the economic views which men shall hold, nor the economic systems they are to adopt."

Measured by this conception of the church's position in our everyday lives, how far out of proportion becomes, for example, the Interchurch Steel Report, based, as it was, on one-sided, embittered testimony and seeking to force upon the American conscience conclusions which in no way squared with the facts as they should have been and could have been brought out. How lacking, again, in the real spirit of the christian church some of the pronouncements of churchmen regarding the Denver strikes.

No, when the church turns agitator for one class as against another class, it distinctly has misconceived its mission and is playing into the hands of groups that not only are un-christian, but are imposing upon the clergy's keen sympathy for humanity to lead it into paths that can bring nothing but lack of respect, not to say ridicule, for it.

When the church has aroused individually in the hearts of men the desire to practice christian principles, the relationships of men in groups will take care of themselves. That is the church's part.

Short Measure Stuff

THESE EDITORS of weekly papers have it soft. As which:

Take George Harvey, f'instance. He goes to Europe, slams his cane down on the table and tells the boys to quit hanging around LaFayette's tomb and the Victory arch waiting for America to do their work. Right away, everybody starts buying his sheet to see what he is going to say privately for world consumption.

Then there's Ford. He begins blasting at the Rock of Ages and transposing the tablets of the patriarchs for his own ends, and every street corner in the world has leather-lunged salesmen peddling his weekly.

We hope that we get recognized before all the jobs that require plenty of talking are filled. We would like to be sent to Tokio but would be satisfied with Berlin. Our paper could save a lot of money that way.

* * *

DENTISTRY

"I want some cotton for my tooth,"
Said suffering Mr. Baker;
"I think that I will need enough
To cover a whole acre."
—Lake McLoke

The dentist peered into his mouth,
His patient's need to serve,
He saw a little tooth that ached
And said: "I like your nerve."
—Detroit Free Press

With a steam drill he went to bat,
The pain he did but double;
And boring deep, said, "We'll get
The root of this here trouble."
—Newark Advocate.

And as he worked in Baker's mouth,
While looking right straight down it,
He said that tooth's the real royal thing—
I think that I will crown it.
—Hastings (Neb.) Tribune

He changed his mind and said, "I think
"It would be better yet
"If I pulled these and made you some
"Then you would be all set."

* * *

IN WHICH THE INSPIRED REPORTER STRIKES AT THE DANCING INDUSTRY.

An Ionia woman is liable to have trouble with another Ionia woman if she doesn't quit dancing with the other woman's husband.—Ionia Sentinel Standard.

* * *

"Largest Ready to Wear Store" reads a sign over a new emporium in Detroit. Who'll be the first to try it on?

* * *

This is the only column in the world that will not try to get gay with Edison's questionnaire.

—A. F.

Digitized by Google

FINANCIAL

The Pound Sterling and Its Price

By A. W. KIMBER

[Editor's Note—Owing to the fact that the price of sterling worked up around $4 recently, which is the first time since June 28 a year ago that this level had been reached, and the importance which the rate of exchange on London is bound to play in future international business, we believe Mr. Kimber's article will prove of interest to students of the foreign situation. He is an authority on foreign bonds and foreign exchange and is the author of several books on these subjects which are given an exceptionally high rating. All over the world the rate of exchange on London is the rate of greatest importance, for bills of exchange drawn on London are to a large extent the currency of international commerce and finance. Even when goods or produce are dealt in between two other countries, payment is made in bills on London, such bills being the world's nearest approach to an international money. The article is reprinted by permission of Paine, Webber & Company.]

WHEN Peru sells sugar to Chile, for instance, the Chilean importer pays the Peruvian merchant with a draft on London for so many pounds sterling. The advantage of this method is obvious, for the Peruvian merchant can use the sterling either to buy goods direct from London or to buy anywhere else in the world a sterling draft being taken by bankers everywhere as the equivalent of local currency at the appropriate rate of exchange on London. The day-to-day rate on London is controlled by the demand for sterling and rises and falls accordingly. In 1914, for instance, the pound sterling sold in New York as high as $7.10. The war, which was because the need of the British government for funds compelled us to pay quickly certain short-term loans contracted in England, and the unusual demand thereby set up, which to pay them forced the price of sterling up.

But commerce between countries is barter, the swapping of goods for other goods, and foreign exchange, the exchange of drafts and cheques between countries, is also barter, not of the goods themselves but of the money of them, a payment in one place being exchanged for a payment in another place. Over the greater part of the world, therefore, the rate of exchange on London merely serves as a basis or indication of the trade balance. The price of the pound at New York is a way of expressing the value of American goods which the pound will buy at New York. Normally it will buy $4.86 worth but when the British demand for American goods is urgent, competitive bidding by British merchants or bankers inclines them to pay more and more for the goods, in other words to take less and less for their pound.

During periods of normal trade movement the price of the pound at New York (the value of American goods it would buy) rarely moved outside the limits $4.84 to $4.89⅛. At $4.84 or below, it was cheaper for the Briton to buy our goods with gold than with a pound's worth of goods; therefore at $4.84 gold would leave London for New York. At $4.89⅛ or higher, on the other hand, the Briton would not take our goods; they were too high; he would send a pound's worth of his own goods and get $4.89⅛ of our gold; with that $4.89⅛ worth of gold the Briton could buy more goods elsewhere than he could get from us. Therefore at $4.89⅛ or higher gold, not goods, would leave New York for London. So smoothly did these processes work that for more than thirty years before the war the highest price of sterling at New York was $4.91, the lowest $4.82.

It is a remarkable fact that at most other financial centers the pound is selling at a premium. In twenty-eight countries sterling is above normal parity in twenty and below normal parity only in the United States, Holland, Canada, Sweden, China, Japan, in Switzerland and at Hongkong.

The reason for the discount at New York is a very simple one. The war created an enormous demand for our goods, and goods were shipped abroad to a much greater value than foreign countries could pay. These transactions were financed in large part by the United States government, which loaned to foreign countries nearly 10,000,000,000 American dollars to enable them to pay for these goods. As long as the American goods were paid for by these American dollars, the price of the pound at New York was not controlled by the value of the goods moving from our shores, and it was possible for government control to "peg" it at $4.76. Shortly after the Armistice this government support was withdrawn and the pound once more stood upon a competitive basis.

All other foreign currencies are selling at a discount in New York; not one of them is at par. Looking at the situation impartially, it is apparent that the discount which is given to all the dollar is at a premium. But this premium is due in great part to the urgent demand from abroad for American dollars to pay for goods exported from this country.

To some extent our exports have been paid for with securities sent here from abroad, and by means of foreign bond issues in this country. But there is still a considerable balance owed us from abroad and it is chiefly the demand for dollars to pay this balance which is keeping up the price of the dollar.

The situation is beginning to adjust itself. The excess of exports for March, 1921, was $132,000,000 against $295,000,000 for the corresponding period of 1920 and $335,500,000 for 1919. Obviously, if this adjustment continues, the demand from abroad for dollars to pay for American goods exported will become less insistent and the price of the dollar will decline.

British Trade Balance

Great Britain for many years has had a heavy excess of imports over exports, the average for some years prior to the war being about $1,000,000,000 annually. This was balanced by the interest and dividends on British foreign investments, which averaged about the same amount. There were other large items of British invisible imports and exports but they virtually offset one another so that the balance was affected as above. During 1919 Britain had an unfavorable trade balance of $3,300,000,000, only partially offset by invisible exports; in 1920 the unfavorable balance was $1,890,000,000, but the British Board of Trade estimates that it was later than offset by invisible exports leaving a balance in favor of the country of more than $800,000,000. Due to this huge balance against Britain in 1919 the price of the pound at New York, which had ranged in 1919 from $4.76 to $3.65, declined in February, 1920, to $3.19. Recovery was rapid and the pound sold in April and May between $3.75 and $3.94, but heavy purchases of dollars to meet the Anglo-French 5 per cent bonds forced sterling down to $3.33 in November, 1920. Since that date the price of the pound at New York has steadily advanced, coincident with the improvement in the British trade balance noted above.

Other discussion of sterling rates has thus far been limited to the movement of commodities and the resultant demand for sterling or dollars to pay for them. This is because the currencies of Great Britain and the United States are sound; both countries are on a gold basis, using gold freely in the settlement of their international accounts; and the price of such currency in terms of the other is controlled, ultimately, by trade balances.

In this period of post-war adjustment there are other factors which influence exchange rates. One such factor is inflation. To what extent is the price of sterling at New York influenced by inflation in Great Britain?

Prior to the war the paper currency of Great Britain was Bank of England notes, covered practically pound for pound in gold. The lowest denomination of these notes was five pounds. The actual circulating medium of the country was gold and silver coins. Immediately upon the outbreak of the war this metal currency began to be hoarded; it was virtually withdrawn from circulation by its chance holders. To meet the currency needs of the nation the government issued a new series of notes in denominations of one pound and of ten shillings; these are known as "currency notes," and it is the total of their outstanding that has been regarded more or less as inflation of British currency. At the end of the first six months the currency notes were covered 48 per cent in gold but successive issues during the war without corresponding increase in gold reduced the gold ratio to to 14⅜ per cent, gold to notes (May 1, 1921).

If inflation of currency in Great Britain had anything to do with the discount on sterling at New York, it is important to note that the process of deflation is well under way. Currency notes outstanding at December 31, 1920, were £367,626,000; at April 30, 1921, this figure had been reduced to £335,838,000. On a percentage basis this is a substantial decrease in four months.

At the same time the purchasing power of the pound, in England, has rapidly increased. The London Economist estimates that average prices in Great Britain are 40 per cent lower than the high prices of last year, the U. S. Federal Reserve Bulletin calculating that them 50 per cent lower. This decrease in prices means increased purchasing power of British currency; the pound will buy more goods; the pound is worth more to those who want British goods or British-controlled goods.

At the same time the British government returns exhibit the old skill in the handling of financial problems. For the fiscal year ended March 31, 1921, the government revenues were £7,600,000 more than budget estimates and the actual revenues for the year exceeded actual expenditure by £230,472,000.

During the year Great Britain reduced her total debt by £248,000,000, and has announced that this year she will pay interest on the advances made during the war by the U. S. government. Last year Great Britain reduced her debt to America by $365,000,000; she has already bought in $45,000,000 of the $150,000,000 bonds maturing in New York next November, and every week shipments of gold arrive here to be used in liquidation of the balance.

All these facts lead to the conclusion that the movement toward normal rates of sterling exchange should continue.

Digitized by Google

State Income Tax Battle Is Under Way in Lansing

[*By Staff Correspondent*]

LANSING, May 25.—Evidence that the state income tax resolution will meet spirited opposition in the special session of the legislature was not lacking yesterday when the session opened. It appeared certain that the entire Wayne delegation would be solidly against it and that help would be forthcoming from other industrial centers.

The resolution, which is practically identical with the Mosier resolution, which failed in the last session, was introduced by Rep. Peter Lennon. It merely changes the word "shall" to "may," thus making it optional for the legislature to pass an income tax law. Corporations are included, as they were in the Mosier resolution.

That the Michigan Manufacturers' Association does not propose to sit idly by and allow the resolution to pass the legislature, and then take chances on the people's defeating the proposition at the polls, was evidenced in the presence of John L. Lovett, general manager of the Association, in Lansing.

Eight bills were introduced the first day, of which two only are regarded as important. The first of these is the bill of Rep. George Welsh amending the James vocational school law and the other is the soldier's bonus enabling act, sponsored by Rep. Vincent Dacey.

Governor Groesbeck's message makes a number of recommendations, chief of which are the income tax; the bonus enabling act; ports and post district legislation; commission form of government for counties; the short ballot and additional compensation for members of the legislature.

Frank W. Brooks Resigns Presidency of the D. U. R.

Frank W. Brooks, railroad man for 39 years, and who made the Rapid Railway one of the most talked-of traction systems in the United States, has resigned as president of the Detroit United Railway because of ill health.

Born in Waco, Tex., and educated in private schools and the Waco Military Academy, Mr. Brooks finished his schooling at the Texas State College, graduating in engineering. Subsequently he was employed by the New Orleans & Texas Pacific, Queen & Crescent and the Louisville, New Orleans & Texas railroads. In 1895 he left the steam roads and became general manager of the Rapid Railway, the first interurban railway as distinguished from the suburban. It was on the Rapid Railway that the idea of carrying freight and mail by trolley was developed.

When the Rapid Railway was taken over by the D. U. R. Mr. Brooks became assistant general manager, gradually taking over more and more of the detail work from Jere C. Hutchins. In 1915 Mr. Brooks succeed Mr. Hutchins as president. For several years Mr. Brooks has been afflicted with nose and throat trouble. His successor has not been named.

M. B. A. CONVENTION SPEAKERS

The principal speakers for the 1921 Michigan Bankers' Association convention, June 6 and 7, will be the following:

John S. Drum, president of the American Bankers Association, who will speak Monday afternoon.

Willis H. Booth, vice-president of the Guaranty Trust Company, New York, who will speak Tuesday morning.

Prof. David Friday, of the University of Michigan, who will speak Tuesday afternoon.

The subjects selected by these speakers have not been announced.

THE OLDEST HOUSE IN MICHIGAN

STERLING BONDS

We have a selected list of Sterling bonds which are exceptionally attractive. They will pay the purchaser an annual income of from 6% to 9% and show a profit at maturity as high as 100% on the money invested. The safety of these issues is unquestionable. We shall be glad to send particulars on request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

Bonds Backed by 40 Years' Record of Earnings

2 Rails—2 Utilities—2 Industrials

Cost $5,400
Average yield 7%

Send for List F-21

Bonbright & Company
UNION TRUST BUILDING, DETROIT
Telephone Cherry 4320
New York Philadelphia Boston Chicago

W. J. PEOPLES & CO.
STOCKS
BONDS
FOREIGN
EXCHANGE
First Floor Penobscot Bldg. Phones Cherry 8640
We solicit your inquiries

COURTESY
SERVICE
SAFETY
You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.
The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange — Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

7% FARM DRAINAGE BONDS 7%

There is no better Security on earth than Tax Liens on Cultivated Farms.

Ordinarily FARM DRAINAGE DISTRICT BONDS pay the Investor Six Per-cent, but for quick sale, we offer ten choice issues to pay from 7% to 7½% Interest payable annually or semi-annually by coupon collectible at your bank.

They come in $1,000, $500 and $100 denominations, and run from Three to Twenty years and are FREE OF ALL FEDERAL INCOME TAXES.

Upon Postal Card request, we will send Circular No. 1963—"A Few Reasons Why Farm Drainage Bonds Are So Highly Regarded."

Interest is falling. Buy High Income now for future years!

THE HANCHETT BOND CO.
(Incorporated 1870)
Municipal Bond House
CHICAGO
Dime Bank Bldg., Detroit.
W. H. Dunham, Representative.

The Bellefontaine Bridge and Steel Co.
Fabricators of
STRUCTURAL STEEL
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 4858.

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.
3 short blocks from Union Station
HOTEL BROWNING, GRAND RAPIDS, Mich.

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

DOING BUSINESS IN MICHIGAN

THE UNITED STATES Circuit Court of Appeals for the Sixth Circuit has affirmed the decision of the District Court for the Eastern District of Michigan, reported in the Corporation Journal for September, 1919, page 47.

The Phillips Company, a Wisconsin corporation, with its principal place of business in Chicago, entered into a contract with the Springfield Realty Company, a Michigan corporation, to equip a manufacturing plant in Detroit with a system of automatic fire sprinklers, for which it was to receive $31,776. Later, additional equipment was ordered making a total of $32,224. The Phillips Company filed a mechanic's lien on the property for this amount. The Springfield Realty Company went into bankruptcy, and in a proceeding to enforce this lien it was contended by the trustee in bankruptcy that the contract for this installation of the equipment was void, because the corporation had not taken out a license to do business in Michigan. The contention of the trustee was upheld by the District Court, and this is now affirmed by the Circuit Court of Appeals. The court in part says:

"In view of the evidence offered on behalf of the appellant, it is clear that the installation of this automatic sprinkler system was not merely an incident to its sale and purchase, for the appellant was not manufacturing sprinkler systems and had none of its own either to sell or install. Its contract with the Springfield Realty Company comprised the whole scope of the business for which it was organized. It could have done no more in the state of Wisconsin, the fact that it employed a Michigan corporation to perform a part of this contract for it, and that this Michigan corporation brought some raw materials from other states to the state of Michigan in the manufacture of its finished product, can, in no wise, affect the appellant's relation to the transaction further than to show that it was not selling to the Springfield Realty Company an automatic sprinkler system manufactured by itself in its home state or in any other state.

"As we have already seen, the status of the sub-contractors cannot fix, change or alter the status of the parties to the original contract. If that were true, the Phillips Company might transfer its entire business activities to the state of Michigan and by sub-contracting with persons or corporations outside that state defy its laws, providing terms and conditions upon which non-resident corporations may do business within the state, and at the same time avail itself of the benefits of the statutes of that state and use its courts for its own protection and to enforce its rights.

"It is true that the Phillips Company may, and probably did, sign this paper writing at its Chicago office; but it was not a contract until signed by the other contracting party, which, from the jurat of the notary public, appears to have been done in the state of Michigan on the 9th of the same month. This contract, however, contemplated by its terms performance by the Phillips Company within the state of Michigan, and the evidence relating to that company's method of performance clearly shows that no part thereof was merely incident to the main transaction, but rather that the contract, in its entirety, was a business transaction, local in its nature and indivisible in character.

"In disposing of this question this court has neither the right nor the authority to ignore the laws of Michigan pertaining to this transaction. It is, of course, unfortunate that the appellant must lose the cost of the material and labor that it added to the fund for distribution among the general creditors of the bankrupt; but that is not the fault of the referee in bankruptcy, or of the court. The appellant could easily have protected itself from loss by complying with the laws of Michigan relating to non-resident corporations doing business within the state. It failed, neglected or refused to do this and the courts cannot relieve it from the consequences of its own neglect."

Phillips Co., vs. Everett, 262 Fed. 341. Corp. Journal No. 98.

FRANCHISE EXTENSION UP

A special election will be held in Rochester, at a date to be announced later, to decide the question of extending the franchise of the Detroit United Railway in the village. At a meeting held a few days ago between the local authorities and Frank W. Brooks, general manager of the D. U. R., the latter is reported to have informed the town that if the company is to make any improvements in the village it must be assured that the present franchise will be extended. The franchise has still seven years to run.

ANN ARBOR BANKERS ENTERTAIN

The spring meeting of Group 9 of the Michigan Bankers' Association met Friday, May 27, at Ann Arbor, where the Ann Arbor bankers are hosts to the delegates from banks in this group, which comprises Jackson, Washtenaw, Lenawee and Monroe counties. Headquarters for the meeting was the Michigan Union, where luncheon was served at 12:30, after which the delegates heard Prof. David Friday. The program was completed by 3:30 to enable delegates to attend the Michigan-Ohio baseball game at Ferry Field.

OFFERS TO SELL TO BAY CITY

Simultaneous with an order from the Michigan Public Utilities Commission requiring the Bay City & Saginaw Railway Company to spend $100,000 for paving on Winona avenue, Bay City, the company notified the city council that unless the competing jitney lines were removed from the streets and certain burdensome conditions in the franchise eliminated, the city could purchase and operate the railway system.

PURCHASE VOTE DEFERRED

The common council of Reed City will not submit to the people a proposition to buy the Osceola Light & Power Company properties for $40,000. A special committee has approved of the appointment of an engineer to look over the property and present a report as to its actual value and what it will be necessary to expend to put the plant in 100 per cent condition.

PUTS IN "AUTOMATIC TELLER"

The Grand Rapids Savings Bank, Grand Rapids, has installed an "Automatic Receiving Teller" at the John D. Rash Company's plant. The teller dispenses 1, 5, 10 and 25-cent stamps which are pasted on folders until $1 or more is accumulated. Then the folder is brought to the bank and a savings account opened. The "teller" is made by the American Banking Machine Corporation, Saginaw.

$50,000 ADDED TO CAPITAL

The Lanz Furniture Company, Allegan, has increased its capitalization from $150,000 to $200,000 and added Weldon Smith, Allegan, and John Travis, Coopersville, to the board of directors, making the total seven.

Digitized by Google

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.	..	..
American Box Board, pfd.	..	..
Bardeen	17	19½
Bryant	14	16½
Eddy, com.	8	9¾
Eddy, pfd.	..	10
Hawthorne	10	10¾
Kalamazoo	14	14½
Kazoo Veg. Parch.	11½	13¾
King	17¾	18¼
Lee, units	100	160
Mac Sim Bar	10	11¾
Michigan	13¾	16¾
Monarch	11	12¾
Rex	19	16
Northern Michigan Pulp	100	126
Standard	98	90
Sutherland	16	..
Watervliet	..	20¾
Western Board	..	20¾
Banks		
First National	326	..
Home Savings	170	180
Kalamazoo City Savings	160	200
Kalamazoo National	150	156
Miscellaneous		
Barley Motor, com.	29	99
Barley Motor, pfd.	66	66
Hayes Wheel	..	..
Kazoo Loose Leaf	13½	14½
Kazoo Corset	..	10¾
Utah-Idaho Sugar	..	..
Kalamazoo Sanitary Mfg.	..	10¾
Limousine Body	..	16¾

Quotes by Olmsted & Mulhall, May 23.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 6	$107,642,994	$131,448,904
January 13	90,376,447	190,667,069
January 16	101,889,849	161,941,037
January 23	79,015,607	67,641,659
February 9	67,696,925	61,779,993
February 6	76,469,466	161,046,606
February 16	79,031,939	101,396,770
February 24	87,711,081	103,523,787
March 3	83,929,596	127,063,884
March 6	78,762,659	169,911,643
March 15	86,836,462	133,176,052
March 22	86,186,466	149,567,046
March 69	99,091,971	116,491,999
April 9	79,186,971	104,906,961
April 19	61,661,947	139,891,667
April 20	99,777,536	161,866,146
April 29	86,826,660	112,366,976
May 9	61,044,096	114,769,767
May 11	79,912,966	107,469,669
May 16	168,141,704	118,764,716
May 66	84,006,691	116,199,741
Month of		
January	399,480,296	467,931,670
February	303,841,683	495,286,896
March	377,875,940	670,499,929
April	364,294,979	640,376,969
May	..	464,264,356
June	..	636,706,267
July	..	536,264,146
August	..	592,989,086
September	..	561,992,940
October	..	515,425,766
November	..	466,036,446
December	..	452,961,645
Yearly totals, 1920	..	$6,106,323,903
Yearly totals, 1919	..	$4,804,989,166

Detroit Listed Bonds

Name May 17, 1921	Bid	Ask
Cons. Pow. Co.—5s, 1938	80	91
Detroit & Flint—5s, 1921	96½	98½
Detroit, Ft. W. & B. I.—6s, 1627	80	87
D., M. & T. Short Line—5s, 1926	..	81
Detroit & Pontiac Ry.—5s, 1929	99	99
Detroit & Pontiac—4½s	..	84
Detroit & Fort Huron S. L.—6s, 1660	68	75
Detroit Railway—5s, 1924	..	86
Detroit, Ypsi. & A. A.—6s, 1924	..	100
D., Y. & A. A., Jackson—5s, 1926	75	85
Det. United Ry.—4½s, 1962	..	61
Detroit Edison Co.—5s, 1933	87	89
Det. Ed. Co.—1st & ref. 5s, 1940	79	81
East Mich. Edison—5s, 1931	81	86
Detroit Edison Deb. 7s, 1928	96¾	..
Detroit Edison deb. 7s, 1925	95¾	66½
Detroit Edison deb. 7s, 1930	65½	96
Detroit Edison deb. 8s, 1931	101	101¼
D. C. Gas Co., O. M.—5s, 1916-26	..	91
D. C. Gas Co., P. L.—5s, 1928	..	96
Detroit & Sub. Gas Co.—5s, 1928	81	86
Mich. State Tel. Co.—5s, 1924	87	..
By-Prod. Coke Corp—8s, 1930	..	..

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Attilery
Military & Michigan

Local and Correspondent

depositors of the DIME SAVINGS BANK include corporations who carry with us checking and reserve accounts and have us attend to collection items and other requirements in the Michigan field.

You will find our service—based upon 36 years' experience of a practical and helpful character.

Capital and Surplus $3,750,000

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

C. C. COREY
COAL
COKE
1308-4 MAJESTIC BLDG. DETROIT, MICH.

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Price Range Detroit Bank Stocks

Name	Detroit Stock Exchange Range 1921 High	Low	Range 1920 High	Low	May 17, '21 Bid	Ask
American State	221	215	226	200	*210	--
Detroit Savings	260	255			*260	--
Dime Savings	288	280	289	258	*288	--
First and Old Detroit Nat'l	272	271	273	269	*272	--
First State					*181	185
Highland Park State	260	255	298	260	*290	--
Merchants National	140	140	153	130	130	--
Nat'l Bank of Commerce	210	210	250	190	--	220
Peninsular State			220	220	*220	--
People State	360	355	355	300	*355	--
United Savings	208	208	212	200	*220	235
Wayne County Home			347	347	345	--
American Loan and Trust					--	--
Bankers Trust					--	--
Guaranty Trust					--	--
Detroit Trust	395	385	380	375	*275	300
Security Trust					*300	--
Union Trust	180	180	197	197	180	190
Commonwealth Federal			130		105	107
Bank of Detroit					1192	200
Continental Bank					1125	--

*Last Sale. †Nominal Quotation.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co.	22	25
Auto Body, com.	2	6
Auto Body, pfd.	2	8
Bates & Edmonds Motor Co.	8	13
Duplex Truck	1	3
Federal Drop Forge Co.	7½	9
Firt Bond & Mortgage Co.		
Lansing Company	38	48
Michigan Mortgage Co.	8	9½
Michigan Screw Co.	18	22
Motor Wheel Corporation	9	9¾
Novo Engine Co.	24	26
Reo Motor Car Co.	17½	17¾

Quotes by G. M. Murchey & Co., May 8.

Pontiac Stocks

	Bid	Ask
Airlite Baking Co.	10	11
American Forge & Socket	1	3
Michigan Drop Forge	35	38
Pontiac Mortgage & Investment Co.	9	97
Van Auken Top		10
BONDS		
Detroit & Pontiac Ry. 5s, 1933	35	39
Detroit & Pontiac Ry. 4½s, 1928	30	34
BANK STOCKS		
Pontiac Commercial Savings	165	167
Oakland County Savings	152½	155½
American Savings Bank	145	150
National Bank of Pontiac	130	133

Quotes by Hughes, Burke & Co., May 26.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	4	6
Economy Baler Co., com.	8½	--
King Trailer Co., pfd.	--	--
Hoover Steel Ball, com.	14	19
Mich. Milling Co., com.	7½	--
Motor Products Co., com.	--	--
Prud. Foundries, com.	8½	--
C. A. Sauer Co.	5	--

Quotes by Langley, Hildner & Co., May 16.

WEBB, LEE & CO. EXPANSIONS

Webb, Lee & Company, members of the Detroit Stock Exchange, who recently opened offices in Saginaw, Flint and Grand Rapids, has made the following appointments to office managership: L. D. Chapple, formerly with the National Union Bank, Jackson, takes charge of the Jackson office. Harry H. Williams, formerly with Phipps, Benson & Williams, will have charge of the Saginaw office, and Claude Whitney, at one time manager of the F. W. Wagner office at Toledo, will direct activities in the Grand Rapids office. Otto Sherling, formerly with F. W. Wagner's Detroit office, and later connected with the Detroit office of Meeker & Company, will direct the wire service for the entire Webb, Lee & Company organization.

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, and also because no authoritative record is kept of sales, positive bids or offers, the quotations must be considered as nominal. We endeavor to obtain figures from responsible brokers and where a positive bid is not obtainable, the quotations are to be considered merely indicative of the approximate market.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	150	152
Columbia National Fire	18	18
Commerce Fire	28	28
Detroit Mortgage	8¾	--
Detroit Mortgage, pfd	5¾	5¾
Detroit Copper & Brass	17	20
Detroit National Fire	36	36
Detroit Life	64	68
Eureka Croesus	51	52
Federal Bakeries Co	27	30
Federal Discount Co	7¾	8¾
Gar Wood	84	84¾
General Necessities Corp	10½	12
Gladys-Bell Oil, com	--	27
Gladys-Bell Oil, pfd	40	--
Great Lakes Engineering, new	11	14
Hoover Steel Ball	13	15
Hayes Wheel Co	13½	14½
Interstate Fire	36	38
Investors Oil	110	130
Jackson Cushion Spring	7	8
Jewett, Bigelow & Brooks Units	9½	10¾
Jewett, Bigelow & Brooks, com	4¾	7
Kelsey Wheel	52¾	53¼
Little Wonder Stove	1¼	1¾
Mercer Binder Board	8	8
Detroit Motor Bus	8	8
McCord Manufacturing, com	7	7¼
McCord Manufacturing, pfd	40	87
Michigan Copper & Brass	14	15
Michigan Fire	20	22
Noble Oil, com	32	36
Peerless Portland Cement	13¾	15
Peninsular Fire Ins	31	31
River Raisin Paper	11¾	12½
Teppenne Mfg. Co	5	6¾
Union Mtge., 100% com	--	7¾
Union Mtge., 90% com	3	17
Motor Stocks	**Bid**	**Asked**
Belcroe Motors	15	17
Columbia Motors	3	4
Chalmers	¾	1¼
Chevrolet	150	400
Cleveland	36	40
Curtis Aeroplane	4	5
Durant Motors	22	28¼
Eight Motors	5	8
Haynes	152	175
Hupp	12¾	12¾
Liberty Motors	5	5¾
Liberty Motors	5	5¾
Lee Tyre	25¾	26¾
Pierce-Arrow Truck	82¾	23¾
Mercer	5	8
Mitchell Motor	2	3
Moturbus	5	9
Nash	250	252
Republic Truck	13¾	14¾
Skinn Motors	14¾	15
Scripps Booth	23	26
Stearns	5	7
Stromberg Carburetor	25¾	26¼
Studebaker	23¾	72¾
Stutz Motor Car	11	11¾
Wilson Truck	2¾	2¾
Grant Motor	1½	1¾
Jordan Motor	75	125
Peerless Motor	27	28
White Motor	35¼	38¾

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd	80	100
Austin Machinery Corp., com	8½	8
Brunswick-Balke-Collender Co. com. A	86	--
Brunswick-Balke-Collender Co. com. B	--	86
Brunswick-Balke-Collender Co. pfd	87	87
Continental Motors Corp. com	8¾	7¼
Continental Motors Corp. pfd	88	85
Linderman Steel & Machine Co. com	11½	12½
Muskegon Finance Co., pfd., with 100% bonus of common	8	10
Occidental Hotel Co., pfd	86	90
Shaw-Walker Co., pfd	8½	10
United Home Telephone Co., com	4	6
United Home Telephone Co., pfd	5	8

Quotes by Allen G. Thurman & Co., May 8.

Michigan Bond Items

The Grand Rapids Gas Light Company, Grand Rapids, has been authorized by the Michigan Public Utilities Commission to issue and sell $100,000 of its 5 per cent first mortgage bonds, dated February 1, 1915, and maturing August 1, 1939. The bonds are to be sold at par.

The village of Ford, Wayne county, has turned down the offers of Keane, Hlubie & Company and Matthew Finn, Detroit, to purchase $27,919 of 5 per cent water extension bonds recently authorized. The former's offer was $24,650, and the latter's $24,384. The sale of the bonds will be readvertised.

Hornblower & Weeks and W. A. Harriman & Company have purchased a $2,500,000 issue of 8 per cent fifteen-year bonds of the American Bosch Magneto Company, offered at 98½. The company sold the bonds to obtain working capital and eliminate floating indebtedness.

Reports in Detroit on the $100,000,000 issue of French 30-year external loan 6½ per cent bonds underwritten by a syndicate formed by J. P. Morgan & Company indicate a ready sale of the securities. The bonds are offered at 85 and interest, yielding slightly over 8 per cent. The proceeds of this issue are to be used to retire $70,000,000 in maturing issues formerly sold in the United States and to establish a $20,000,000 credit for American commodities, particularly materials and foodstuffs.

The First National Company and Detroit Trust Company, Detroit, are members of the original Morgan purchasing group.

The city clerk of Sault Ste. Marie will receive sealed proposals for the sale of $100,000 of Sault Ste. Marie refunding water bonds until 2 p. m. June 6. The bonds to bear interest of not more than 6½ per cent.

Dearborn township will receive bids until 8:30 p. m., June 1, for the purchase of $30,000 of bonds for the construction of a concrete arch bridge. The bonds bear 5 per cent interest, are payable semi-annually, $15,000 July 1, 1922, and $15,000 July 1, 1923.

Thirty-five to forty bond houses already have signified their intention of bidding for Lansing bonds, although these will not be opened until July 11. The bonds are $200,000 for paving; $200,000 for bridge and $100,000 for sewer. They were voted at the spring election and the city treasurer is receiving applications.

The Lansing city council this week voted to submit to the people at a special election a proposal to issue $200,000 of bonds for the erection of a memorial building for soldiers of the Civil, Spanish-American and World wars. No date was set for the election.

HARRIS, SMALL & LAWSON'S PLAN

Harris, Small & Lawson, Detroit, are offering the benefits of a copyrighted partial payment plan to small investors who are not in position to pay for bonds in full. Investors who take advantage of this offer may purchase any bond offered by the firm subject to regular conditions from $100 up to $1,000 par value and pay 10 per cent initial payment, the balance to be paid within one year in regular installments. The interest accruing on the bond is credited to the account of the purchaser and the purchaser pays the prevailing rate of interest on unpaid balances. The plan is more fully described in an attractive booklet issued by the firm.

NOTE—Detroit Stock Table omited this week because changes are inconsequential.

Digitized by Google

$100,000,000

Government of the French Republic

Twenty-Year External Gold Loan 7½% Bonds

Dated June 1, 1921 **Due June 1, 1941**

Not subject to Redemption prior to maturity

Interest payable June 1 and December 1. Principal and interest payable in New York at the office of J. P. Morgan & Co., in United States gold coin of the present standard of weight and fineness, without deduction for any French taxes, present or future.

In the opinion of counsel, these Bonds are a legal investment for Savings Banks in Connecticut, Vermont and California

Coupon Bonds in denominatons of $1,000, $500, and $100, registerable as to priincipal only.

In the Loan Contract under which these Bonds are to be issued, the French Government covenants to pay to J. P. Morgan & Co., during the first five years, as a Sinking Fund, the sum of not less than $9,000,000 in cash per annum, in monthly instalments of not less than $750,000 each, beginning July 1, 1921, such sums to be applied to the purchase of Bonds, if obtainable, at not exceeding par and accrued interest; any unexpended portion of any such instalment remaining in the Sinking Fund at the end of any month to be returned to the French Government.

We are receiving subscriptios nsubject to allotment, for the above Bonds at

95% and Accrued Interest to Yield Over 8%

Subscription books will be opened at the offices of J. P. Morgan & Co., at 10 oo'clock A. M., Wednesday, May 25, 1921, and will be closed in their discretion.

All subscriptions will be received subject to the issue and delivery to us of the Bonds as planned, and to the approval by our counsel of their form and execution. The right is reserved to reject any and all applications, and also, in any event, to award a smaller amount than applied for. Amounts due on allotments will be payable at the office of J. P. Morgan & Co. in New York funds to their order, or on or about June 10, 1921.

Temporary Bonds or Trust Receipts will be delivered pending the preparation of the definite Bonds.

J. P. Morgan & Co.

Brown Brothers & Co.

First National Bank, New York — **National City Company**

Harris Trust & Savings Bank

Guaranty Company of New York — **Bankers Trust Company**

Halsey, Stuart & Co. Inc. — **Dillon, Read & Co.**

Lee, Higginson & Co.

First National Company, Detroit — **Detroit Trust Company**

May 24, 1921

Digitized by Google

FOR SALE—240 Volt D.C. Generators

Kw.		Speed
1	25	Westinghouse, MP, type M..... 975
1	25	Northern, MP..... 900
1	25	Ft. Wayne, 4-pole..... 975
1	25	Keystone, MP..... 1175
1	25	General Electric, comp. to Ideal horizontal steam engine..... 900
1	30	Western Elec., MP..... 1250
1	10	Fairbanks-Morse, MP..... 900
1	30	Northern, MP..... 850
1	35	Fairbanks-Morse, comp. interpole.... 1125
1	40	Northern, comp., to Fleming horizontal steam engine..... 820
1	45	Westinghouse, MP, type S..... 875
1	50	Ft. Wayne, 4-pole..... 600
1	60	Northern, MP..... 800
1	75	Northern, 6-pole..... 585
1	100	Midwauker, 6-pole..... 850
1	125	Allis-Chalmers, MP..... 850
1	150	General Electric, interpole, 2-bearing 650

Would YOU buy a SECOND-HAND ELECTRIC MOTOR at ANY price? If you KNEW it to be as good as new?
Write us your inquiries.
GREGORY ELECTRIC CO. Second-hand Electrical Motors Bought, Sold and Exchanged. In business since 1903. 16th and Lincoln Streets Chicago, Ill.

Motor Stocks

Wm. A. Neer & Co.
Members Detroit Stock Exchange

MUNICIPAL BONDS
Exempt from Federal Income Tax

MICHIGAN TAX FREE BONDS
Yielding 5½% to 6.75%
Send for our list.

Bolger, Mosser & Willaman
2020 Dime Bank Bldg., Detroit, Mich.
L. D. Phone, Cadillac 8.

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

New Corporations

FOR WEEK ENDED MAY 21, 1921

Consumers Oil & Gas Service Corp., Flint, to own, operate and lease gasoline filling stations, etc.; Bert M. Garner, Albert J. Widmayer, Charles Pierbaugh, Flint 10,000

Public Garage Co., Calumet; to conduct business of an automobile sales agency; Harry E. King, Laurium; William J. Edwards, Calumet; William T. King, Ahmeek 40,000

Rupreght Engineering Co., Grand Haven; to manufacture and market the Rupreght motor engines, etc.; Frederick Rupreght, Harry E. Misner, Joe Nojam, Grand Haven .....

Diamond Lake Bottling Co., Cassopolis; to manufacture, install and wholesale all kinds of carbonated and all soft drinks, ice cream, etc.; Clinton Morse, Floyd Robinson, Cassopolis; Charles S. Boyer, Three Rivers 30,000

Peter Cooper's Glue Factory (F.), New York; Wellington D. Beaney, Grand Rapids, Michigan agent 1,600,000

Hatton Brown & Co., Inc., Roanoke, Va.; A. S. Fiell, 301 Majestic Bldg., Detroit 25,000

C. G. Spring Bumper Co. (F.), Chicago, Ill.; Christian J. Kalamazoo 1,500

A. H. Walker Candy Corp., Muskegon; to manufacture, sell and deal in candies, chewing gum, confections, etc.; A. H. Harriet and Maxine Walker, Muskegon .....

Okemos Home Building Co., Okemos; buying, selling and dealing in real estate, building and selling homes; Myron H. Daniels, Lon Lee Worth, Glen Cline, Okemos .....

Wills Sainte Claire Co., Detroit; to buy and sell automobiles and do general garage business; John R. Black, Ernest R. Boudeau, William A. Reech, Port Huron .....

Woodland Piston Co., Munith; to manufacture and sale of pistons and piston rings and all other parts for automobiles; Bert L. Woodland, Herbert R. Huntley, Percy G. Wilson, Munith .....

Consolidated Steel Corp., Detroit; to buy, sell and deal in scrap iron, steel and metals of all kinds; Julia Masaroski, 3858 LeMay Ave.; Harriet I. Barbour, Charles Reichel, Detroit

Passenger Lorry Co. (F.), Delaware; George W. Moore, Campau Bldg., Detroit, Michigan agent; 1,000 shares no par value .....

Shee Marked, Lansing; to buy, sell and deal in shoes, rubbers and hosiery; Max A. Harryman, Hugh P. Harryman, Lansing; Walter F. Harryman, Owosso .....

Motor & Fire Underwriters, Inc., Detroit; to act as agent for insurance companies and represent guaranty and surety bond companies, etc.; James L. Loftus, Dearborn; Richard T. Cassidy, 8581 14th Ave.; Marie Cuaighi, Detroit .....

Short-Mynaugh Contracting Co., Detroit; general teaming, contracting, machinery, moving, erecting and mill wright work; Raymond W. Short, Charles W. Myn, Melville Myn, 2485 Concord Ave., Detroit .....

Superior Brass Works, Detroit; manufacture and fabrication of metal castings and finished metal parts; Frank M. Klump, Bedford, O.; John M. Butke, 262 Chalmers Ave.; Carl W. Thurnes, Detroit .....

Mills & Healey, Grand Rapids; to buy, sell and deal in dry goods and other merchandise; Charles W. and Julia F. Mills, 1222 Terrace Ave.; Henry W. Healey, Grand Rapids .....

J. C. Piner Co., Grand Rapids; to conduct a store or stores for the buying and selling at retail, ladies' and misses' outer garments; Jacob H. Weil, Jacob H. Friedman, Jacob L. Lewis, New York .....

CONSOLIDATION

Oakland County Savings Bank, consolidated with Pontiac Commercial and Savings Bank, Pontiac $1,000,000

CHANGES OF NAME

H. W. Johns-Manville Co. (name changed to Johns-Manville, Inc., Detroit, New York $2,000,000

Pirelli-H. Corporation (name changed to Truscbex Corporation), Detroit... 10,000

INCREASES

Brown Land & Lumber Co. (F.) (Wis.), Rhinelander, Wis., Ironwood, from $1,000,000 to 1,500,000

Cheasaning Mfg. Co. (name changed to J. B. Brunn Furniture Co.), Cheasaning, from $50,000 to 125,000

Tide Water Oil Sales Corp. (F.) (Del.), Detroit, from $100,000 to..... 5,000,000

United Broach & Machine Co., Detroit, from $50,000 to 100,000

Northwestern Excelsior Mills, Detroit, from 150,000 to 150,000

Security Mortgage Corp. (F.) (Del.), Wilmington, Del., Detroit, from 150,000 shs. pref. p. v. $10, and 100,000 com. n. p. v. to 300,000 shs. pref. p. v. $10, and 200,000 shs. com. n. p. v.

American Malleables Co. (F.) (N. Y.), Lancaster, N. Y., Owosso, from $1,000,000 to 2,000,000

NOTICES OF WITHDRAWAL

Republic Distributing Corporation (F.), (N. Y.), New York City, Detroit, 1,250 shs. no par value.

Recent Dividends

Company	Rate	Stock of Record	Payable
American Locomotive	1¼% Q	June 30	June 31
American Locomotive, pfd.	1¾% Q	June 30	June 31
American Radiator	2.50 Q	July 15	June 30
Crucible Steel, pfd.	1¾% Q	June 30	June 15
Cities Service, pfd.	½% m cash	July 1	June 15
Cities Service, pfd B.	½% m cash	July 1	June 15
Cities Service, com.	½% m cash	July 1	June 15
Cities Service, com.	1½% m stock	July 1	June 15
Fisk Rubber, pfd.	1¾% Q	June 15	June 15
Fairbanks-Morse, pfd.	1½% Q	June 1	May 15
S. S. Kresge, com.	3% s. a.	July 2	June 16
S. S. Kresge, pfd.	1¾% Q	July 1	June 16
National Lead	1¼% Q	June 30	June 10
Southern Pacific	$1.50 Q	July 1	May 31
Truscon Steel, pfd.	1¾% Q	June 1	May 21
U. S. Industrial Alcohol	$2.00 Q	June 15	May 31
Union Bag & Paper	$2.00 Q	June 13	June 3
White Motor	1¼% Q	June 30	June 16
American Sugar Refining	1¾% Q	July 2	June 1
American Sugar Refining, pfd.	1¾% Q	July 2	June 1
Atlantic Refining	3% Q	June 18	May 21
American Power & Light, pfd.	1% Q	June 1	May 18
Bessemer & L. E.	1½% Q	June 1	May 14
Crane & Company	1½% Q	June 15	June 1
Crane & Company, pfd.	1¾% Q	June 30	June 15
Crucible Steel, com.	1½% Q	June 1	May 12
Michigan Sugar, com.	1½% Q	June 1	May 13
Michigan Sugar, pfd.	1¾% Q	May 1	May 13
Sinclair C. Oil, pfd.	1¾% Q	July 1	May 31
Southern Pacific	1½% Q	July 1	June 3
Union Pacific R. R.	2½% Q	July 1	June 3

The Durant Motors and Tubes Company has notified its stockholders that the cumulative preferred stock dividend due at this time will not be paid.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	9¾	10¼
Commonwealth Power	9¾	10¾
Lufkin Rule, pfd.	9¾	10¾
Michigan Sugar, com.	7¼	7¾
Michigan Sugar, pfd.	8	8¾
National Grocer, com.	8	8¾
National Grocer, pfd.	82	85
Saginaw Building Co.	7½	9¾
Symons Bros.	9¾	10
Valley Home Tel. Co., pfd.		45

BANK STOCKS

Second National	295	315
American State Bank	200	210
Bank of Saginaw	190	210
Commercial National	190	208
Peoples Savings	206	235

Quotes by Phipps, Williams & Beeson, May 23.

Grand Rapids Stocks

American Public Utilities, com.	6	10
American Public Utilities, pfd.	15	21
Commonwealth P. R. & L., com.	10	11½
Commonwealth P. R. & L., pfd.	29	31
Citizens Telephone Co.	4	4½
United Light & Railways, com.	25½	28½
United Light & Railways, pfd.	61	63
Cities Service, Bankers' Shares	27	27½
Cities Service, com.	220	225
Cities Service, pfd	65	65½
Cities Service, Debenture "B"	122	125
Cities Service, Debenture "C"	89	91
Cities Service, Debenture "D"	83	86

Quotes by Howe, Snow, Corrigan & Bertles, May 24.

Digitized by Google

True Cost of Expert Plumbing and Heating

Knowledge and experience are tools of the expert.

Like everything else, the cost of plumbing and heating work is, in the long run, vastly more economical and infinitely more satisfactory when entrusted to experts.

The broad, basic knowledge of plumbing and heating possessed by our organization, has been made more valuable to our clients by a tremendous, diversified practical experience.

Without obligation, we shall be pleased to consult with you at any time, regarding your heating or plumbing problems or plans.

R. L. Spitzley Heating Co.
Heating Contractors Plumbing
DETROIT • 346 Larned Street West • MICHIGAN

THE Michigan Mutual writes more compensation insurance in Michigan than any other two companies combined.

Yes, there is a reason.

Ask for it. A postal will do

Every policy is non-assessable

Every policy shares in savings

Michigan Mutual Liability Company

Real Estate Exchange Building
Detroit Michigan

DETROIT FIDELITY & SURETY.

The Detroit Fidelity & Surety Company is the name of a corporation which succeeds the Detroit Bond & Mortgage Guarantee Company. Capital and surplus is $2,000,000 and the required $200,000 in securities has been placed on deposit with the state treasurer qualifying the new company to engage in business. Present offices are in the Book building. At the reorganization meeting of stockholders held recently the following officers and directors were elected for terms as indicated:

For one year—C. E. Glttins, E. J. Corbett, R. A. Mercier, Maynard D. Follin, all of Detroit; W. H. Burnham, Adrian; Sidney C. McLouth, Marine City; R. Shields, Houghton; Paul Ulrich, Mount Clemens; C. O. Hetchler, Flint.

For two years—Albert E. Sleeper, Bad Axe; Richard G. Lambrecht, Ralph B. Wilkinson, George Reid, F. C. Martindale, F. E. Bushman, Charles J. Esterling, all of Detroit; N. S. Potter, Jackson; Roy Clark, Benton Harbor; Sherman T. Handy, Lansing.

For three years—A. F. Bunting, Walter J. Hayes, Louis W. Schimmel, John A. Russell, E. E. Englehart, all of Detroit; John Q. Rose, Muskegon; Burt D. Cady, Port Huron; Frank H. Ellsworth, Benton Harbor.

The company has purchased from the General Motors Corporation the building at Milwaukee avenue west and Cass avenue formerly occupied by the Hyatt Roller Bearing Company.

Officers of the company are; President, A. F. Bunting; vice-president and agency director, F. H. Ellsworth; secretary, E. E. Englehart; treasurer, W. J. Hayes; auditor, F. C. Michaud; secretary to the president, Frank N. Wakeman.

MICHIGAN CENTRAL ELECTION

Gross earnings of the Michigan Central Railroad Company for the first three months of 1921 were $16,494,476, compared with $20,904,589 for the first three months of 1920. Net operating income, after taxes, was $1,365,810, as against $2,636,681 a year ago.

Michigan Central stockholders, meeting recently in Detroit, elected the following directors: Henry B. Ledyard, E. D. Bronner and Henry M. Campbell, Detroit; Frederick W. Vanderbilt, William Rockefeller, Alfred H. Smith, Chauncey M. Depew, George F. Baker, William K. Vanderbilt, Harold S. Vanderbilt, Edward S. Harkness, Robert S. Lovett and Albert H. Harris, New York.

MICHIGAN DROP FORGE COMPANY

(Cents omitted)

	Dec. 31, 1920	Dec. 31, 1919
Land and buildings	$ 74,905	$ 66,077
Machinery and equipment	151,766	139,014
Office equipment	1,240	.....
	$233,933	$205,094
Cash	$ 39,925	$ 3,112
Accounts receivable	53,176	105,351
Notes receivable	25,261	.....
Inventory materials	244,854	73,855
Miscellaneous	1,691	65,882
Deferred charges	$364,176 698	$247,801 666
Total assets	$598,808	$453,532
Preferred stock	$250,000	$250,000
Balance applicable to common	102,596	102,596
	$352,596	$352,596
Accounts payable	22,382	17,581
Notes payable	$0,000	.....
Accrued insurance	626	636
	$ 72,949	$ 18,217
Reserve for depreciation	72,963	117
Reserve for taxes	64,136	66,800
Surplus	$ 67,065 66,136	$ 36,047 46,649
Total liabilities	$598,808	$453,532

MAXWELL-CHALMERS ON CHANGE

The Maxwell-Chalmers 8 per cent Class A preferred stock and the Class B common have been admitted to list on the New York stock exchange, when issued.

NEW CEDAR SPRINGS BANK

The Farmers' & Merchants' Bank at Cedar Springs has opened for business. It has a capital and surplus of $30,000 and has more than 80 shareholders. The officers are: President, D. Phelps; vice-president, Thomas J. Blanchard; cashier, Thaddeus B. Taylor. These officers, together with George Arnold, George Munro, James E. Hanna and John M. Holland, constitute the board of directors.

I. C. R. R. EARNS $12.41

Illinois Central Railroad reports net income of $13,571,132 in 1920 after deduction of charges and federal taxes, this being equal to $12.41 a share on the $109,284,467 of capital stock, compared with $11.13 a share in 1919.

D. T. & I. REPORT

The Detroit, Toledo & Ironton Railroad Company reports an operating deficit of $233,385 for the three months ended March 31, as against net operating income of $16,713 for the corresponding period of 1920. Gross earnings were $877,648, as against $1,148,106.

SOO LINE REPORT

Minneapolis, St. Paul & Sault Ste. Marie Railroad Company reports gross earnings of $9,586,872 for the first three months of 1921, as compared with $10,220,705 for the similar part of last year. Net operating deficit, after taxes, was $1,982,666, as against $126,238 in 1920.

STANDARD OIL MEETING JUNE 3

Stockholders of the Standard Oil Company of Indiana, at a meeting June 3, are to vote on a proposal to increase the authorized capital stock from $100,000,000 to $140,000,000. One purpose of the increase is said to be to acquire the remainder of the Midwest Refining Company's stock, about 33 per cent of which is now owned by Standard Oil of Indiana.

Digitized by Google

World Trade Hurdles to Clear

A Word More About the Handicaps With Which American Manufacturers Burden Themselves

By MARC BRAUN

THE government statistics on American exports during March, recently made public, show a decrease of $450,000,000 as compared with our exports during March, 1920, and a decrease of about $100,000,000 as compared with February, 1921.

It is not the purpose here to discuss the causes for the decline. There are a good many reasons—the exchange situation, for instance, as well as the fact that Europe is beginning to produce more of the things which it has been buying here. However, there is one fact with regard to our foreign trade and that is that too many American manufacturers do not take care of their overseas customers in the same way and with the same spirit as they do for their home trade. This isn't something new; it has been a matter of complaint on the part of foreign buyers of American goods for a great many years.

When the writer was in Belgium and in France during the winter of 1919 in the interests of this publication, he was able to see for himself that the allegations made against American exporters were correct in many instances. At the time one or several articles were written on the subject, but it is not out of place to come back to the subject, now especially, when our foreign business is dropping off.

There was a time when many American business houses made very extensive use of the mimeographed and multigraphed letters to get business in the home markets. The former type of letter is used now only occasionally, and while the multigraphed letter is still used extensively it has been much improved and actually looks more like an individually written letter.

In Europe, so I was told, this sort of letter writing was quite unknown until American business methods brought it out. Some European firms adopted the idea, but only a very small number. As a rule, individual letters were adhered to.

American firms, however, owing to the greatly reduced expense, continued the practice, with the result that much of their mail went into the waste basket. The writer knows of several cases of Belgian and French automobile distributors who had written to American manufacturers for the purpose of obtaining the distribution of their motor cars. Some of the manufacturers acknowledged the receipt of the letters by merely filling out a multigraphed letter form, in which the only thing actually typewritten was the date, the prices and the models. A Belgian dealer who had got one such letter received a "follow up" multigraphed form about thirty days after the first, and in the second letter reference was made to the first one and to the fact that "no answer had as yet been received." Which answer—unless cabled—could not possibly have been received by the American manufacturer; and this he could have found out had he figured the time required for his letter to get to Belgium and for an answer to get to him. Needless to say, the Belgian business man was not very enthusiastic. He did not have much faith in this manufacturer, notwithstanding that his letter head showed the picture of a wonderfully large plant and that he claimed to be one of the biggest producers of cars in the United States.

In Paris a firm of importers was organized to handle American products only. There were two Frenchmen and an American in the partnership. The American naturally corresponded with American exporters. Practically every car from the United States brought a dozen or more multigraphed or mimeographed letters, together with quite a large number of real typewritten letters. The latter were all taken care of with the utmost attention, while the former were given no attention—or at least very little.

Failing to Make an Impression

Undoubtedly many American business men believe that illustrations of their factory and statements as to their large production, or the large number of workers they employ, or the floor space of their factory, is an important factor in the securing of business. In 95 out of 100 cases it does not interest the European prospective buyer in the least, but has rather the effect of making him think that in such big plants and with such tremendous output, the product cannot be made so good, so carefully, so soldidly as in Europe. Nowhere in the old world has quantity production along typical American lines been tried out. Quantity output is not what the European manufacturers instill into the minds of their workers; it is rather quality production.

In a recent issue of Automotive Industries Clyde Jennings relates the experiences of an importer of American cars "over there," from the letters received from the European business man. One letter the writer said: "We started off at the beginning of the year 1920 with a tremendous amount of enthusiasm, but our prospects are marred by the fact that even our first demonstration car did not reach us until June, and finally the first batch of cars for delivery reached us August 13. The situation at this end can be seen by the fact that of the thirty provisional orders for sample cars that we had for dealers, we were only able to get six of them converted into money, the trade view being that the year was dead and gone."

The writer when in Paris was shown copies of cabled orders to American manufacturers, which orders were not filled for more than thirty days, and which arrived nearly sixty days after date. The manufacturer's excuse was that domestic business at the time was taking practically all of his output. True as this might have been, it is most assuredly a poor way to try to build up an export trade. Since that time there has been a great change in the automobile industry in America, and this manufacturer during the latter part of 1920 was very anxious and very willing to take care to the best of his ability of possible foreign business. However, the European dealer did not care then to do business with him. A copy of the letter he wrote several months ago, was handed to the writer: "At a time when I could have sold several of your cars you were in no hurry to take care of my orders, and so I lost some sales. Now when you find that sales in America are diminishing, you are anxious to sell your cars over here. But I do not need them now. I am able to get French and Belgian cars now, without having to wait six months for them, and thus shall not order cars from America. You might, however, take my advice for the future. If you wish to do business in Europe you must take more consideration of the desires of the European dealers."

There is another drawback in our trade expansion methods. We attempt quite often to write to the people of Europe in their language, but instead of writing good French or good Russian or good Greek we employ translators who are not competent. An American truck maker sent out a so-called French letter to Belgian and French automobile dealers during the winter of 1919-1920 which was so faulty and so evidently written by some one who was merely studying French that the letter was circulated among the dealers at one of their weekly meetings and made the topic of an hour's good laughing. The letter even found its way to the office of a high official of the staff of the Minister of Commerce and there also was made the target for jibes.

In summing up the export trade possibilities for America, it may be well to quote again the correspondent of Automotive Industries:

"The export trade is going to need a lot more specialization, much more careful handling and some entirely new treatment along the lines of credit. If your people want to have their full share of export business they have got to get away from this cash against document at the factory or at New York. It means that we importers have the whole of our credit locked up for months at New York waiting for shipment, and it is impossible for the business to expand in the way it should.

"Take my own case as an example. I have had a large credit established at New York now for eight weeks to take care of cars which were due for shipment; the cars have not materialized and, therefore, the credit is not yet used, but as long as the credit is established at New York it is no longer available here, and so other work that might have been done here with the same credit has been standing by. In other words, this means that that portion of my business has been dead for two months.

"If, on the other hand, cars were shipped (of course, only to approved persons with all the necessary safeguards) on the 60 days' sight draft or any other form of credit which might be agreed, I could be going on here here full speed with the other necessary developments and would have ample time, once I knew that the cars had been shipped, to take care of the payment for the shipment when they arrived."

The sooner American exporters begin to think about export trade in the same light as they do about their domestic business, the better it will be for them. We must satisfy the foreign buyer just the same way as we try to satisfy Tom Watkins in Kalamazoo or Charles McGinnis in Owosso. Monsieur Paul Rivaud in Paris or Mr. Emile Robyns in Brussels must be taken care of exactly with the same courtesy and attention as the above mentioned prospective American buyers. For if we don't take care of them they will turn to other foreign markets, where they are likely to be taken care of.

To get foreign business and to keep foreign customers requires special attention and special study. It should not be such a difficult matter for us to make good. We have made good in so many things and we can make good here if we want to. It is merely a case of being less indifferent and careless.

Digitized by Google



Factory Office Building, Prest-O-Lite Co., Indianapolis, Ind.

Your office building

The headquarters of your business deserves an appropriate home.

We would be pleased to assist you in locating and arranging one.

LOCKWOOD, GREENE & CO.
ENGINEERS
1227 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK
CLEVELAND CHARLOTTE PHILADELPHIA
LOCKWOOD, GREENE & CO. OF CANADA, LTD., 286 Beaver Hall Hill, Montreal, P. Q.
COMPAGNIE LOCKWOOD GREENE, 47, Avenue de l'Opéra, Paris, France

THE JOSEPH L. SKELTON ENGINEERING COMPANY

Power Plant Engineers and Contractors

Ames Single Valve, Four Valve and Unaflow Engines
Water Tube and Tubular Boilers
Pumping Machinery
Electrical Machinery

We design and build general power plants.

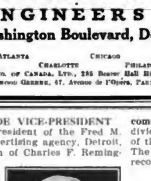
Detroit Office
1156 Penobscot Bldg.
Phone Cad. 6941

Cleveland Office
876 Kirby Bldg.
Phone Main 3764

General Offices and Shops
Toledo, Ohio.

REMINGTON MADE VICE-PRESIDENT

Fred M. Randall, president of the Fred M. Randall Company, advertising agency, Detroit, announces the election of Charles F. Remington as vice-president of the organization.



C. F. REMINGTON

Mr. Remington has been associated with this agency for the last three years as director of research and statistics. He has long been identified with the advertising and publication fields in Chicago and New York and for several years connected with Detroit daily papers. He is a writer of national prominence and has contributed many articles to the press.

COLUMBIA GAS & ELECTRIC

Gross earnings of the Columbia Gas & Electric Company for the year ended April 30, 1921, are reported as $14,894,213, an increase of $1,824,074 over the previous year's earnings. After taxes, rentals and fixed charges, the surplus for dividends was $4,828,677, an increase of $943,544.

SENECA COPPER CO. MEETING

Stockholders of the Seneca Copper Company have been requested to attend a meeting, the date for which has not been set, to vote on an increase in the capital stock from 250,000 to 350,000 shares.

D. U. R. STOCK DIVIDEND

The Michigan Public Utilities Commission has authorized the Detroit United Railway to issue a stock dividend of $375,000, representing money earned, but turned back into the company for betterments and extensions. This dividend represents 2½ per cent on $15,000,000 of the $25,000,000 capital stock actually issued. The dividend will be paid to stockholders of record May 16.

OWENS BOTTLE REPORT

Net earnings of the Owens Bottle Machine Company for the first three months of the current year were $503,189 after deduction of charges and taxes. After providing for a dividend on the preferred stock, a balance equal to 78 cents a share on the common, amounting to $11,037,575, par value $25 a share, was shown.

UTAH COPPER REPORT

The Utah Copper Company reports net loss of $89,828 before allowance for depreciation, but after charging off loss of $395,544 on the sale of government bonds, for the first three months of 1921. In the same period of 1920 the net profit was equal to $1.75 a share on capital stock to the amount of $16,244,900, par value $10.

CITIES SERVICE EARNINGS

Net earnings of the Cities Service Company for April were $1,382,446, a decrease of $735,254 from the report for April, 1920. After allowing for preferred dividends, the balance was $807,930, a decrease of $768,606. Net earnings for the twelve months were $21,578,167, an increase of $1,278,766, the balance after preferred dividends being $14,843,316, an increase of $888,177 over the previous year.

The River Raisin Paper Company, Monroe, has brought suit against the Escanaba Manufacturing Company, Escanaba, for $50,000 for goods claimed to have been delivered the defendant at its own request, but never paid for.

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	19	19¾	18
Dow Chemical	200	260	200
Firestone Tire & Rubber	81	90	57
Do, pfd.	87	88	75
Fisher Cdie Body	21¼	30	18
Do, pfd.	73	75¼	61
Goodyear Tire & Rubber	10	29	3¼
Do, pfd.	29¼	53½	26
Miller Rubber	72	90	47
Murray Ohio	6	6	6
National Acme	21½	23¾	20¼
Paragon Refining	19	25½	16½
Portage Rubber	17	37	15
Do, pfd.	36	46	30
Standard Parts	¾	1¼	¾
Do, pfd.	2¼	33½	2
Victor Rubber	30	30¼	15
Youngstown Sheet & Tube	59½	75	57
Do, pfd.	104½	104½	102¾

Quotes by Otis & Co., May 14.

Detroit Listed Bonds

Sales Week Ended May 18

Detroit Edison 7s, 1930, 100 @ 96.
Detroit Edison 8s, 1931, 2,000 @ 101¼.
Detroit Edison 7s, 1929, 1,000 @ 96.
Detroit Edison 8s, 1940, 800 @ 78¾.

Sales Bank Stock

10 Bank of Detroit @ 185.

Listed stocks, 26,031 shares.
Unlisted stocks, 74,663 shares.

GARDNER LIGHT REORGANIZING

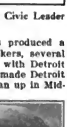
The Gardner Light and Power Company, which supplies service to Muir and Pewamo, is being reorganized under the name of Nickle Plate Power Company. The purchase of securities in the new company will be limited to present and prospective customers. A power plant will be constructed on Prairie creek, with a capacity of 200 horsepower. Flowage rights and option have been acquired. Enlarged equipment will be installed at Muir and Pewamo. Extension of service is also contemplated to Palo and Fowler.

Digitized by Google

Who's Who In Michigan Finance

Clarence H. Macomber, Banker and Civic Leader at Midland.

THE THUMB of Michigan has produced a goodly number of notable bankers, several of whom have become connected with Detroit institutions and others who have made Detroit their residence. But there is a man up in Midland who has an enviable record of achievement behind him, and a brilliant future. He accumulated wide experience in a short time because he applied efficiency methods to handling bank work from the beginning of his career in 1895, when he entered the Cass City Bank.



C. H. MACOMBER

Clarence H. Macomber is a combination of intense vigor, genial personality and sagacity. And the story of his rise from a beginner in the Cass City bank to president of the Chemical Savings Bank of Midland is a splendid example of what the right sort of young man can do for himself in the banking business.

It happened that C. W. McPhail, owner of the Cass City Bank, was looking for a bank clerk. He applied to the Detroit Business College and was given a number of names of prospective employes with a description of the work each had done and the records made in the schools. From among these he selected Mr. Macomber because of his excellent school record and the recommendations given him by the school officials, and he was hired, as Mr. McPhail says, "at the prodigious salary of $6.50 a week." It was not long thereafter that Mr. McPhail sold out the Cass City Bank to Seeley & Anten, and as a result Mr. Macomber was out of a job. Not for long, however, for he soon became cashier of the American Express Company at Bay City and shortly thereafter was appointed agent of the company at West Bay City. There are some interesting incidents told of how he indulged in economies and extra work in order to get capital together for the bank of his own which some day he hoped to organize.

Eventually the opportunity came. This was about 1898, when he cast his fortunes with Mr. McPhail again. Together they started the Arenac Exchange Bank, of Omer, with Macomber holding down all jobs from janitor to cashier. The chief industry was merchandising forest products and there was but one other bank in Arenac county at the time, at Standish. But both Mr. McPhail and Mr. Macomber had faith in the future of the county and eventually the bank became successful, but, as Mr. McPhail says, "there was quite a period when the little bank didn't earn much more than enough to pay Macomber's board bill."

By 1905 there seemed to be business for a bank at Whittemore, and the Iosco County Bank was established by these two pioneers. Mr. Macomber being the active manager of both institutions. In 1909 they organized a bank at Auburn, which two years later became the Peoples State Savings Bank of Auburn.

Meanwhile McPhail and Macomber bought the controlling interest in the State Bank of Coleman, which made four banks in the string, and Mr. Macomber moved to Midland, from which point he supervised the banks by spending certain days of each week with the different institutions. He had not lived in Midland long before his public mindedness and careful business methods brought to him the mayoralty of the city, which he held for two terms. In 1917, when Midland began to grow rapidly by reason of the success of the Dow Chemical Company, he organized the Chemical State Savings Bank, of which he became president. This bank had a most remarkable growth and within a year after its opening had footings of about three-quarters of a million dollars, passing the million mark within two years.

Midland knew Macomber not only as a good banker and a good mayor but as a successful chairman of the Liberty Loan drives. He was also chairman of the Midland County War Board and director and treasurer of the local American Red Cross. He was born in Calhoun county, Michigan, September 23, 1873, and his hobby, if he has one more prominent than hard earn is swimming, goodly and that April shipment totals were expected to show an increase over those of April, 1920. The plant is operwork, is driving an automobile, of which he is an ardent enthusiast.

A RULING ON TARIFF PROTEST

It happens frequently that importers delay filing promptly protest against government assessment of duty on goods coming from a foreign country. Many importers disregard the fact that such claims or protest must be made within 30 days after the ascertainment and liquidation of the duties, as provided in the tariff law covering customs litigations.

An important decision on the subject upholding the Government has been handed down by the Board of United States General Appraisers in New York affecting the protest which had been filed by a St. Louis, Mo., importer. The board, says the New York Commercial, admits that the contention of the importers for a lower rate of duty than that imposed by the collector was justified, but the protest was overruled on the sole fact that it was not filed within the prescribed time. Duty was assessed on the fabrics in question at the rate of 35 per cent ad valorem, under paragraph 284 of the tariff law. The importers contended for classification under paragraph 283, with duty at the rate of only 30 per cent ad valorem. The importers must pay the higher rate under the board's ruling.

In the course of his ruling Judge Weller wrote: "If the importers were in any way misled through this apparently immaterial error, we can only concinde it was entirely due to their own fault or negligence, for we think they have received all the reasonable notice of the time of liquidation to which they were entitled, and we can find no justification in law for granting the importers in effect an extension of time beyond the statutory limit of thirty days within which to file a protest under paragraph N of Section 3 of said act of 1913."

WESTERN UNION EARNINGS

The Western Union Telegraph Company reports that during the three months ended March 31 its total operating revenue was $25,885,677, as compared with $28,878,725 for the corresponding period in 1920. The net revenue after taxes was $2,761,772, or $1,668,887 less than in 1920.

CALUMET & ARIZONA ELECTION

The Calumet & Arizona Mining Company and the New Cornelia Copper Company, a subsidiary, have elected Gordon R. Campbell president. He was secretary-treasurer and director of the Calumet & Arizona Company.

NEVADA CONSOLIDATED COPPER

For the quarter ended March 31 the Nevada Consolidated Copper Company reports a net loss of $6,634 before depreciation, as compared with a profit of $215,583 for a corresponding period in 1920.

News of the A. I. B.

The annual election was held last Saturday evening at the Hotel Statler and was attended by more than 250 members of the Detroit chapter and their wives. The successful candidates are as follows: President, Frank C. Thomas, First & Old Detroit National Bank; vice-president, Fred D. Lorimer, Dime Savings Bank; secretary, Christopher Montross, Peoples State Bank; treasurer, Arthur Gramm, First State Bank; directors to serve one year, George L. Bott, Merchants National Bank; Kenneth Paton, Detroit Savings Bank; A. A. Chipman, Detroit Trust Company; George Y. Reed, Highland Park State Bank; Julius Rohlfer, First State Bank; directors to serve two years, Grant D. Esterling, First & Old Detroit National Bank; Leo D. Heaphy, Peoples State Bank; Clifford H. Hyett, Dime Savings Bank; George T. Jarvis, Federal Reserve Bank; A. C. Voss, National Bank of Commerce.

CHANGES IN BANK LAW

It is reported by the banking commissioner's office that the only changes in the state banking law resulting from the acts of the legislature which adjourned May 19 are as follows: (1) Terms of commissioner changed from four to two years; (2) the total investment in banking house may now equal one-half of capital and surplus, instead of one-half of capital alone, as heretofore ; (3) directors, officers or employes may vote proxies at annual meetings. This was prohibited by the previous statute.

"COMMON LAW TRUST" PROSECUTIONS

Following the recent decision of the Michigan supreme court that stocks of so-called "common law trusts" come within the range of securities which must be subjected to approval by the Michigan Securities Commission, prosecutions have been instituted against persons selling this unapproved stock in several cities, according to H. N. Duff, executive officer of the commission.

STATE TAX $903,194 LESS

The total direct state tax for the next two years to be levied to meet appropriations made at the regular session of the legislature will be $33,906,028.64, as compared with $34,809,-224.08 for the present two years which end June 30. This means a reduction of $903,-194.44, according to figures just completed by the state administrative board. The total expenditures will be $48,861,431.31, with estimated receipts from all sources at $51,906,-029.64. The total taxes this year total $7,578,654.98, as compared with $6,995,690.96 for 1920. The total valuation of listed companies is fixed at $287,072,650.

MICHIGAN AUTOMOBILE INSURANCE

Stockholders of the Michigan Automobile Insurance Company, Grand Rapids, have elected the following officers: George E. Nichols, president and general counsel; Henry J. Kennedy, vice-president and general manager; Brinton F. Hall and Harlan J. Dudley, vice-presidents, and William M. Ames, secretary-treasurer.

EARTH CONCRETE ELECTION

R. S. Greenwood has been elected president of the Earth Concrete Company, Grand Rapids, in place of Alvah Brown, resigned. Harrison Rich has been named secretary and Abner D. Dilley a director.

CHINO COPPER CO. REPORT

An operating loss of $122,949 for the quarter ended March 31 is reported by the Chino Copper Company During the same period in 1920 the company had a net income of $737,605.

Digitized by Google

Willmarth & Morman
GRINDERS

Brand New at Special Prices

No. 78 Full Automatic, Wet Power Feed Surface Grinder---$800.
No. 3 Full Automatic, Wet Power Feed Surface Grinder---$800.

These Grinders are Brand New, Late Style, Complete with all Standard Equipment and on our floor for immediate delivery, f. o. b. Detroit, Michigan.

The Above Machines Carry the Factory Guarantee

Riverside Machinery Depot
251 ST. AUBIN AVE. DETROIT, MICHIGAN

PAINT SALES PICKING UP

There has been a gratifying increase in business in the paint industry, according to statements by various representatives of big concerns. Charles S. Kennedy, director of merchants' sales of the Glidden Varnish Company, Cleveland, is quoted as follows: "Reopening of the automobile factories in Detroit already has been felt by the company in a gratifying increase of business along industrial lines. The same may be said about other industries. All indications are that there will be a continued increase.

"Sales to paint dealers during the first quarter this year are in excess of sales made last year, in the matter of dollars and cents, and this notwithstanding that there have been reductions of about twenty-five per cent in price of house paint. Dealers are buying more carefully and placing smaller orders, but the orders are more frequent."

TO MAKE CANE SUGAR

The Marine City plant of the Independent Sugar Company is being overhauled and made ready for a large run. It is expected that within another 30 days a full force or 250 men will be working. The plant will make cane sugar.

MAY MOVE TO HOMER

It is stated by officials of the Homer Chamber of Commerce that if a suitable building is provided the Laughlin Farm Gate & Hinge Company, now in Jackson, will move to Homer. Arrangements have been made whereby the cedar mill of Preston Miller will be offered the Jackson firm.

REHABILITATING BREWERY PLANT

The plant of the Ionia Brewing Company, Ionia, has been leased by Albert Sorg, Grand Rapids; Charles Koeber, Detroit, and John H. Puddnull, Chicago, who are forming a company to manufacture a patent stepladdor invented by Mr. Sorg. Machinery and equipment has been purchased and the company will begin operations with orders for several carloads of ladders on hand.

DALL'S NEW PRODUCT

Another new Lansing product is the all-steel Wolverine express wagon for children, originated and manufactured by the Dall Steel Products Company. Orders already exceed output and will mean an increase in the production of the local plant. The dies and tools are now being built and in 30 or 60 days the wagons will be made in quantity

NEW MANISTIQUE MILL READY

The new sawmill of the Brown Lumber Company, Manistique, construction of which was started in December, 1920, is now completed. The main building is 44 by 140 feet and is known as a line shaft mill. The boiler room is 32 by 50 and the engine room 20 by 40 feet. A number of smaller buildings for diverse purposes will be constructed later. Finished lumber from the mill will be carried from the mill on trucks, pulled by a tractor.

EMPLOYMENT AGENCY REPORTS

According to the state labor department, reports from the twelve free employment bureaus show a steady improvement. During April 2,616 employers offered positions, as against 2,171 in March, with 436 more men and 260 more women offered work.

CONTRACTING PLASTERERS ELECT

At the recent annual meeting of the Contracting Plasterers' Association of Detroit, the following officers were elected for the ensuing year: Walter Fritsch, president; John Shea, vice-president, and Albert Beever, secretary-treasurer.

BITUMINOUS OUTPUT ON INCREASE

Increased bituminous coal output is evidenced in the report of the Department of the Interior for the week ended May 7. The production totald 7,296,000 tons, as compared with 6,970,000 for the previous week and 9,167,000 tons for the corresponding week in 1920. Total output of bituminous for the coal year to date was 136,352,000 tons, compared with 180,171,000 in 1920. In the anthracite mines there was a sharp decline in production, the week of May 7 showing that only 1,633,000 tons were produced, as compared with 1,945,000 for the previous week and 1,891,000 for the similar week in 1920. Yet output for the calendar year to date is ahead of the 1920 production, 31,978,000 tons having been produced, as compared with 30,105,000 for the same period a year ago.

ANGLE STOOL WILL EXPAND

In connection with the announcement that the Angle Steel Stool Company, Otsego, has declared a dividend of five per cent, the Otsego Union reports that the business of the concern is recovering rapidly. The plant is operating six days a week and the expectation is that within the next two or three months operations will tax its capacity, on account of which arrangements are being made to expand the production facilities. The postoffices of Washington and Chicago recently were supplied with steel stools made by the Angle company.

GLOBE KNITTING'S PURCHASE

The Globe Knitting Company, Grand Rapids, has bought an interest in the Robinson & Peckham Company, New York, which for the last fifteen years has been its eastern selling agent. R. W. Jones, president of the New York firm, has been elected a director of the Globe company, while E. A. Clements and Grover C. Good have become members of the board of the Robinson & Peckham company.

Digitized by Google

Making the Railroads a Closed Shop

(*Continued from Page 4*)

The net operating income was smaller by $454,025,669 in 1920 than in 1919, while the gross operating revenues were $1,041,338,541 larger in 1920 than in 1919. When the roads were returned to private ownership, with them went numerous contracts for materials and supplies at prices fixed by the Government. Out of the charges from which operating revenue was to come, these charges being fixed by the Government, had to be added 97.5 per cent on every dollar for labor, 30 per cent for materials and supplies and 3.5 per cent for expenses other than labor and materials. Of the thirty cents for materials fifteen cents was for materials and supplies contracted for by the Government at prices fixed by it, and the other fifteen cents was contracted for by the roads at prices fixed by market conditions. Therefore for 1920, 97.5 cents of every dollar went for labor, materials and expenses, the costs of which were fixed by the Government during federal control.

Under those conditions all the railroads could do was to seek economies in the consumption of materials and supplies and increased production from labor. The total increase in all expenses of the railroads for 1920 was $1,499,-566,184; the net increase, $1,041,338,210. Fuel cost 27 per cent more; lumber 60 per cent more, and bar, sheet iron and steel, 15 per cent more. Lower costs of all these items is certain this year, which new costs will be possible because of cuts in payrolls as well as in other items of expense, and increased production from the same, or decreased number of employes on the payrolls of manufacturers.

What Louch Did Not Figure

W. Jett Lauck, representing the railroad brotherhoods, filed with the Railroad Labor Board exhibits presuming to show where the roads could save a billion dollars a year by certain economies, particularly those made by the use of more modern equipment. Daniel Willard, president of the Baltimore & Ohio, replied with a statement to the effect that a saving of $10,000,000 a year could be made by modernizing locomotives at a cost of $165,-000,000. Mr. Willard estimated that the Baltimore & Ohio represented about 1/25 of the entire railroad system of the United States. Assuming that the conditions on that system were typical of those on every other, Mr. Willard estimated that an expenditure of twenty-five times that necessary on his system would equip all the railroads to effect a savings of $250,000,000 a year, but the investment necessary to gain this economy would exceed $4,-000,000,000, and he desired to know from what source this sum, or even one-fourth of it, was to be obtained. To provide more modern machinery in the railroad shops, thereby saving $1,250,000 a year, would cost approximately $6,000,000, Mr. Willard said. At one time, he added, the question of whether $2,000,000 should be spent in improving the shops or for providing steel coaches to replace wooden ones came up and it was decided that the comfort and safety of the public called for the purchase of steel coaches more important than the improvement of the shops.

That the railroads have endeavored to effect economies is shown by the following list of methods:

By intensive effort to reduce coal consumption.

By buying coal at prevailing high prices on only a hand-to-mouth basis.

By a sustained nation-wide campaign to reduce loss and damages claims.

By increasing the average movement per car per day.

By increasing the average tonnage per loaded car.

By increasing the average number of cars per train.

By consolidation of operating divisions.

By discontinuation of unprofitable stations.

By discontinuation of unnecessary trains.

By reclamation of scrap materials.

By abstaining from the purchase at present high prices of all but absolutely essential materials and supplies.

By a reduction in the amount of many of these supplies, due to increased efficiency per car and per locomotive.

Inasmuch as wages constitute more than 60 per cent of the cost of operation, not enough saving can be effected in the above fields. Therefore, the roads have been forced, on account of the business depression, to effect reductions in the number of employes. They are seeking by conference with their men a reduction of basic wage rates of necessary employes, to come closer into harmony with wages paid for similar labor in other fields, and to correspond with the reduction of the cost of living since last July.

Why High Rates Fail

Mr. Kruttschnitt's explanation of why the higher rates in 1920 failed to produce sufficient revenue, made before the Senate committee, follows:

"in 1920 the gross revenue of Class I roads was $6,225,000,000, an increase of $1,041,000,000 over 1919, or 20 per cent. The increase was made up as follows:

"1. Increase of 10 per cent in volume of traffic (ton miles plus three times passenger miles).....$469,000,000

U. S. RUBBER'S POSITION

Directors of United States Rubber Company have not recently discussed new financing of any kind, nor do officials think it will become necessary to do so, says the Wall Street Journal. Bank loans which were approximately $50,000,000 at the close of last year have already been somewhat reduced and it is believed that by the end of 1921 they will have been cut in half at least.

Different conditions prevail in the three branches of U. S. Rubber's business. The footwear division is the slowest, although there is an active demand for canvas footwear, such as tennis shoes, keds, etc. Mechanical goods business is somewhat better than it has been and is approaching a satisfactory level. In the tire end, however, there is making a remarkable showing. April sales were on a par with April last year and indications are that May will show substantial improvement.

U. S. Rubber has used up practically all its high priced rubber and is taking advantage of current low prices around sixteen cents a pound to pick up small lots whenever available. In position with respect to cotton fabric is less favorable although sufficiently good to have made possible the recent tire price reduction without any great loss.

Aside from the possible establishment of a few new branch stores, etc., incident to the normal growth of its business, the company contemplates no immediate expansion program of any size. Additions to tire making plants undertaken last year and which are virtually completed will add to tire making capacity. Since Rubber would have no need for additional funds except for new construction on a big scale it appears certain that the company will not enter the money market this year.

MOHAWK MINING REPORT

During 1920 the Mohawk Mining Company's net receipts amounted to $1,627,150, as compared with $2,384,941 in 1919. Net income was $632,762, as against $598,821 in 1919. After deduction of dividends there remained a surplus of $82,762, as against $70,635 in 1919. The feature of the last fiscal year was that work expenses and other operating costs, which in 1919 amounted to $1,850,692, dropped to $1,-046,240.

"2. Increased revenue derived from higher rates on freight and passenger traffic granted by Interstate Commerce Commission, four months.....418,000,000

"3. Increase in mail, express and miscellaneous revenues.....164,000,000

"Thus of a total increase of $1,041,000,000, only $418,000,000, or 40 per cent, was due to the higher rates granted by the Interstate Commerce Commission; the balance, $563,000-000, accruing from greater service performed, excepting only the back mail pay amounting to $64,000,000.

"The increase of $418,000,000 was due to the Interstate Commerce Commission's increases in rates granted on the application of the carriers designed to produce 33.5 per cent increase in freight revenue and 23.9 per cent in passenger revenue.

"These higher rates were in effect for the last four months of the year only; so that the increase in revenue from higher rates fell far short of the requirements of the railroads and amounted to but 8 per cent for the entire year.

"How meager this increase was can be judged from the fact that had the increases designed by the Commission operated for the full year, the increase would have been on the volume of traffic handled $1,202,000,000 more than they actually earned and the increase in gross revenues for 1920 would have been $2,243,000,000, instead of $1,041,000,000.

"From the above will be seen how incorrect is the popular impression that with freight rates fixed so as to increase their gross revenues by 33.5 per cent and passenger fares increase of 23.9 per cent, the managements of the railroads, since their return to private control, must have been improvident and inefficient in the extreme to produce the unsatisfactory results in the calendar year 1920.

State Commission Obstruction

"The increased rates became effective August 26, and although the volume of business during the last four months of 1920 was larger than in the last months of 1919, the actual gross revenue was substantially less than the rates should have yielded, for the following reasons:

"1. The state commissions in many states did not raise the state freight rates the full amount authorized by the Interstate Commerce Commission, so that the full measure of increase was not realized until after the Interstate Commerce Commission issued the necessary orders upon appeal of the carriers. In several states some commodities are still excepted from the increases finally authorized. In Arizona the increases were denied in toto by the state commission, so that no freight rate increase in that state on intrastate traffic was enjoyed by the carriers during the year 1920.

"Many states denied any increase in intrastate passenger fares, and proceedings were necessary before they allowed the higher fares to be put in effect, and as the intrastate passenger business is of almost the same volume as the interstate business, the failure of the carriers to realize the increase of passenger revenue that the Interstate Commerce Commission's decision was expected to produce is easily understood.

"2. Agencies created by the Government and paid for by taxes, in which the railroads themselves contributed largely, operated with constantly increasing effect during 1920 to deprive the steam lines of large amounts of freight traffic which they had created and fostered."

It was not until after the National Association of Manufacturers case was made acquainted with the conditions under which the railroads were operating, and with the evident intention of the Railroad Labor Board to encourage a continuation of such conditions by approving the unionizing of all rail labor, that it took a definite stand against organized labor in the transportation industry and the Railroad Labor Board as at present constituted.

Digitized by Google



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Capital, Surplus and Undivided Profits - $14,000,000

For every banking need, this institution has complete facilities; and the standard of service is particularly high.

The past year has emphasized the desirability of a banking connection of this type.

OFFICERS

JAMES T. KEENA, Chairman of the Board
JOHN W. STALEY, President
F. A. SCHULTE, Vice-President
JOHN R. BODDE, Vice-President
H. P. BORGMAN, Vice-President
R. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES H. AYERS, Vice-President
AUSTIN E. WING, Assistant to President
A. H. MOODY, Cashier
D. N. SWEENY, Assistant Cashier
D. E. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
G. W. BEASLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO D. HEAPHY, Assistant Cashier
C. L. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor
RODERICK P. FRASER, Manager Foreign Department

DIRECTORS

RUSSELL A. ALGER
GEORGE H. BARBOUR
W. T. BARBOUR
JOHN R. BODDE
H. P. BORGMAN
H. M. CAMPBELL
C. A. DU CHARME
FRANK J. HECKER
FRED W. HODGES
J. C. HUTCHINS
JAMES T. KEENA
H. B. LEDYARD
ROBERT S. MASON
FRED T. MORAN
FRED T. MURPHY
M. J. MURPHY
W. HOWIE MUIR
TRUMAN H. NEWBERRY
WALTER S. RUSSEL
HUGO SCHERER
F. A. SCHULTE
ANGUS SMITH
R. W. SMYLIE
JOHN W. STALEY
HOMER WARREN

(236)

Digitized by Google

MICHIGAN MUTUAL LIABILITY

F. C. Whitney, Muskegon, secretary of the Motor Specialties Company, who retired as president of the Michigan Manufacturers' Association this year, was elected a director of the Michigan Mutual Liability Company, Detroit, at the annual meeting. The retiring directors were re-elected as follows: F. S. Bigler, Wilson Critzen, C. W. Dickerson, Frederick T. DuCharme, F. W. Hutchings, James Inglis, A. F. Jackson, A. J. Peoples, F. C. Root, J. R. Searles, Hal H. Smith, A. A. Tompkins, all of Detroit; Fred Buck, Saginaw; P. W. A. Fitzsimmons, Tecumseh; Lisle Hall, F. C. Ruch Lansing; E. A. Weves, Grand Rapids; William A. Yawter II, Benton Harbor; A. B. Williams, Battle Creek; C. F. Zapf, Traverse City. The stockholders held the meeting in Hotel Statler, where dinner was served in the evening. In the meeting room the company arranged an exhibit of photographs showing progress in accident prevention work and during the afternoon motion pictures on the same subject were presented.

CREDIT MEN'S CONVENTION PLANS

Members of the Detroit Association of Credit Men who will attend the annual convention of the National Association of Credit Men, San Francisco, in June, will leave Detroit on the "Indianapolis Special" at 10 p. m., June 3, on the Michigan Central. On this train will be the delegations from St. Louis, Pittsburgh, Cincinnati, New Orleans and Cleveland.

GORMAN ON CORPORATION TAX

Frank E. Gorman, state treasurer, reports that the new corporation tax law of three-tenths of a mill on capital stock and surplus is being well received. He quotes executives of a number of corporations as saying they do not believe the tax will be burdensome and the the collection of the $6,000,000 sought will be difficult. Mr. Gorman says these men feel it is far better than a state income tax.

HUBBARD HEADS NEVADA COMPANY

Two men well known in Michigan's sugar industry—B. C. Hubbard and Charles Cave, both of St. Louis—have been elected respectively president and treasurer of the Lahontan Valley Sugar Company, Fallon, Nev. The plant has a capacity of 600 tons of beets a day.

BELDING BOARD ELECTS

The Belding Board of Commerce has elected the following officers: President, E. C. Lloyd; vice-president, Clyde A. Knapp; treasurer, Merton Smith. Directors, Walter Ireland, Henry J. Leonard and W. P. Hetherington.

PORTLAND SEEKS NEW INDUSTRIES

The Portland, Mich., Board of Commerce announces that negotiations are pending to bring a garment industry and a brick plant to the city. The following have been elected directors of the board: Carl D. Bywater, Ross H. Collier, Carl O. Daby, Peter H. Knox, Lorenzo Webber, Will J. McClelland, Will C. Stone, O. E. Robbinson, A. A. Mack and E. A. Richards. It was decided to hold an old-fashioned business men's and farmers' picnic August 10.

HANDS SUCCEEDS ELLSWORTH

L. T. Hands has been appointed state insurance commissioner by Gov. Groesbeck to succeed Frank H. Ellsworth, who resigned to become vice-president and superintendent of agencies of the Michigan Bonding & Mortgage company, Detroit. Mr. Hands, who comes from Sanilac county, has been in state service for some years, having been first deputy in the insurance office since the death of Don A. Baxter a year ago.

DELIVER TO SINK NEW SHAFT

The Oliver Iron Mining Company, which recently obtained an extension of the lease of the Geneva property in Beaver township, Gogebic county, will begin shortly the sinking of one of the largest shafts ever constructed for the production of iron ore, says the Iron Wood Times. The new mine will be located midway between the Davis and the Puritan properties of the company. The shaft will be designed to develop further the iron ore coming into the Geneva territory from the west, from the Norrie and Newport properties.

TWO URGE REFORESTATION

George L. Lusk, of the public domain commission and conservation department, in an address to the Lansing Engineers' Club, last week, urged the importance of a program of reforestation. He declared there were thousands of acres in Michigan which were good for little else. Richard A. Smith, state geologist, also emphasized the possibilities of profit to the state and industry through reforestation.

Books Containing Facts On Operation of Trucks

On request of the National Team & Motor Truck Owners' Association, whose headquarters are in Detroit, the Detroit Public Library has compiled the following list of references on motor truck operation:

Short Course for Motor Truck Operators, by H. P. Gould. Engineering and Contracting, v. 52, pp. 231-232, Aug. 20, 1919.

Classified Table of Truck Load Capacities. Horseless Age, v. 33, p. 349, Nov. 15, 1916.

Curbing Waste in Motor Trucking. Iron Trade Review, v. 32, pp. 973-978, Apr. 13, 1916.

Design of Passenger Automobiles, by C. M. McCreery. Society of Automotive Engineers Journal, v. 3, pp. 37-38, February, 1920.

Efficiency in Motor Truck Scheduling Age, v. 43, pp. 48-49, February, 1921.

Getting the Co-operation of the Man Who Drives Your Truck. Factory, v. 20, pp. 242-244, February, 1918.

Load Scale for Trucks. Municipal Engineering, v. 51, p. 204, November, 1916.

Making the Motor Truck Better. Factory, v. 24, pp. 872, 1173; v. 25, pp. 276, 766, 1156, 1354, Mar. 1-Apr. 15, May 15, Sept. 1, Nov. 15, 1918.

The Modern Motor Truck Design, Construction, Operation, Repair and Management. Directions, by V. W. Page. 1921. "Considers in detail everything one needs to know about motor trucks, their care, operation and economical use. Includes full instructions in non-technical language, for the guidance of leading makes of trucks and making necessary repairs. Illustrated by specially drawn engravings."

Motor Truck and Automobile Motors and Mechanism; a practical illustrated treatise on the power plants and parts of gasoline motor vehicles, by T. H. Russell. 1917.

Motor Truck Cost Data for Use in Business Profits, by S. V. Norton. 1918. One of the most complete books on motor trucks, containing accurate, tested information on all essential features. Phases are grouped under five main parts:

Part 1. Fitting the motor truck to your business.

Part 2. Making your motor truck do more and better work.

Chapters on body design, methods and time of loading under this head. The other three parts discuss cost accounting, building new business and future problems.

The text has 225 illustrations, and many performance charts.

Motor Trucks: Design and Construction, by C. T. Schaefer. 1913. The book aims to give in simple language, a practical discussion of the gasoline commercial truck. The general mechanical layout of the chassis is followed by chapters devoted to the construction details of the engine, cooling systems, etc. The illustrations number 192, consisting largely of photographs and text.

Motor Truck Efficiency as Related to Solid and Pneumatic Tires. India Rubber World, v. 60, pp. 561-567, August, 1919.

Motor Truck Operation and Accounting. Municipal and County Engineering, v. 58, Supp. 18, v. 59; Sup. 18, Sup. 10, Sup. 10, Sup. 10; v. 60, Sup. 14, January, March-December, 1920, February, 1921.

Motor Vehicle Engineering, Engines (for Automobiles, Trucks and Tractors), by Ethelbert Favary. 1918. Presents in a concise way information needed by the designer and engineer as well as the draft-man. Includes many dimensional details and drawings.

Motor Vehicles on Their Engines; a practical handbook on the care, repair and management of motor trucks and automobiles, for owners, chauffeurs, garagemen and schools, by E. S. Faser and R. B. Jones. 1919. "Authors have collected in a small compass such elementary, theoretical and practical information as will assist in the operation, upkeep and adjustment of motor vehicles."

Power Wagon Reference Book. 1920. The motor truck, tractor and passenger car, are treated in separate sections. The use of the motor truck in different industries is a special feature of the book. There is good material on truck body design, including blue print drawings. Tabulated specifications for motor trucks and tractors are listed.

A Study of Road Impact and Spring and Tire Deflection, by A. F. Masury (an account of tests made).

Society of Automotive Engineers Journal, v. 7, pp. 96-102, July, 1920.

Practical Considerations as a Motor Truck Delivery Wagon on Different Roads, by E. A. Kennelly and C. D. Asbury. (Massachusetts Institute of Technology, Electrical Engineering Department, Research Division Bulletin No. 10, pp. 101-1039. June, 1914.)

Truck Efficiency Graphically Shown, by F. W. Ives. Automotive Industries, v. 38, pp. 33-36, Jan. 3, 1918.

What Truck Service Should Be and How It Should Be Rendered. Motor Age, v. 37, pp. 91,92, January 29, 1920.

There Also Recent Instruction Books on the Operation of Different Makes of Trucks as Peerless, Packard, etc.

Maintenance and Inspection

Constant Inflation Means Long Tire Life. Automobile, v. 35, pp. 28, 29, July 3, 1916.

How to Get the Most Out of a Motor Truck, by V. W. Page. Scientific American, v. 121, p. 634, Dec. 27, 1919.

Importance of Systematic Inspection and Maintenance of Motor Trucks. Scientific American, v. 116, p. 498, May, 1917.

Maintenance of Motor Tires. Machinery, v. 26, pp. 42-44. September, 1919.

Overloading and Misuse of Trucks Automobile, v. 35, pp. 1070-1071, Dec. 21, 1916.

Relation of Solid and Pneumatic Tires to Motor-Truck Efficiency, by Ethelbert Favary. Society of Automotive Engineers Journal, v. 3, pp. 203-4, April, 1918.

Supervision, Lubrication, Maintenance of Motor Trucks. National Petroleum News, v. 12, pp. 51-52, Oct. 6, 1920.

Trends in Management—How the Motor Truck is Developing Ideas that Lead to Better Management. Factory, v. 25, pp. 708-709, Sept. 1, 1920.

What Constitutes Good Care of a Motor Truck. Factory, v. 20, p. 704, April, 1918.

Cost Accounting

A Six-form System of Keeping Track of Truck Work. Engineering and Contracting, v. 53, pp. 61-64, Jan. 7, 1920.

A Checking System of Upkeep for Automobiles and Trucks, by R. C. Rognon. 1913.

Cost and Operating Data of Motor Truck Service. Railway Review, v. 63, pp. 806-810, Dec. 7, 1918.

Cost Systems Adapted to Make Motor Trucks Economic Engineering, v. 57, pp. 104-105, Apr. 19, 1912.

Motor Transportation and Its Value to Industry. Engineering Magazine, v. 44, pp. 626-646, 732-750, 851-866, January-March, 1913. (Deals fully with cost accounting.)

Standard System for Motor Truck Operating Costs. Engineering and Contracting, and Contracting, v. 49, Sup. 24, Sup. 23, Feb. 6, June 19, 1918.

Truck Cost Records. Power Plant Engineering, v. 24, pp. 804-806, Aug. 15, 1920.

Fuel Conservation

Fuel for Automotive Apparatus. Automotive Industries, v. 38, pp. 224-228, Jan. 24, 1918.

Motor Truck Fuel Substitutes, by J. E. Pogue. Automotive Industries, v. 40, pp. 1319-1324, June 13, 1919.

Suggestions for Avoiding Waste of Gasoline. Engineering and Contracting, v. 49, p. 32, Jan. 2, 1918.

Ten Commandments of Fuel Economy. Motor Age, v. 34, pp. 36-37, July 11, 1918.

Highways Transportation

Express Service Over the Road by Motor Truck. Automotive Industries, v. 38, pp. 445-450, Feb. 28, 1918.

Hauling Freight Over the Highways. Good Roads, N. S., v. 15, pp. 1-2, Jan. 5, 1913.

Hauling Over the Highway with Motor Trucks. Good Roads, v. 11, p. 46-48, July 23, 1910.

Motor Trucks and Highway Transportation. Good Roads, N. S, v. 15, pp. 15-16, Jan. 12, 1913.

Relative Economy of Freight Transport by Railway and by Motor Truck, by C. W. Baker. Engineering News-record, v. 32, pp. 62-67, Jan. 10, 1918.

Relation of Highways to Motor Truck Operating Cost, by A. H. Blanchard. Canadian Engineer, v. 38, pp. 311-313, Mar. 18, 1920.

Return-loads Barred to Save Waste in Transportation, April, 1918 (Highways Transport Committee, Council of National Defense, Bulletin No. 1)

Rural Motor Express to Conserve Food Stuffs and Labor and to Supply Rural Transportation, May, 1918 (Highways Transport Committee, Council of National Defense, Bulletin No. 3.)

Digitized by Google

RED CROWN GASOLINE EVERYWHERE

Every few miles in the country---and every few blocks in the city---you can get Red Crown Gasoline. That's your assurance of uniform power when you use Red Crown---for it never varies.

Its uniformity is guaranteed---its performance is assured. It's the best motor gasoline you can buy regardless of price.

That steady steam-engine-like piston stroke imparted by Red Crown means long life to your motor.

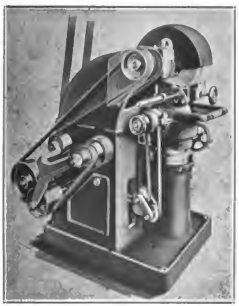
No racked engine causing frequent overhauling. No delay from lack of power. For the utmost in gasoline service, use---

RED CROWN

Standard Oil Company (Indiana) Chicago, U. S. A.

Pageant of Progress Exposition at Chicago's $5,000,000 Municipal Pier, July 30 to August 14

Mr. Automotive Parts Manufacturer:--



Did You Get That Order You Figured On?

Maybe this is your predicament.

The other day a local parts manufacturer called on the Purchasing Agent of ——— Motor Company.
He wanted to quote on wrist pins, oil pump plungers, cam rollers and pins, etc.

Says the P. A.: "Have you got a Detroit Centerless Grinder?"

"No. Why?" said the Parts Manager.

Here is what the Purchasing Agent said:
"You can't compete with others unless you grind by the Centerless Method, and you better buy one of the machines."

AND WHY NOT?

Piston Pins, 1 1-16" dia. x 3½ long—125 per hr.
Piston Pins, ¾" dia. x 2¾ long—200 per hr.

Write for Circular Today

DETROIT MACHINE TOOL COMPANY
6545 St. Antoine St., Detroit, Mich.

Digitized by Google

Studebaker and Its Men

(Continued from Page 6)

will then be given the option of purchasing the property at the stipulated price. In the event of purchase he will be given a credit by the company for continuous service equal to 3½ per cent of the sales price, as well as credit for the excess of monthly payments over interest, tax and insurance charges.

At any time after five years and before ten years the purchaser may leave the employ of the company and yet hold the property under the terms of the agreement, except that he will be charged interest at the rate of 7 per cent and his monthly payments be increased to 1 per cent of the unpaid balance at the time of his leaving the company. At any time after the fifth year any purchaser may pay up the unpaid balance and receive a deed to the property. Down payments in excess of the stipulated amount will be accepted and will serve to decrease interest, but in no case will a deed be given to the property before the expiration of the specific lease period.

It is expected that the outstanding balance will be cleaned up at the expiration of ten years either by the payment of cash or the execution of a note or mortgage.

The special privilege in connection with these homes is of course given only in exchange for continuous service and is intended to be another thorn in the side of the company's labor turnover.

The first allotment of homes now being offered the employes is the subject for much discussion and it is expected that the interest will continue to grow as the plan of sale becomes more familiar.

Carrying out the system roughly sketched in the foregoing paragraphs involves the expenditure of a great deal of money. Much of the amount paid out in this way during the last year and a half will come back, eventually, in the form of payments on the homes constructed. How much return is had from the co-operative work proper is not known. It doesn't come back in the form of dollars and cents. The question is frequently asked, Does it pay? The queries are for a dollars and cents statement—which it is impossible to give.

There is no way of getting it down on paper. Even if it were possible, which it isn't, to know the value in connection with the reduction of labor turnover, there would yet be a lot of unknown quantities to consider. For instance, there is no way of estimating the value to be had from giving a factory worker a week's vacation with pay. Granted that it puts new life and vigor into him, you can't say how much and how it affects production.

The Studebaker Corporation knows for a reasonable surety that if employees feel a greater interest in its concern when they hold some of its stock, but it doesn't know how to measure this interest in the form of increased and more excellent production. It may, and does, know of instances where the anniversary check provision has kept men on the job in the face of difficulties, but it doesn't know what this provision is worth in dollars and cents.

The whole thing must be viewed from a broad standpoint and largely on general principles. Accurate reports of labor turnover are kept and the rise and decline tabulated monthly. During 1920 the company's turnover was 269.9 per cent for the year; on a yearly basis, it was 61.6 per cent for the first three months of 1921. That is an extraordinary reduction, but just how much of it is due to the co-operative work it is impossible to say. The company attributes much of it to this work but there are undoubtedly many other contributing factors. The general industrial conditions over the country would surely have to be given credit for no small part of the reduction. But granting all this, it is yet believed that the co-operative work has contributed much toward the reduction—so much that the board of directors has seen fit to continue the complete system throughout this year.

Probably the most concrete and tangible result came about in the Detroit plants early this year. Body painters and trimmers employed there refused to join a strike of their union in that city, giving as a reason that they were unwilling to sacrifice their co-operative benefits for the probable gain to be had from the strike.

Interested persons frequently inquire as to the personnel necessary to the carrying on of such a work. Studebaker's work is charged to a special organization known as the Co-Operative Department. To this department falls all record keeping as to punctuality and attendance, as well as the supervising and training of factory workers. The hospital work, sanitation provisions and recreation facilities and management are likewise listed as a part of this department's charges.

Dr. C. A. Lippincott, a Presbyterian minister, is head of this department, and under him work the several heads of the departmental divisions. A number of men known as factory representatives work in the plant with the men and keep attendance records as well as handle any matter which must be taken up through the Co-Operative Department.

The department is entirely on a business basis and keeps as far away from any savor of welfare work as possible.

Punch and Power Press Operation

(Continued from Page 9)

While it is not the only press used for extruding metals, still it is the most important. With it lead and brass pipe are made. Pad lock hasps, gears, brackets and many curious shapes of many metals that could not otherwise be made except at great expense are extruded. Lead, tin, copper and brass are the principal ones. The solder are placed in the machine cold and are extruded without the addition of heat. Copper and the brasses are usually heated red hot before being extruded. The operation given very fine, strong tough metal, the characteristics being far ahead of similar metals cast or worked up in other ways.

An important field in this line is the covering of cables with lead for protection against the elements. The rods from which the shrapnel balls were made were the product of extrusion presses. Wire solder, thin tubing, the lead support for stained glass and many other shapes are regularly made in this manner.

Extending the field of the power press must be done by the new industries involved. It is safe to say that the ordinary metal manufacturing industries have a fair working knowledge of what is possible, although there are still many parts that could be made for a small fraction of their present cost on stampings. In many cases it will be necessary to re-design the part somewhat but this can usually be done without injury.

That has been the history of the automobile. One part after another has been made of a stamping, until today if it were necessary to go back to the old method of manufacture, the average weight of the machine would be increased by hundreds of pounds, and the cost hundreds of dollars. A study of the various pieces will show unsuspected possibilities for other industries.

All it needs is a suspicion that it is possible to substitute a stamping. Send a print or

AMERICANIZATION PROGRESS

Co-operation between the Y. M. C. A., the Grand Rapids Americanization Society and the local board of education is reported to have given excellent result in the Americanization work going on in the Furniture City. The report of it. M. DeWitt, of the Y. M. C. A. shows that of thirty-six plants where the Association has been conducting its educational campaign since the beginning of the year, all but three are now on a 100 per cent American basis. And even in these three plants there are less than half a dozen aliens. Since January 100 aliens have taken out their first citizenship papers.

MAKING A BOTTLE CONTAINER

The Davis Metal Fixture Company, Lansing, has originated and is manufacturing a novel container for milk bottles, which can be attached to the side of the house where it cannot be upset by children, animals or wind. On the face of it are movable hands to indicate the amount of milk desired. The container is constructed of metal and finished in black enamel. It has been indorsed by the state board of health and M. A. C. Dairy department. The container will be manufactured in quantity lots and put out through jobbers.

the article, explaining just where and how it is used and what strains it must stand and the number exactly alike that are used, to one of the machine manufacturers of presses. They will advise whether it is possible to make it on a power press. If by changing the design somewhat it can be made a practical operation they will let you know. They will tell you on what press it must be made, the production per day, the kind of dies that must be made, and their approximate cost.

Very few if any press manufacturers also make parts but they all know factories which can handle exactly that job to the best advantage, and will tell you about them.

The production of a press or a series of presses is so great that unless there is a very large demand for the parts it is not economical to make them yourself. There is a possibility of a greater reliability and control in your own factory but unless there is a sufficient number of presses at work the cost of die up-keep, superintendence and idle time of the machines will more than equal the cost of the purchased parts. Added to this is the increased overhead due to larger factory, capital tied up in machines, and press depreciation.

There are a large number of companies which specialize on making certain types of dies. The press builders usually will build your dies for you if you wish. This removes the difficulty of making and designing them but not of caring for them. Dies must be cared for very rigorously or they will not give a good product.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



GENERAL LIBRARY
JUN 9 1921
UNIV. OF MICH.

Fifteen Cents a Copy

Five Dollars a Year

A Basis for Motor Price Cutting

"Pittsburgh Plus" Again

Mixing the Ounce of Prevention

Every Dye Plant an Arsenal

(Financial Section Starts on Page 22)

DETROIT, JUNE 4, 1921

Volume 27 Entered as second Class Mail Matter at the Post Office at Detroit, Mich. *Number 23*



Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

A Basis for Motor Price Cuts

Detroit Manufacturer Suggests Informing the Public Fully As to Costs, in Order to Restore Confidence

By ALFRED FISCHER

UNCERTAINTY is the greatest destroyer of business and all that goes into business. No matter how bad a situation is, once it is known that it is at bed rock, those responsible for its rehabilitation take off their coats, roll up their sleeves and start to clear away the wreckage.

When a principle is fundamental it is no matter whether it applies in automobile production, farming or chasing butterflies. Therefore the ruthlessness of uncertainty as a destroyer of that which better days and more confidence created must be expected to function.

The automotive industry today is torn by the element of uncertainty, created for the most part from within its own ranks. Prices are tobogganing; and, like a tobogan, one is never certain where he is to be landed. He might stop after the force of velocity has spent itself, at the base of the iced inclined plane, or he might be tipped over by the wind and land on his ear in a snowbank, or a pebble in the path might spill him hopelessly in the way of other sleds close behind.

Price Cuts Fail As Stimulus

In the mad scramble for automobile orders, in this period of paucity, there has been almost a condition of panic. Manufacturers, convinced that the public was holding out for lower prices, cut into their retail prices deeply in all cases. Of course materials and labor were lower and general conditions permitted the change in selling prices. However, the public has not bought.

One Detroit manufacturer of parts, whose books contain the names of the best known manufacturers of automobiles, has come forward with a possible answer to the continued stagnation. It is simple enough, but unrecognizable because, like so many simple things, the fundamental principle luvolved has been overlooked.

"The trouble has been that price cutting, instead of restoring confidence of the public, has served to unsettle it further," is this manufacturer's analysis. "Here is how it has worked:

"The average prospect for a car of any class or size reads how steel and leather and labor are coming down in price. He expects that there will be some reduction in automobile prices, just how much he has no way of knowing. He waits for developments.

"When the price cuts come he discovers that they range from $200 to $500 on cars of the same class, with the same weight and about the same amount of material in their construction, built in the same labor market. He looks over the reductions in cars of higher grade and discovers blanket reductions in excess of $1,000. Is he tickled to death and does he run right to the bank to withdraw his savings and purchase a car? He does not.

"Instead he starts to wonder, and his wondering makes him ask a lot of questions. Is this the end? Will there be another cut when the model for the coming year is put on the market? Will there be a further cut in steel, lumber, labor, etc.? Are they cutting too deeply and taking it out in quality of the vehicle so that my car will have to be junked in eight months? Are they using seconds instead of firsts when they put on tires? If they can knock off $1,400 overnight on a six or eight-cylinder car, aren't they holding back another $1,400 profit? Guess I'll sit still a little longer.

"Do you consider that extreme? Then ask the first ten men you meet who are financially able to buy a car but have not done so, and hear what they say. Their stories will have a most uninteresting uniformity."

What is the remedy, if there is one? This manufacturer believes that there is not only a remedy but that there should never have been an ailment. What about the National Automobile Chamber of Commerce, he asked? Where was it all this time? When prices are changed, he believes, the manufacturers owe it to the public to explain why they are increased or lowered. He urges that this be done so that the situation may be clarified before there is further destruction and before uncertainty takes a greater toll.

It is suggested that the N. A. C. C. or some other responsible group make a study of production and sales figures, estimate the average cost of building cars in the various classes, figuring everything that enters into the business, and publish such tabulations as a basis for making price cuts. It would serve to give both uniformity and standardization to the revision, whichever way it would have to go, for once established, such a system would be continued.

The suggestion is to estimate costs on a weight basis. Figures based on markets as they fluctuate from time to time could be assembled showing the costs of the various materials, and striking from those figures what should be the cost of building a car of any given weight. For the items of overhead it will be found that sales, advertising, cost of maintaining dealers, promotion, depreciation, reserve and other figures would not be difficult to reach averages upon, so that it would soon be possible to state just what a light four-cylindered car should bring; likewise a six or eight-cylinder, open or closed body, etc. Then the elements that make up prices could be understood by the prospective purchasers and there would be some definite understandings as to what could be expected.

Costs About Stabilized

It is a matter of figures that prices of most commodities at present are just about at the average of the last sixteen years, so that there can be no more serious fluctuation, unless a panic should utterly demoralize the markets for certain basic products. But our wisest economists and financial men tell us that the pendulum has begun to swing upward and that the worst is over.

What would be the effect of such a clearing house of definite and confidence-restoring information to the country on the financial interests? Is it not reasonable to assume that it would tend to make money easier for the automotive industry, for manufacturer, dealer and purchaser alike? Such a conclusion is almost trite. It should be done by the industry itself for its own best interests before some outside regulatory force decides to undertake the task. For once that is attempted, the compilations would not be made disinterestedly by those best qualified.

The automotive industry will weather any storm because it is too firmly imbedded in our life. How soon it will reach port depends upon its pilots.

Buick, Chalmers, Sheridan And Mitchell Cut Prices

During the last ten days the price reduction wave among the automobile manufacturers has been more pronounced than at any time since Jordan started the movement nearly four weeks ago. The Mitchell Motors Company, Inc., Racine, Wis., reduced its prices from $160 to $260 on the model, as follows:

Model	New Prices.	Old Prices.	Reduction.
Three-pass. roadster	$1,490	$1,750	$260
Five-pass. touring	1,490	1,750	260
Four-pass special	1,790	1,950	160
Four-pass. coupe	2,590	2,800	210
Five-pass. sedan	2,690	2,900	210
Seven-pass. touring	1,995	1,995	none

The Chalmers Mtor Car Company, Detroit, cut prices from $150 to $300, according to the body type. The new schedule, as compared with the old one, is as follows:

Model	New Prices.	Old Prices.	Reduction.
Roadster	$1,495	$1,795	$300
Five-pass. touring	1,545	1,795	250
Seven-pass. touring	1,795	1,945	150
Coupe	2,195	2,595	200
Sedan	2,445	2,745	300
Sport	1,695	1,895	200

The Sheridan Motor Car Company, Muncie, Ind., which is one of the General Motors Corporation units, but is about to pass to Durant control, announces the following revision:

Model	New Prices.	Old Prices.	Reduction.
Two-pass. roadster	$1,485	$1,685	$200
Five-pass. touring	1,485	1,685	200
Four-pass. coupe	2,265	2,565	300
Five-pass. sedan	2,465	2,765	300

The Buick Motor Company, Flint, which is the largest producer of cars in the General Motors Corporation group, announces that the

(*Continued on Page 34*)

Digitized by Google

"Pittsburgh Plus" Again

Dispute About Fairness of Long Established Base On Steel Once More Before the Trade Commission

LATEST ADVICES from the Federal Trade Commission indicates that "Pittsburgh plus" is "in Dutch" again. Manufacturers of products fabricated from rolled steel, who are seeking every avenue leading to possible reductions in the cost of production to facilitate the readjustment of business, have prevailed upon the Commission to make an investigation of the steel industry to ascertain if a continuation of the practice of basing all steel upon Pittsburgh regardless of actual source of supply, is justified.

In 1919 "Pittsburgh plus" was on the carpet to face charges of being an "unearned increment," brought by the Western Association of Rolled Steel Consumers, aided by a southern association of the same name. After a week's hearing the Commission, by a vote of three to one, gave "Pittsburgh plus" an immunity bath. Since then the National Association of Purchasing Agents, the American Farm Bureau, the Mississippi Valley Association and numerous other organizations interested in steel have joined the pioneer agitators and their combined efforts have influenced the Commission to admit a bill of complaint and investigate.

What "Pittsburgh Plus" Is

"Pittsburgh plus" is a twenty-year-old practice of charging the freight rate on steel from Pittsburgh to destination regardless of the actual source of supply. Manufacturers of steel in the Middle West are the main opponents of this practice. Michigan is affected because it uses an enormous amount of rolled steel in the manufacture of automotive products.

The average passenger car contains about 913 pounds of steel. The average for motor trucks is 1,370 pounds. There are 54 passenger car and truck plants in Michigan manufacturing normally more than a million cars and trucks a year, to say nothing of the tractors, automotive parts and accessories that Michigan manufacturers buy their steel wherever they can get it the cheapest; consequently not more than half of the supply comes from the Pittsburgh district. Ever since the automotive industry in Michigan became not only the state's leading industry but established the state as the automotive center of the world, Detroit has been "threatened" with steel industry of its own. In fact, manufacturers believe that within two years Michigan will have one or more steel plants of great capacity to supply the automotive industry.

When Pittsburgh became the steel center of this country mills located elsewhere looked to Pittsburgh for the price standard, and the practice of basing all prices on Pittsburgh—that is, using the Pittsburgh freight rate—was established. Gradually mills have been located in Sharon, Pa., Gary, Ind., Youngstown, O., Warren, O., Chicago, Ill., Duluth, Minn., and Birmingham, Ala. The freight rates from any of these centers to consumers within their immediate territory would not be the same as that from Pittsburgh to these consuming districts. Until these mills began to produce steel in large quantities there was no objection to the Pittsburgh base. Now that there are indications that Pittsburgh may lose its primacy, consumers close to other steel centers want the Pittsburgh base eliminated so far as they are concerned.

If, for instance, a steel plant was established in Detroit and was adequate to supply steel to the automotive industry, consumers in Michigan would want the price based upon Detroit rather than upon Pittsburgh. It is claimed that if "Pittsburgh plus" continued in effect the consumer in Michigan who either hauled his steel by motor truck to his plant, or had the advantage of a short haul by railroad, would have to pay the differential between the Pittsburgh freight rate to Detroit and the actual freight rate from the Detroit plant to his plant.

Frank Emerich, in an article in the Mississippi Valley Magazine, claims that the "Pittsburgh plus" practice results in an annual charge against steel consumers of $75,000,000, which represents freight rates charged into the price of steel, but which is not earned by nor paid to the railroads. He declares that a Chicago consumer buying steel in South Chicago or Gary, Ind., has to pay $7.50 a ton freight rate from Pittsburgh even though he may haul the steel to his plant in his own trucks.

Walter V. Heimel, purchasing agent at the Motor Products Corporation plant, Detroit, and who buys approximately 25,000 tons of steel annually, says that at this time when cost reduction is the main thought in industry, "Pittsburgh plus" assumes an entirely new importance.

"In the future," says Mr. Heimel, "the aim of industry will be to buy everything at the lowest possible cost and get the lowest possible freight rates on materials shipped to the plants as well as on finished products shipped from the plants. Therefore every extra item will be challenged.

"'Pittsburgh plus' has long been regarded as an uneconomic practice by those consumers of steel who buy from plants located outside of Pittsburgh. At this time, perhaps, it is not so important for the reason that competition for business is so keen among the steel manufacturers that the prices quoted have little in common with each other and the very favorable quotations render the 'Pittsburgh plus' negligible. If Detroit has a steel plant in the near future—and I am sure it will—we cannot afford to have the 'Pittsburgh plus' handicap.

"On the other hand, I am buying steel from five different plants, only two of which are located in Pittsburgh. If I could not get the most favorable prices the Pittsburgh base would be a greater burden than it is. When Pittsburgh was the undisputed center of steel production there was no reason for objecting to that city as a basing point, but it is a hardship on buyers of steel to have to pay the Pittsburgh differential when buying steel from plants closer to destination."

The 1920 Detroit consumption of sheet steel was 106,220 tons, more than half of which came from plants outside of Pittsburgh. Ford used 30,000 tons and the rest was taken up by automotive plants in general. The rate from Pittsburgh now is 32½ cents for 100 pounds, carload or less. From Warren, O., the freight rate is 23½ cents, carload lots. The Pittsburgh freight rate prevails, hence there is an extra charge on every 100 pounds, or 60 cents on the ton. Assuming that only half of the steel consumed comes from outside the Pittsburgh district, the amount of excess charges paid by steel buyers would be $30,000 for the year. The strip steel consumption is about 200,000 tons, and the unnecessary charge to consumers of this product is claimed to be $720,000 year, assuming that only half of it comes from plants closer to Michigan than Pittsburgh.

Harry Botsford, of the National Association of Purchasing Agents, has written an article on this subject, in which he says:

"The necessity of establishing Chicago and other steel producing centers as price basing points is manifest, and this fact is brought home with striking force when it is taken into consideration that 10,000,000 tons of steel are sold in Chicago annually, which, on the present Pittsburg basing point of $7.60 a ton added freight, means over $50,000,000 annually, the greater portion of which might be saved to the western consumers. Gary mills produce steel approximately 18 per cent cheaper than Pittsburgh, and Pittsburgh holds a handicap of about 9 per cent over the Chicago market under the present basing practice."

The above facts are only a small part of the arguments before the Federal Trade Commission. The fact that the railroads do not recognize the "Pittsburgh plus" in buying steel rails because they haul the rails and pay no freight rates they do not charge themselves, is cited. The question of why there should be a Pittsburgh base on rolled steel when there is no base on pig iron also is asked.

What the Producers Say

At the 1919 hearing before the Federal Trade Commission the mills won their case on the ground that the Pittsburgh base was an economic necessity, because inasmuch as Pittsburgh produced 40 per cent of all the steel used in the country it took up the slack and was entitled to a better price. It was declared that if the Pittsburgh base were removed the price of steel charged by other plants would be higher than the Pittsburgh quotation for the reason that other mills would charge the Pittsburgh price in the same markets. Abolition of the Pittsburgh base, it has been contended by the mills, would mean that many of them would have to move their plants into western and southern territories or build new plants in those districts. Millions of dollars have been invested in the steel business in Pittsburgh and naturally every effort will be made to maintain Pittsburgh as the steel center of the country.

Under present conditions the eastern steel manufacturer can sell his product in competition with the western manufacturer, while the steel man in the West can sell in the East only at a disadvantage. The same rule applies in the South. Therefore, it can be seen why the establishment of new steel plants in the West or South will not be of any advantage so long as Pittsburgh remains the basing point. The Mississippi Valley Association is laboring diligently to build up industry in the valley, and its opposition to "Pittsburgh plus" is founded, in part at least, upon the claim that "Pittsburgh plus" is hampering western industrial development. Shipbuilders are interested because their costs are higher. The farmers are interested because they believe farm machinery would be cheaper if the Pittsburgh obstacle were removed.

All the rest of industry that uses steel and is located nearer to plants outside of the Pittsburgh district is interested because it believes the removal of the Pittsburgh base will mean lower costs of steel through a reduction in freight rates. Some of the greatest legal minds and industrial experts in the country are engaged in this contest, the outcome of which will be awaited with interest throughout the country.

Digitized by Google

Mixing the Ounce of Prevention

What the Michigan Manufacturers' Assn. Is Doing For the State's Industry, Particularly in Legislation

ELECTION to public office does not change the human nature of a man. Instead, it gives him a greater opportunity for display of these traits of character which make him an individual apart from his brothers and which must put him on record as having either the attributes of statesmanship or the keen analysis of a judicial mind. Theoretically, at least, it is assumed that election to such a representative body as a state legislature presupposes the successful candidate to have a breadth of mind and a quality of citizenship which promises the greatest good for the greatest number in all decisions bearing upon the merits of statutory regulations and limitations.

This is all very pretty and sometimes true. Unfortunately it is two-thirds theory and the rest practice. This being a democracy, the number of votes rather than statesmanship or judicial tests qualify a man for legislative duties. The winning count may be determined by certain principles advocated by the candidate and approved by his constituency. On the other hand, popularity aided by political strategy may determine the result.

Whatever the vehicle upon which the legislator rides into office, whatever the principles he may openly advocate, the fact remains that the senator or the representative takes his seat chuck full of human nature, bristling with personal ideas, touched with certain antipathies; sometimes with definite aim to "get something or somebody" for doing something to somebody sometime or other.

Attention to Duty the Thing

We have with us always class legislators and class legislation. Labor organizes and goes after legislative advantage, hewing close to measures for the good of labor regardless of where the chips fall. Industry organizes to put a curb on what of labor legislation it



F. W. HUTCHINGS
Vice-President and Treasurer of the Charcoal Iron Company of America, Detroit

may deem unreasonable or detrimental to industry. So a merry time is had by all. The side that picks and chooses legislative candidates and then elects them in greater number gets the best of the deal when the statute makers begin the grind. Indifference on the part of one or the other of the interests concedes an advantage to the other; therefore the success of organization for legislative protection or advantage lies not in mere cohesiveness or numbers, but in attention to duties required by organization.

The industry of a state is its lifeblood. The richer this blood the greater the state. Yet industrial progress and achievement beget jealousy, suspicion, antipathies, real or fancied wrongs, and stir ambitions that may be good or bad for the common weal, according to the lights of the ambitions.

Michigan is a young industrial giant. It is overgrown physically and undernourished in those economic essentials which are born of experience. Its industrial successes have inspired attack back of which the desire for a division of spoils has been more or less an impelling motive. On the part of industry there has been a sense of false security which has to a certain extent so deadened aggressiveness as to render industry too often dependent upon the pound of cure because the ounce of prevention was ignored.

The most successful economic organization is that one which is more a practitioner of preventive medicine than a prescriber of remedies, and that is what the Michigan Manufacturers' Association is gradually coming to be. The transition has been particularly marked during the last two years. And it is well that it is so, for the next few years will be difficult ones for all industry. Michigan industry has just passed through what might easily have been a disasterous legislative period, but which, fortunately, has proved to be comparatively harmless.

Leadership and Good Sense

The reason it has been so harmless to industry lies in the leadership of the Michigan Manufacturers' Association and the good sense of the majority of the legislators in Lansing. The rock upon which industry might have been severely damaged was taxation. Another shoal which invited shipwreck was labor legislation. Swarming about these two main factors were the countless bills framed to exact tribute from one class or another of industry, intended to satisfy personal grievance or expected to rectify some imaginary wrong. All



NEW VICE-PRESIDENT AND DIRECTORS OF THE MICHIGAN MANUFACTURERS' ASSOCIATION

Left to right—C. E. Bement, vice-president and general manager of the Novo Engine Company, Lansing; second vice-president; A. M. Larsen, works manager, Manning, Maxwell & Moore, Inc. (Shaw Crane Works), Muskegon; L. F. Bomhoff, treasurer, Jaxon Steel Products Company, Jackson; Walter O. Adams, president and general manager, Production Foundries Company, Ann Arbor, directors.

Digitized by Google

told, there were 160 bills affecting in one way or another the industries of this state. Three of them attained to the dignity of statutory enactment.

The 1,200 or more members of the Michigan Manufacturers' Association have more cause to respect and support their organization this year than ever. The whole industrial and commercial life of the state owes a debt of gratitude to the Association for legislation which cripples or obstructs the healthy development of industry does harm to the whole economic fabric of the state. The Michigan Manufacturers' Association grappled with human nature in all its phases and prevented much adverse and costly legislation, which, in the years to come, would have required many pounds of cure.

One man who was largely responsible for the success of the united effort of the Association was John L. Lovett, its manager. Mr. Lovett came to the Association from an assistant secretaryship in the Illinois Manufacturers' Association, prior to which he was a newspaper man on the Chicago Tribune and Kansas City Star. As a newspaper man assigned to legislative work in both states at one time or another, he learned the inner workings of legislative procedure and the part played by human nature in statesmanship of assorted varieties.

Building Up the Body

When Mr. Lovett came to Detroit the Association had about 600 members, most of them A. W. O. L. both in body and spirit. As Mr. Lovett said recently in an address, golf was doing to the Michigan Manufacturers' Association what the automobile and Sunday baseball is supposed to be doing to the churches. The Association was organized partly on the theory that it was customary to have an association and partly because one or several industrial executives stole enough time from business to visualize what such an association could do. After it was organized its main function was to wait until the legislative crack of doom scared its members out of seven years' growth and then rush around for cover.

No man was to blame. The responsibility was collective. Every man who had a part in industrial management in this state was so smeared with success and loaded down with pelf that he had become near-sighted. That any man or organization of men would consider interfering with the growth of such a husky industrial baby as Michigan had was beyond his comprehension. When I joined the Association in September, 1919, and immediately began to buzz around the ears of the members with warnings of impending disaster unless the Association membership became both numerically stronger and more active.

His theory was that enunciated by President Harding, Secretary Hoover and others, that there should be more business in politics and less politics in business; or, put another way, more business in government and less government in business. He wanted the business men of this state to take a direct interest in the politics of the state, pay more attention to the men aspiring to public office and in prospective legislation, to the end that the cause of prevention might make unnecessary the pound of cure.

Practically all the state's industrial leaders had held the same view but they wore leather vests and kept their views so close to the vests that the best run of legislators who preferred to listen to reason failed of any benefits from the views. There were exceptions to this rule. Men like F. W. Hutchings, Arthur H. Williams, C. E. Bement, M. J. Murphy, A. B. Demory, Henry M. Leland, Frank C. Whitney and others subscribed to the same principles, and they set the example.

Two years ago when compensation legislation saddled industry with an annual bill of $9,000,000 in premiums on insurance and $6,000,000 in compensation, industrial management began to understand why the United States was successfully founded upon the theory that "United We Stand; Divided We Fall," and why "E Pluribus Unum" is the most effective motto displayed in the world.

Michigan made more out of its organization this year than ever in its history, but that part of it represented in the automotive industry lost a great opportunity when the first reductions in motor car prices were made. Henry Ford threw a monkey wrench into the machinery by announcing a price cut before any other manufacturer woke up to the temper of the buying public. The point is not that the Association could or would have urged or argued against such a cut, but that had the organization principle been applied, the industry would have known the impending change in public sentiment on prices and been prepared to act instead of being obliged to trail along after Henry.

At the annual banquet of the Association recently Mr. Lovett reviewed the course of legislation during the current session in Lansing. He took the members to task for their indif-



JOHN L. LOVETT

ference to the politics of the state, but his address not only illustrated the importance of attention to legislation but revealed the excellent work of the Association officers and committees during 1920 and 1921. Mr. Lovett said in part:

"A new member of the legislature came to me shortly after the beginning of the session in January, and he said: 'Do those manufacturers in my district belong to your association?'

"'I presume most of them do,' I replied.

"'Well,' he said, 'they do not even know I am up here. They do not know the name of the representative from their own district.'

"There is a lot of truth in that statement which can be applied to many districts in the state. The question in the mind of the average legislator is whether he is going to be returned to the legislature or, perhaps, whether he may be timber for Congress. Most of the acts of members of the state legislature by necessity are governed by the possible reward in votes. The manufacturers of this state are as much a part of the citizenry as are the legislators or any other class of enfranchised residents. They are entitled to have a voice in the conduct of the affairs of the state, particularly where the legislative and executive work of the state government affects their business and welfare. The legislators seem to know this better than the manufacturers themselves, and they expect to have their opinions on legislation.

"This indifference to state politics is illustrated by the fact that when I send out bulletins on proposed legislation, sometimes with the request that the members take personal action, I get telephone calls from members, requesting to know what district they live in and who are their representatives in the legislature. It is recognized that the executive of a plant is a busy man but I question if there are any other jobs in your plants more important than that of knowing who is your legislative representative and what your Senate and House of Representatives is planning to do you for, or do for you.

The Corporation Tax Law

"To show you how much the legislature can cost you, I call your attention to the Corporation Franchise Law passed at the last session. It provides for a 3½ mill tax on your paid-in capital and surplus. If you have a million dollars capital and surplus, your tax is $3,500."

It should be mentioned here that the Association did not fight this bill, realizing that the state needed money, and the manufacturers were willing to contribute their share to financing the government.

"We not only neglect the state legislature, but Congress," Mr. Lovett continued. "We neglect the elective officers. During the first 100 years of the existence of this country the business men took an active interest in its politics. If you will go back into the history of the acts of Congress, you will find that in 1887, when our country was building a good deal in the country, Congress passed the Interstate Commerce Act, the first regulatory act the business of this country had to submit to. Congress followed that with the Sherman Anti-Trust Act and then came the Clayton amendments, which created the Federal Trade Commission. This commission began to investigate and send questionnaires, much to the dismay of many manufacturers.

"In the last session of Congress an effort was made to license and set up a commission for the control of the coal mines. This was followed by the Kendrick bill for the licensing and control of the packing industry. I mention these things to bring to your mind what is happening in Washington and to show that all of this has happened during a period in the history of this country when the business men and manufacturers have been neglecting to note who the men are that are running for Congress or the state legislatures.

"I want to impress every man here with the importance of remembering that the state legislature is nominated in August every two years and that the largest job you have or will have in the next twenty years is to find out who the right man is to represent you, and see that he is elected. You do not need to fear radicalism if you have the right kind of public officials to enforce the laws.

"The farmers control the lower house of the state legislature and might control the upper house by political log-rolling. Fortunately for us, it takes sixty-seven votes to put through a constitutional amendment in the house and twenty-two votes in the Senate. So far this numerically has not been necessary. We defeated the income tax proposition in the regular session. We are likely to have another session of the legislature in January to consider other matters, and we are due for a running fire of legislation for the next two years. It is up to you men to take more of an interest in politics. It is not necessary to run for office but it is of interest to you to know what kind of men are candidates and whether they are likely to be fair in their decisions.

"All the manufacturers ask is a square deal. I have never asked a member of the legislature for anything more than fair consideration of bills affecting industry, and I am glad to

(*Continued on Page 32*)

Digitized by Google

Every Dye Plant An Arsenal

Why World Disarmament Is Not Safe So Long As Any Nation Monopolizes Color Industry

GERMANY opened the war with projectiles seventeen inches in diameter and closed it with projectiles one hundred millionths of an inch in diameter—in other words, molecules of poison gas—chlorine, phosgene and mustard gas. All of these and many other chemicals as deadly were manufactured in the same plants, by the same men and with the same apparatus that had produced the brilliant colors and the soft shaded pigments shipped to the Allied countries to delight the eyes and tickle the vanities of mankind, while the Kaiser was planning a world conquest that would make Caesar and Napoleon look like bush leaguers.

In the innocent dye plants of the German empire the most insidious virus of a new kind of warfare was being developed, the characters of which were so numerous and indefinite that even the masters did not know their power. Had Germany known that this modern war was to start 100 per cent explosive and end 55 per cent chemical, the fate of the Allies would have been sealed within a few months after the opening of hostilities and before the United States could have rendered any effective aid.

As shown in these columns two weeks ago, Germany controlled and coal tar products industry because of her vast superiority in the knowledge of organic chemistry, organization and numerical strength of research chemists and her pitiless competitive methods encouraged by the apathy of manufacturers in other countries toward the development of a dye industry. By the same methods and facilities she controlled the manufacture of war chemicals, in quantity as well as in character and quality.

By F. W. HERSEY

A saner world talks disarmament but hesitates to speak too loudly until Germany has been disarmed. Remove the last tank, every airplane, Zeppelin, machine gun, "Big Bertha," all her shells, small arms ammunition, armored cars, her sabers and her bayonets, all her rifles, pistols and hand grenades, but leave her dye industry intact, and Germany is armed and ready for a more devastating war than history so far reveals. Give her two innocent units of peace time progress—commercial aircraft and dye works—and Germany will rule supreme—unless every other nation is similiarly armed—with aircraft and dye works.

The burden of this article is the topic of the moment among the chemical and dye manufacturers of this country. Its keynote is: There must be no world monopoly of the dye-making industry. Every nation that hopes to remain independent, prosperous and as happy as nations are permitted to be in this vale of tears, must have its dye industry equal, in proportion to its size, to every other nation's dye industry.

The United States, with its vast resources and uncrowded areas, regarded with jealous, avaricious eyes by other nations cramped for room and starving for resources, must have a dye industry as great as its national risk. All its steel, powder, metal and ordinary chemical resources, all its plants and manufacturing genius will be of no avail unless it can manufacture dyes and coal tar products in variety and quantity equal to the ability of every other nation. The accomplishment of such an ambitious purpose means knowledge and continued research in organic chemistry, the necessary supply of chemists and the frequent discovery of new and valuable aids to medicine and industry.

When Germany began to pour mustard gas into the ranks of the Allied armies the rest of the world did not know what it was. Because the United States had no dye plants and no organized research in organic chemistry it took us eleven months to produce the same gas, and in the meantime this lack prepared ness cost us 300,000 casualities.

In telling the story of mustard gas to a large audience in the Detroit Board of Commerce building, recently, Joseph H. Choate, Jr., said that the solution of the mustard gas problem came from a small dye shop that had been taken from the Germans by the French. After this shop was finally discovered it took just one week to begin the production of mustard gas. As Mr. Choate pointed out, the United States had a wall of Allied armies and the whole British navy between it and possible German aggression, and behind that wall we began to develop a dye industry and produce the necessary chemicals for war. In another war the United States might not have such protection.

Another telling point made by Mr. Choate was this: "Few of the weapons and gases we know of now will be used in another war. The discovery of a method of offense and its defeat by an efficient method of defense ends its usefulness. Success in modern warfare requires constantly new and more terrible engines and means of destruction. We know now that any future war will be one of chemicals largely, and the more we know about organic chemistry the better armed we will be. Old methods of war required the maintenance of fortifications, guns, shell and explosive plants, arsenals and innumerable other

General View of the Proposed Durant Motors Plant in Lansing



AFTER the drawing here shown was completed, a large addition to the plant was decided on. This will be a wing 20 by 400 feet, tied into the main assembly branch. A warehouse, to be constructed later, probably not this year, is also lacking in the drawing but is indicated in the engineer's blueprints.

This cut gives, however, a good idea of the division of the Durant Motors brought to Lansing by Edward Ver Linden, formerly one of the big figures in the General Motors Corporation. The long view is of the general assembly building. It faces the proposed new street to

(*Continued on Page* 34)

Digitized by Google

units. The cost has been enormous and will continue to increase as the years go by.

"On the other hand, the maintenance of a dye industry as a peace time operation which is not only self-supporting but profit-bearing. One German general said that every dye plant was an arsenal, which covers the case perfectly. When gas was first used it was expelled from cylinders and allowed to roll down the wind. Later it was distributed from shells fired from guns. Near the close of the war improved cylinders of light and cheap construction were used. Soldiers could seek safety beneath underground shelters and listen to the huge shells singing overhead, but when the gas came there was no protection. It penetrated into every nook and corner; it lurked for hours and sometimes days in hidden recesses and no man knew when or where he might run into it. In retreat the Germans filled abandoned dugouts and demolished buildings with it, and the Allied troops, in their headlong advance, succumbed to its stifling, burning, killing fumes.

"Knowledge is the prime requisite in chemical warfare. Any men who has the knowledge can make the deadliest gases with a teakettle and two shaving mugs in an old shed. What we know about war is not dangerous, what we do not know about it is. A nation well supplied with commercial aircraft and dye plants would need no other plants to do its drop cylinders of poison gases upon armies and cities and the casualties would be frightful. The successes of the red armies against the Poles were entirely due to what gases did they get it? Russia has no dye plants. The answer is, Germany. Imagine a combination of German dye plants and the bolshevist ambition to destroy existing social orders!"

The Gases and Other Derivatives

The very nature of the gases derived from coal tar products makes it deadly. It is egotistic, consisting of particles having the utmost aversion to each other. Once released these particles fly apart and move with great velocity in every direction—anywhere to get away from possible contact with each other. Hot gases in hot cylinders become, then, the most effective weapon known to man.

Gas is not the only derivative from coal tar to be considered. There are the explosive materials made from benzene, toluol and naphtalene. When France girded herself for war she had 4,000 "75's" but no melinite for the shells they fired. France had been caught in the closely woven dye web and had to go out of the country for melinite, and the source of her supply was—Germany. Melinite and trinitrotoluene are hydrocarbons extracted from distilled coal tar, in which is incorporated oxidized nitrogen.

Germany succeeded in freeing herself from Chilian nitrates and in extracting oxidized nitrogen from the atmosphere, an element necessary in the manufacture of high explosive. Chile was the only source of nitrates for the Allies. Germany was the only nation in the war that could make explosive entirely in her own country, because she had a dye industry five times greater than any other country.

Dr. Charles H. Herty, member of the Conference on Reparation Dyes, told a committee. at committee that Sections 168 and 169 of the Peace Treaty provided for the chemical disarmament of Germany by the destruction of her surplus dye works, but the American influences were exerted against the execution of the provisions, despite the fact that all Europe desired it. Before the war closed, Dr. Herty said, the nation knew of the possibilities of destruction through gas bombs and slow evaporating liquids dropped from airplanes and the effectiveness of smoke candles of a toxic nature dropped from aircraft or released from submarines, but because the warring nations were so equally matched, each feared to start it. Congress has yet to realize the importance of chemical warfare, as evidenced by the fact that of $24,000,000 appropriated for the fighting forces only two-tenths of one per cent is for chemical warfare, which caused more than one-third of the casualties.

Maj. Lefebure said, in an article published in Metallurgical Engineering, that, of the three factors in warfare—combatants, mechanical armament and chemical constituents—the facilities necessary for the last named factor were the easiest converted from peace time to war time activity. The means for chemical warfare cannot be destroyed or curtailed in peace times because they are too closely connected with industry. There is only one way to guarantee protection and that is by preventing any nation from maintaining a chemical and dye monopoly. Production is the key to the war use of any invention, and in the face of Germany's chemical warfare, the United States and the Allies were woefully weak in production of chemicals when their importance had been established.

"The dye industry is an international question calling for the re-distribution of the industry with each nation's legislative power supporting it at home." Major Lefebure said.

A few extracts from statements by military men and leading scientific men show the situation.

Major-General W. L. Sibert, former director of the United States Chemical Warfare Service—"Five of the guns used by the German army in the late war were composed of materials used in dye manufacture. These materials passed through the same processes for dyes or gases or explosives up to the point where they became the raw materials for toxic gases and explosives. Any industry using electricity is equally available for war or peace, and the dye industry uses electricity."

Rear Admiral Ralph Earle, U. S. N.—"In case of war it should not be necessary to expend time against time to build intermediary explosive and chemical plants, and it would not be necessary if the United States had a dye industry. The average dye works can be converted into an explosive or chemical plant in three weeks. Toluol, phenol and xylol are important chemical combinations that come from dye plants."

Col. C. T. Harris, assistant to the chief of manufacturing, Ordnance Department, U. S. A.—"An American dye industry would have the advantage that it would increase the number of chemists, particularly research chemists; it would increase research in coal tar products; it would provide permanent plants for the manufacture of explosives and chemicals for war purposes, when needed. Diphenylamine, a stabilizer of smokeless powder, was found by accident while making research investigations in coal tar products. T. N. T. came from the same source but were discovered by the German chemists."

Col. J. H. Jones, acting chief of the nitrate division, Ordnance Department—"We already have arranged with dye manufacturers in this country to make tetranitro aniline to take the place of T. N. T., and it will be known as T. N. A."

Dr. M. T. Bogert, professor of organic chemistry, Columbia University, and director of research and chemical technology of the National Research Council, and of the gas service organization in this country—

"A well developed synthetic dye industry is absolutely necessary for the security of our country. The search for dyestuffs has been responsible for all the research work in the distillation of coal tar. It is a basic and essential industry. Chlorine, one of the essential ingredients and the backbone of most toxic gases, came from the dye industry, which provided Germany with enormous quantities of it. It was first used by Germany at Ypres, April 22, 1915. We can produce all the dye we need, more that are not yet known, and better dyes than Germany can, once we get started. So far our experimentation and production has been on such a small scale as to be only sufficient to show what we could do if we tried."

Thomas A. Edison—"Give the United States a license law for four years and we will beat Germany at her own game. During the early part of the war I erected the first plants for producing benzol and toluol. The latter was used to make T. N. T. The benzol was used in my plant, where I produced the first synthetic carbolic acid for our government, from which it made picric acid explosives at Picatinny, N. J., and Indianhead, near Washington.

"I was the first one to produce aniline oil in quantity for the textile mills, at their request, to prevent them from shutting down. I was also the first to produce in this country paraphenylenediamine, which saved the fur dyers from closing their doors. Other very necessary chemicals were also produced in these early plants. Altogether, I put up five chemical works and four subsidiary plants, all of which were erected within 65 days from the time of starting. I continued to operate these various plants until other manufacturers could supply the market, when I retired and sold the apparatus to various chemical works. These facts are mentioned to show that I am familiar with chemical manufacture, but I no longer have any interest in this kind of production.

"I have been reading about the various schemes that are being put forth for protecting our factories against German low cost until they get a little more experience. It is my opinion that nothing of the kind should be granted, by tariff, which would be no protection at all, but by a licensing system, good for, say, four years, at the end of which Congress, if necessary, could extend the license. I believe that ultimately the Americans will beat the Germans at their own game."

On the Medical Side

Either war or industry to be vigorously prosecuted must have a nation of healthy workers or fighters behind it. Man is everlastingly fighting disease; and the general headquarters of all the fighting forces is the research laboratory. There the biological theory that attributes disease to microbes and bacteria was discovered and many of the anti-toxins that have rendered diseases less virulent, if not entirely impotent, came from the same source. These anti-toxins either kill off the germ life or neutralize the germ poisons.

One of the prolific sources of these anti-toxins has been the dye plant. Adrenalin, which formerly came from the glands of sheep, and therefore was costly, is now derived from coal tar intermediates. Aspirin, phenacetin, procaine and barbital, perhaps the better and important antiseptic, came from the dye plant laboratory. Salvarsan, the best known cure for the human plague, was discovered in German dye works but today it is made in the United States at much less cost and more effective in character than it is produced in Germany. When Germany controlled the dye industry she sold this and other synthetic drugs in the United States at four times the price she demanded in the Canadian market.

Dye materials come in three classes, crudes, intermediates and finished product. The crudes can be found in any steel plant and in the coal tar industry. They are by-products which result not so much from skill as from the nature of common and well-known operations. From the state of intermediates to the finished product there must be applied a great amount of scientific skill.

The greater this skill the greater production will be and the lower the cost of the by-products obtained. In the beginning these processes do not spell economy because the yield in products is often discouraging, with a great amount of waste. German chemists have been working and experimenting so many years that they have been able to get as high as 90 per cent yield. Mr. Choate made this very plain in his address and added that utmost encouragement should be given the American dye industry so that time and skill could be made less costly problems.

(Continued on Page 36)

Digitized by Google

General Motors' Outlook Is Said to Be Improving

Referring to the recent decline in General Motors Corporation common stock, the Wall Street Journal said:

"Selling of the last few days, which put the common below 12, probably represents the liquidation of speculative holdings by people alarmed at the prospect of a general slump in the automotive industry. So far as General Motors Corporation is concerned, however, it is at the moment in better position than earlier in the year. For the first quarter common dividend requirements of twenty-five cents a share, or $5,000,000 for the 20,000,000 shares, were not earned. It appears certain that the dividend will be earned in the current quarter.

"Even in the face of a probable falling off in business during the last half of the year, General Motors should make a fairly good showing because it has succeeded in substantially reducing overhead. Production schedules at the beginning of the year were laid out on a basis of approximately 50 per cent of operations in 1920. Plans were made, however, whereby output could be quickly expanded whenever necessary.

"It has been rumored that General Motors was seeking to dispose of some of its passenger car divisions, probably Oakland and Oldsmobile. No such project has been under discussion, although the management is not entirely satisfied with Oakland. A general reorganization of this division is being undertaken which, when completed, will greatly strengthen the position of General Motors as a whole.

"As a further measure of retrenchment it is not unlikely that the company will greatly curtail or give up altogether some of its activities in lines not directly affiliated with the automotive industry, such as the Frigidaire Corporation, Sunnyhome Electric Company, etc."

The Corporation announces that it has not disposed of the Frigidaire Corporation, which manufactures refrigerators, but that the activity of the Frigidaire is being extended through the sales organization of the Delco-Light Company, a subsidiary of the General Motors, in Dayton, O. The Sunnyhome Electric Company, which manufactures domestic farm light plants and accessories, has been consolidated with the Delco-Light Company.

MOVIE SHOWS BELT MANUFACTURE

The Charles A. Schieren Company, tanner and manufacturer of leather belting, has had a four-reel motion picture made of belt manufacturing operations from the tanning of the raw hide to the packing of belting for shipment. The tanning process, cutting, shaving, scouring, "stuffing" to make the leather pliable, and the stretching operation are shown. The company manufactures belts from one inch to 72 inches wide, and has tanneries in Bristol, Tenn., near the source of oak bark supply, a plant for belt making in the same city, another plant in New York city, a rawhide lace factory in Brooklyn and seventeen branch offices throughout the country. The motion picture film was made as an educational feature to be displayed at meetings, in industrial plants, and wherever there is an interest in tanning and belt manufacturing. The Detroit office of the Charles A. Schieren Company is at 65 Shelby street. J. A. McGee is manager.

REALTY CONVENTION PLANS

The Michigan Real Estate Association will send a delegation of 400 members to the convention of the National Association of Real Estate Boards, Chicago, July 12 to 15.

STRAIGHT LINE METHODS

Courage in Business

All modern industrial and mercantile expansion depends upon courage. It explains progress. It determines the limits of individual success. It is the physical expression of confidence and belief.

Business moves forward only so far as it is led by men with the vision of new conditions, new ideas, new forces, new methods —*and the courage to put them through.*

Business weaklings are left behind at the end of every period of inflation. Courage is not governed by conditions; it controls conditions. It not only recognizes, but eliminates, weak organization, mistakes, inefficiency.

Courage is inspired by knowledge. Knowledge dispels fear. Knowledge of your business—timely and dependable Facts and Figures from every department—points out weakness and waste; while knowledge of better methods, *with courage,* eliminates them.

ERNST & ERNST

AUDITS — SYSTEMS
TAX SERVICE

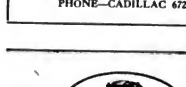
DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK, PHILADELPHIA, BOSTON, PROVIDENCE, WASHINGTON, CHICAGO, MINNEAPOLIS, ST. PAUL, ST. LOUIS, KANSAS CITY, CLEVELAND, BUFFALO, PITTSBURGH, CINCINNATI, INDIANAPOLIS, TOLEDO, ATLANTA, RICHMOND, NEW ORLEANS, DALLAS, FORT WORTH, HOUSTON, DENVER

STRAIGHT LINE METHODS

Digitized by Google

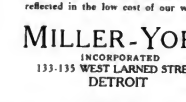
Allegheny
STEEL SHEETS
AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work
SHEARED PLATES
3-16" and Heavier up to 96" wide
Lap Welded Steel
BOILER TUBES
2" to 6" O. D.
Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729



THE eighth world wonder is the workman who really enjoys and prides in his work. We have him. In fact we have many just like him. How do we do it? By a system which recognizes merit and rewards initiative.

The benefit of such a system is soon reflected in the low cost of our work.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT



AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

OLDS PRODUCTION INCREASED

The Olds Motor Works, Lansing, has resumed operations after being closed for a short time due to the receipt of rear axles which did not meet the requirements of the company. This delay will necessitate greater efforts to meet the demands of the sales organization. The plant is now 10,000 cars behind orders, and preparations are being made to increase production to 160 a day, the highest so far this season being 133. Most of the cars are to be delivered during the next three months. Many sales agents and distributors of the company in various parts of the country are visiting the plant to arrange for early shipments. Among those who have been here for conferences with officials of the sales department are H. H. Hall, Frank Witt and B. J. Kenyon, of the Illinois Oldsmobile Company, Chicago, the largest distributors of Oldsmobile products.

STUDEBAKER PRODUCTION

President A. R. Erskine, of the Studebaker Corporation, Detroit and South Bend, Ind., is credited with the statement that during the first six weeks of the second quarter of this year 10,000 Studebaker cars were made and sold and that the company had orders on hand recently for 7,600 cars. Production as planned for June is said to call for approximately 8,000 vehicles.

STROMBERG CARBURETOR REPORT

The Stromberg Carburetor Corporation's net income during 1920 totaled $787,443, as compared with $870,566 in 1919. Net profits were $340,101, as against $401,328 for the previous year. Total assets on December 31, 1920, were $3,290,301, as compared with $3,476,809 at the end of 1919. The surplus was $2,344,943, as against $2,255,965.

FISHER BODY'S BUSINESS

Although there has been some slackening in the automobile trade the Fisher Body Corporation is at present doing the biggest business in its history, says the Wall Street Journal. Aside from its General Motors contract, which is on a cost-plus basis, the Detroit company makes bodies for numerous other manufacturers, including Ford, Cleveland and Chandler.

OUTPUT NOW 20,000 DAILY

The American Bushings Corporation, Marysville, which is making bushings for the American and Canadian Ford companies, has increased its production to 20,000 a day. Important changes in the method of production have been devised by President J. W. Leighton.

WILL MAKE OWN WIRING EQUIPMENT

The Willys-Overland Company, Toledo, is making arrangements to manufacture wiring equipment for Overland and Willys-Knight cars at the Toledo plant instead of having them made by the Electric Auto-Lite Company, as at present.

MAXSON WITH DURANT MOTORS

L. D. Maxson, purchasing agent of the Olds Motor Works, Lansing, has resigned to accept a similar position with Edward Ver Linden, general manager of the Ver Linden division, Durant Motors Corporation. Until the new plant is in operation he will have purchasing authority for all material to be used in the plant, as well as the mechanical equipment. Mr. Maxson began work with the Olds in the purchasing department 16 years ago, and was made purchasing agent by Mr. Ver Linden three years ago. His successor has not yet been announced.

STEVENS-DURYEA ADDS MEN

It has been announced that the Stevens-Duryea Motor Company, Springfield, Mass., added 150 men to its force last week and that its Williamansett plant has reopened. Production has been increased 50 per cent.

BUSINESS BETTER IN COTTON BELT

Walter Zimmerman, special representative of the Olds Motor Works, Lansing, has returned from an extensive trip through the cotton belt with a report that business conditions are better in Texas, Mexico has a more stabilized government and is beginning to buy in Texas. Cotton growers are more optimistic because an effort is being made to finance the cotton interests through a banking pool, he says. However, the night riders are still busy destroying property. With proper financing and rates of exchange, he declares, European countries will be in the market for cotton as millions of spindles are idle there

AUTO LICENSE ISSUE INCREASED

Up to May 1 there has been issued 381,672 auto license plates by the department of state in Michigan. Another 15,000 have been sent out since. Four hundred and fifty thousand plates have been ordered for this year, while last year there were less than 412,000 licenses issued.

REO CANADIAN SALES STRONGER

Canadian sales of the Reo Motor Car Company, Lansing, are increasing. Large orders have been received from the Windsor agency for Ontario, Quebec and the maritime provinces, while the western market is also opening up. Production in Windsor is approaching normal in the face of the economic depression in western Ontario.

AUTO CLUB PLACES SAFETY SIGNS

The Lansing Automobile Association has placed safety signs in the neighborhood of schools throughout the city. These carry the words, "Drive Slow—School Ahead." About 200 of the placards have been placed. Later the association will place signs at the dangerous corners of the city.

WHEEL WOOD SUPPLY ASSURED

The Motor Wheel Corporation, Lansing, need not worry about a timber supply for the next 50 years, according to officials of the company. Emil Brock, of the Weis-Lesh Manufacturing Company, Memphis, Tenn., a logging and spoke manufacturing unit of the corporation, has been in Lansing for a conference with H. F. Harper, general manager, and other officers of the concern. The Memphis unit has a large supply of raw material ready for shipment to the wheel units in Lansing. At present the mills are running at a lower production than a year ago.

CAPITAL AUTO IN NEW QUARTERS

The Capital Auto Company's repair and service department, Lansing, is now located in the Porter building, formerly occupied by the Lansing Taxicab Company. The offices, salesrooms, used car and storage departments are also located in this building, bringing all departments of the company together. Ample accommodations are provided and a complete stock of Dodge motor car parts is carried.

Digitized by Google

Saves Money On Every Cut!



It's automatic, self-adjusting gravity feed prevents the breaking of saws on hard spots.

The "NAPIER" Metal Cutting Machine

Is economical.
Cuts fast and smooth.
Requires no skill to run it.
Costs less to operate.
Is built strong and rugged.
Power consumption is small.
Its bands are efficient and long wearing.
No danger to operator—"Safety First."
Needs no repairs or attention.

Regular machine—Capacity 10"x10".
"Junior" machine—Capacity 4"x4".

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

RICE DINED BY ASSOCIATES

H. H. Rice, recently elected president of the Cadillac Motor Car Company, was tendered a complimentary dinner in the new plant a few days ago by 375 associates in the company's executive offices. In an address he said that the reduction in discount rates and the easier credits indicated a gradual improvement of the business situation and in a short time the automotive industry would be stronger than at any time in its history.

CHURCHILL JOINS BUICK

Charles W. Churchill, formerly general manager of the Winton Company, Cleveland, has been added to the sales force of the Buick Motor Company, Flint. He is a director in the National Automobile Chamber of Commerce.

BURNETT GOES TO CADILLAC CO.

Verne E. Burnett, who has been in charge of advertising at the plant of the Liberty Motor Company, Detroit, has resigned to join the advertising staff of the Cadillac Motor Car Company, Detroit. Mr. Burnett, prior to going into the advertising business, was on the editorial staffs of the Detroit Free Press and Detroit News at different times.

Million-Dollar Tire Plant for Bay City



ABOVE is shown the first unit of the plant of the Wildman Rubber Company, Bay City, the contract for the erection of which has been awarded to the Bay City Stone Company, which put in the foundation. This unit is 365 by 161 feet in dimensions, three stories and basement, and will be built of reinforced concrete, with brick facing, asphalt mastic floors and composition roof. The equipment will be of the most modern design.

The plant is located on the Saginaw river with deep water frontage of half a mile, and on a tract of 63 acres donated by the Bay City Board of Commerce and J. F. and R. P. Leahy. It is of such size as to permit of the manufacture of 2,500 tires and 5,000 tubes daily, and when conditions warrant the company has enough land for plant extensions which eventually will make possible the production of 50,000 tires and 100,000 tubes daily.

W. W. Wildman, president of the company, is one of the pioneers of the rubber industry, having been for some years president of Portage. James C. McCabe, for several years secretary of the Bay City Board of Commerce, is secretary of the company.

BOWERS ON COLUMBIA STAFF

J. T. Bowers, for years a piano and dry goods salesman, and who has been connected with Grinnell Brothers for a number of years, has joined the sales organization of the Columbia Motors Company, Detroit, as commercial manager.

DURANT TO CONTROL SHERIDAN

While thus far no official announcement has been made by Durant Motors, Inc., regarding the recent transaction involving the Sheridan Motor Car Company, Muncie, Ind., which was one of the General Motors properties, this publication is in a position to state unofficially that Durant Motors, Inc., will own a controlling interest in the Sheridan Motor Car Company, which will manufacture an exclusive six-cylinder car to be sold at a popular price. D. A. Burke, will continue as president and general manager of the company and the Muncie plant will be in quantity production by January, 1922, with a capacity of 25,000 cars annually.

REO ORDERS 1,000 BODIES

The Hayes-Ionia Company, Ionia, has received an order for 1,000 high grade bodies for the Reo Motor Car Company, Lansing. This is a new body and was designed by Victor Preston. The company also has made 100 bodies for Durant Motors, Inc., and will be delivered in the near future.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

WICKES BOILERS
Vertical Water Tube Type



Steel Cased Setting
Increases Efficiency.

Ask for Bulletin: Magnitude and Prevention of Air Infiltration Losses
Sent Free

The Wickes Boiler Company
SAGINAW, MICHIGAN
Michigan Sales Office:
1116 Penobscot Building, DETROIT, Mich.

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

COMMERCIAL HAULING

JITNEYS CUT TROLLEY REVENUE

Motor busses are cutting heavily into the proceeds of the Toledo Traction Company. Reports from that city state that in three months the street railway lines accumulated a deficit of $204,301. Bus operation is netting a revenue approximated at $1,000 daily.

Bus fares are five cents and street car fares are six cents, with one cent charge for a transfer. The railway company has a stabilizing fund which will be reduced so low by August 1 that fares will have to be increased again, it is expected.

A city ordinance recently passed has established a license fee of $100 against the buses and requires a $10,000 indemnity bond for operators. This is being contested.

BUS RATES REDUCED

George Wilson, who operates a freight and passenger motor service between Sault Ste. Marie and Pickford, has announced a voluntary reduction in rates, effective June 1. Mr. Wilson announces that he will continue his service twelve months in the year, which is a departure for the upper peninsula.

BRIDGMAN BUILDS TRUCK DOCKS

Increased facilities for handling fruit shipments and other merchandise by motor truck in the Benton Harbor-St. Joseph territory are being built at Bridgman, in Lake county. Glaras & Katsulas are building a fruit loading station near the plant of the Bridgman Fruit Growers' Association plant. It is planned to make delivery of all freight from this warehouse that arrives from Chicago over the Graham and Morton line by trucks. The use of motor equipment will speed up the service between Chicago and the twin cities, it is reported.

SCHOOLS USE MOTOR BUSSES

Motor busses are revolutionizing the rural system of education. Standard schools, to which children are brought in these vehicles, are replacing the old fashioned country school. There are now 12,000 standard schools in the United States, according to the United States bureau of education.

A compilation recently made shows the number of children carried to standard schools and the percentage of them that travel by busses. Figures were obtained from the superintendents of public instruction in the respective states, which show the following:

State	Children Carried	Carried by Motor Bus
Florida	7,867	nearly 100%
Alabama	4,944	78
Illinois	200	78
Kentucky	4,569	66
Delaware	510	60
Washington	20,000	45
Iowa	30,000	40
Minnesota	16,268	25
Massachusetts	25,325	18
Connecticut	2,356	11
Vermont	3,570	few
Mississippi	30,772	not recorded
North Dakota	23,000	" "
Georgia	5,742	" "
Texas	2,683	" "
South Dakota	2,288	" "

Early Coal Purchases Urged by I. C. R. R. Head

C. H. Markham, president of the Illinois Central Railroad, in a notice sent to freight agents and manufacturers urges the early purchase of bituminous coal for manufacturing purposes while there are 225,000 idle open top cars and hauling conditions are most favorable to the railroads. Mr. Markham says the present rail equipment is sufficient to handle an evenly balanced tonnage of coal if the bulk of this tonnage is thrown upon the roads in the fall and early winter, there will be another coal shortage.

He calls attention to the fact that there is only a small quantity of coal above ground and the present output indicates that during the latter half of the year it will be necessary for the mines to produce and the railroads to haul 380,000,000 tons of bituminous to equal the output of 1920, which was a short year.

The coal shortage of 1920 forced the Interstate Commerce Commission to rule that all open top equipment be used for coal, which resulted in a shortage of road and building materials, also carried in open top cars. However, there is no indication of any competition between the coal industry and the building material industry for open top cars, but on the other hand, as Mr. Markham points out, a mad rush for coal in October, November and December will result in price increases and delayed shipments, especially if the railroads have a bad fall and winter.

FURNITURE EXPOSITION OUTLOOK

A large number of applications for reservations have been received by the Pantlind Hotel, Grand Rapids, in connection with the summer furniture expositon, which will open June 27. In this connection the Grand Rapids Press says:

"There will be more sellers in the market, it is expected, than in any former season. The exposition buildings are filled and many new lines are promised. All the space in the Blodgett, which has been only partially filled in recent seasons, has been taken and there is a strong demand for outside space for exhibits that cannot get into the exposition buildings.

"The Conrey-Davis Company, Shelbyville, and the Orinoco and the Lincoln Chair Companies, Columbus, Ind., which dropped out three years ago to put their capacity into phonograph production, will be back in the market with new lines. The Connersville Furniture Company also dropped ont to manufacture phonographs and it is as yet uncertain whether it will be back.

The Grand Rapids manufacturers have their plans for the new season well advanced. The market was pretty well cleaned up of surplus goods at the mid-season sale and the new season will produce many new patterns."

VACUUM OIL'S NEW BRANCHES

The Vacuum Oil Company, 61 Broadway, New York, has opened two new branch offices to take care of the increased demand for its products, Gargoyle mobiloils for automobiles, tractors, etc., and Gargoyle lubricants for plant lubrication.

The new offices are located at Buffalo, N. Y., and Dallas, Tex. The Buffalo office will cover New York state west of the Hudson river. The trade will be supplied from the company's plant at Rochester, N. Y., or from warehouses at Buffalo and Albany.

The new Dallas office will cover the states of Texas and Oklahoma. Warehouse stocks will be carried at Dallas, Texas City and Oklahoma City.

Malcolm McIntyre, eight superintendent of the Detroit United Railway, has resigned to become general superintendent of the Mobile Railway Company, Mobile, Ala. Mr. McIntyre has been connected with the D. U. R. twelve years.

Digitized by Google

Brass Forging Work Success With Mueller

During the war, brass forging, which was more or less in the experimental stage prior to 1914, was given a marked impetus, especially in the Port Huron and Sarnia, Ont., plants of the Mueller Metals Company, where considerable research work in forging brass and bronze had been going on for some time. Production of brass forgings in the Sarnia plant of the company was pushed energetically until it reached 225,000 forged fuse parts daily. After the armistice the company continued with its development work, and during this period of depression it is making tools and dies for the production of brass forgings for the automotive and other industries throughout the country.

The new process for forging brass developed by the Mueller company will, it is believed, help considerably to reduce the cost of production in plants making brass products of one kind or another, particularly in automotive plants where considerable brass is used. Where brass forgings are used, they will, to some extent, replace sand castings, although at present the Mueller company has not been able to produce forgings where core holes are used, or parts weighing less than three or four pounds.

The principal arguments for forged brass parts are summarized as follows:

Forged under 200 pounds pressure per square inch while the metal is at a cherry red heat, brass forgings have no sand holes nor flaws. The metal is as fine grained as tool steel and is claimed to be 80 per cent stronger than sand castings.

The Mueller comparison of physical properties is as follows:

	Brass Forgings	Sand Castings
Tensile strength	54,000 pounds	30,000 pounds
Yield point	28,000 pounds	15,000 pounds
Elongation	30%	20%

It is claimed that special bronze forgings can be made to equal a tensile strength of 105,000 pounds. The greater strength is considered equivalent to lighter weight parts for the same service. These forgings are made to .005 of an inch on diameters of .010 of an inch on lengths. The surfaces are smooth and free from scale, which reduces the cost of buffing, polishing and nickel plating.

Increased production with attendant economy is claimed because there is less material to be removed, the material is free-cutting and uniform, exact dimensions save time in chucking, tools last longer without grinding, rough machining operations are not required, the forgings wear longer, there is less scrap metal, more pieces to the pound and less labor required in preparing the parts for assembly.

NEW TARIFF BECOMES EFFECTIVE

The following articles, previously free of import duty, have been declared taxable under the recent tariff: Cattle, sheep, corn, grain, flour, sugar of milk, cotton, fresh, frozen, prepared or preserved meats cream, fresh, preserved or condensed milk, cocoanut and cotton seed oils, potatoes and all grades of wool. This measure is to be effective for six months pending a permanent tariff. The measure empowers the Secretary of the Treasury to use penalties in staving off dumping of foreign-made goods, continues the wartime control over importation of dyes, and operates to clarify tangles in the assessment of duties which result from fluctuating exchange rates.

DETROIT TAX RATE INCREASED

Detroit's tax rate will be between $21.60 and $21.65 for 1921, according to official announcement. Th's is an increase of $1 over the 1920 rate. The assessed valuation is $1,858,476,350, an increase of $150,360,620 over 1920, and the increased personal assessment is $38,000,000.



Digitized by Google

Detroit United Lines
(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:30 a. m. and every two hours to 5:30 p. m. Toledo only, 7:30 p. m.

TOLEDO EXPRESS—6:30 a. m. and every two hours to 6:30 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6:30 p. m.

JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.

FLINT, BAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

(MLAY CITY LIMITED—3:15 p. m.

PORT HURON—6:30 a. m. and every two hours to 6:30 p. m. Sundays only, 11:00 p. m.

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

Hughes
FACTORY EQUIPMENT
STRONG, DURABLE AND PRACTICAL
MEETS FACTORY REQUIREMENTS
WRITE US
HUGHES STEEL EQUIPMENT CO.
FACTORY & HOME OFFICE - ALLEGAN, MICH.

The Bellefontaine Bridge and Steel Co.
Fabricators of
STRUCTURAL STEEL
Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6851.

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

Flint's Much Needed Belt Is Materializing

For several years a railroad belt line has been proposed in Flint. It has been pointed out that it would mean without doubt a rapid expansion of the city's industrial area. According to announcements made a few days ago both by city officials and executives of the Pere Marquette railway, the belt is now practically assured. In fact, President Frank H. Alfred, of the P. M., is quoted as saying that a new corporation, independent of the railroad company, probably will be formed to construct and operate the line and that the first section is to be completed by July 1, 1922, and the remainder by July 1, 1924.

About all that remains to be done in order to be able to say that the project has actually materialized is the attaching of the signatures of the mayor of Flint and the city clerk to the contract which has been drawn up between the city and the Pere Marquette, says the Flint Journal, which adds:

"Authority to sign the contract was granted by the common council but the document will not be signed, it is understood, until the full amount of the purchase price of the right-of-way has been subscribed by citizens who are donating the land to the railroad company. This amount has been fully underwritten by various organizations and individuals in order to safeguard the interests of the city, since the charter prohibits the donation of land to the railway company, it thus being necessary that the land be purchased by private subscription, and a quiet campaign is being conducted to obtain subscriptions for the amount still needed, which is expected to occupy but a very short time."

It is said that options on most of the property were obtained at very low figures, although some portions of the right-of-way will have to be condemned, which will not delay work, inasmuch as the P. M. will be permitted to give bond to cover the probable cost.

A special committee of trustees has been appointed by Mr. Edwin W. Atwood, consisting of Arthur G. Bishop, J. Dallas Dort and Leonard Freeman, to receive donations on behalf of the city, the money not to be handled by the city or in connection with the city funds.

It is likely that the one thing which has contributed much of late to bringing the matter to a head is the proposed location of a plant of the Durant Motors, Inc., in a part of the city where the belt line will be all important.

"Securing of the Pere Marquette cut-off means the opening of a great industrial district in the east side of the city," adds the Journal. "It extends nearly eight miles from a point north of Grand Blanc to McGrew's Station near the waterworks plant north of the city, with factory sites available practically the entire distance. The city's industrial expansion has reached its limit in other directions, but the opening of the east side district will mean that the city can now invite other industries here with adequate factory sites and transportation assured."

CREDIT MEN'S ELECTION

S. Owen Livingston has been elected president of the Grand Rapids Credit Men's Association. Other officers are Richard J. Prendergast, vice-president; Frank V. Blakely, secretary; Clyde L. Ross, treasurer; executive committeemen, Rudolph M. Bremer, L. Z. Caukin, Charles H. Gallmeyer, Charles Holden, Lee M. Hutchins, Carl S. Hester, John D. Karel, A. H. Merritt and Allen K. Tyson

Transportation

Benton Harbor—The Benton Transit Company started its season's navigation this week, with the steamer Frank Woods. The boat will make three trips a week, from Benton Harbor to St. Joseph and Chicago, and return

East Tawas—Under the direction of J. K. McHarg, Jr., president and general manager of the Detroit & Mackinac Railroad, new repair shops have been built of concrete and equipped with modern machinery. Headquarters have been located in East Tawas and gradually the offices of the purchasing department, now in Detroit, the operating department and the traffic department, formerly in Bay City, are being established in East Tawas. Two large dwelling houses have been purchased and furnished for office work.

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service
Investors will find it to their advantage to consult
Our Statistical Departments
before making commitments. This service costs you nothing.
Write, Phone or Call

WEBB, LEE & CO.
Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit
Correspondents:
Thomsen & McKinnon
Members New York Stock Exchange

WATCH—for the opening of our New Main Offices in The Detroit Savings Bank Building, cor. Griswold and State Sts.

THE DETROIT SAVINGS BANK

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Fort St., E. DETROIT

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

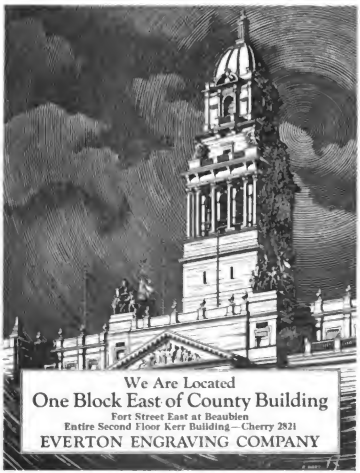
Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098



MOTCH AND MERRYWEATHER MACHINERY CO

THE METAL WORKING MACHINE TOOLS

DETROIT OFFICE
MAJESTIC BUILDING

Digitized by Google

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product Glass Plants Excellent for Steam

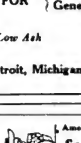
BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064



America's Headquarters for

Second Hand Electrical Machinery

Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.

CHICAGO, ILLINOIS

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

PHOTOGRAPHER

STUDIO BUILDING

4938 WOODWARD AVE.

MAIN 6436-W

Commercial and Portait

Rush Work Given Special Attention

Glendale 10

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—Plans for on own-your-home exposition have been submitted to the Detroit Real Estate Board by Robert H. Sexton, president of the Business Counsel Corporation, New York city. A similar exposition was held in Chicago in March. If the exposition is held a special building will be erected for it and the date will be in September or October.

Lansing—The Brown & Gordon Company has closed a contract with the H. G. Christman Company to furnish all the sand and gravel for the new Durant plant, which will require about 100,000 yards. To care for this big contract a new sand and gravel washing machine has been installed.

Detroit—The schedule of contract lettings by architects and general contractors as prepared by the Detroit Builders Traders Exchange for the week ended May 26, includes a building to be erected in Royal Oak for the First State Bank of Royal Oak; a number of stores and residences, alterations to an office building, and some minor jobs. As for projects in the hands of architects, they include a brick and steel 57-apartment building, a brick and steel 30-apartment building and a three-story 16-apartment. Other work was a brick and steel one-story market building, a brick ladder house to be erected at McGraw and Martin avenue, an addition to the Doty school, a brick and steel factory building, a solid brick store, office and dance hall building, and a large amount of smaller construction.

Holland—The Willis Road Construction Company, Detroit, has been awarded a paving contract by the city council involving an expenditure of $77,445. The job includes, besides paving Ninth street, the installation of curb, gutters and other incidentals.

Lansing—The Wolverine Insurance and the Michigan Employers' Casualty companies have decided to erect a five-story office building here to provide for increased business. The companies will occupy the first two stories. The Wolverine Building will cost approximately $150,000. The Wolverine company was organized a year ago to specialize in auto insurance as an old line company, and also to write insurance on business property. The company has authorized an $800,000 stock issue, putting the concern in the million dollar class, as $200,000 of the stock has already been passed upon. The remainder will be placed on the market as soon as approved by the Michigan Securities Commission. The price of Wolverine stock went from $40 to $50 June 1.

Lansing—The city council has voted to submit to the people at a special election the question of issuing $200,000 in bonds or the erection of a memorial building to the veterans of three wars, the structure to include an auditorium, club rooms, banquet hall, etc.

Detroit—The Fellowcraft Athletic Club is planning the erection of a clubhouse to cost between $2,000,000 and $3,000,000, to be located at Second avenue and Ledyard street, facing Cass park, and to be ready for occupancy in 1923.

Lansing—Prospects of another industry for Lansing are indicated by negotiations opened for the establishment of a paper mill by David Friedland, of the Friedland Iron Company. A site along the Grand River would be provided, and with good shipping facilities, the central location for securing waste material in the state and the distribution of the product, the opportunities for such a plant are believed excellent. Lansing takes about 25 per cent of the product.

Detroit—The board of education has awarded contracts for the erection of three school buildings as follows: Noble school, in Fullerton avenue, John Bollin Company, $127,885; an elementary school in Joy road, John Bollin Company, $126,800; an elementary school in Broadstreet boulevard, Max Bartholomael, $127,380.

Lansing—The Reiniger Construction Company has completed the steel work for the George E Lawrence & Son plant and the walls will be started. The building is to be ready for occupancy by early fall. It will be two stories high with basement and 100 by 142 feet. It will be one of the largest and most modern bake shops in Michigan.

COAL PRODUCTION REPORT

Bituminous coal output for the week ended May 14 totaled 7,937,000 tons, which is nearly 600,000 tons in excess of the previous week's production and almost 1,000,000 tons more than the record of the last week in April. The Department of the Interior says that the increase is due probably to the increasing shipments to the lakes and to tidewater for export. The output of anthracite also showing a goodly increase for the week, the total being 1,938,000 tons, or 300,000 more than for the week of May 7. Carload shipments also show gains. There were shipped from the bituminous mines 148,554 carloads, as compared with 138,032 during the week of May 7, while from the anthracite fields 14,267 went forward 37,063 carloads, as compared with 31,217.

The department's records also give figures on anthracite in storage. On April 1 there was in storage with ten of the largest producers, including tonnage of all the railroad coal companies and the Susquehanna Colliery Company, 1,613,066 tons, as compared with 577,829 on January 1 and 1,110,777 on June 1, 1920.

MARSHALL CORSET CHANGES NAME

The Marshall Corset Company, Marshall, besides changing its name to that of Corset Artistique, Inc., has increased its capital stock from $50,000 to $200,000. Hereafter the concern will make only the highest grade corsets for leading department stores throughout the country. The officers are: H. H. Stiles, president; L. C. Bloomfield, vice-president; George B. Caldwell, secretary, and R. H. Loveland, treasurer.

DETROIT GRAIN ELEVATOR PROPOSED

H. E. Botsford and C. M. Martin have obtained the indorsement of the inland waterways committee of the Detroit Board of Commerce of a plan to build a 2,500,000-bushel grain elevator in Detroit to take care of the needs of the port of Detroit when the Great Lakes-St. Lawrence waterway has been built. Messrs. Botsford and Martin, who propose to organize a corporation to build the elevator, pointed out to the committee that cargoes for ballast were necessary if overseas trade were to be developed, for masters decline to go to sea with only water as ballast.

HUGHES STEEL EQUIPMENT ELECTION

E. L. Koenig, formerly assistant sales manager of J. T. Ryerson & Son, Chicago, has been elected vice-president and a director of the Hughes Steel Equipment Company, Allegan. W. H. Shirley also has been elected to the directorate.

Digitized by Google

Pikes Association Tourists Will Circle Lake Superior

Three hundred persons, a brass band of 40 pieces, a corps of good roads speakers, and a song leader will make the sixth annual tour of the Michigan Pikes Association scheduled to start from Detroit on July 10 on an itinerary covering 1,700 miles and girdling Lake Superior. Eighty motor cars and trucks will transport the party, according to the present plans of W. D. Edenburn, tour manager. With intermediate stops, the expedition will touch the following main points: Detroit, Lansing, Grayling, St. Ignace, Maniatique, Marquette, Crystal Falls, Ironwood, Duluth, Minn., Grand Marais, Fort Williams, Ont., Port Arthur, Ont., Sault Ste. Marie, Ont., Sault Ste. Marie, Mich., Lunden's camp, returning to Detroit by way of Bay City.

This year a tour innovation is to be introduced in the jump from Port Arthur, Ont., to the American "Soo." This will be made by steamer, the "Noronic," Northern Navigation Company's, chartered to transport vehicles and the party across Lake Superior.

At every point where a stop will be made, local committees have been busy for weeks on arrangements to welcome the visitors. Throughout the Upper Peninsula they are looking forward to a big increase in the throngs of motorists who drive through the scenic and resort sections, and the Michigan Pikes expedition is regarded as the greatest possible stimulant in bringing visitors to that part of the country. Applications should be filed with Secretary Willard K. Bush, Michigan Pikes Association, 1220 Book building, Detroit.

A CORRECTION

In an announcement of the opening of a Detroit office by the Joseph L. Skeldon Engineering Company, Toledo, in a recent issue of this publication, the name was spelled "Skelton," which was incorrect. The notice is reprinted to correct the mistake. The new office of the company is located at 1156 Penobscot Building, and is in charge of H. E. Hellman. The company represents the Ames Iron Works, Oswego, N. Y.; Houston-Stanwood & Gamble, Cincinnati; the American Steam Pump Company, Battle Creek, and several other lines. It operates its own machine and pipe shop and does general machine repair work. The company has just finished a power plant for the Monroe Paper Products Company, Monroe, which it designed and built complete, and is installing an addition to the new plant of the River Raisin Paper Company, Monroe.

CREDIT MEN ELECT OFFICERS

Officers elected by the Detroit Association of Credit Men last week are as follows: Murray D. Wasson, Parke, Davis & Company, president; George A. Palmer, Farrand, Williams & Clark, vice president; O. L. Hatt, National Bank of Commerce, treasurer, and W. C. Mitchell, Detroit Stove Works; L. E. Phelan, Smith-Morgan Company; M. B. Williston, United Fuel & Supply Company, and A. G. Baird, Ohio & Michigan Coal Company, directors. The association is twenty-five years old and has a membership of more than 800, being one of the largest business organizations in Detroit.

$40,712 FOR D. U. R. TRACKAGE

On behalf of the city, the clerk of the United States district court at Detroit late last week paid to the Detroit United Railway $40,712.58 for the company's lines in Harper avenue from Gratiot avenue to Montclair avenue. The money came out of the $50,000 deposited with the court when legal action was instituted by the city to take over the lines. The amount was agreed upon by William H. Maybury, appraiser for the city, and Prof. Henry E. Riggs, of the University of Michigan, appraiser for the D. U. R.



A Machine Tool Service Station

In Detroit
where so many Warner & Swasey turret lathes are operating
a Service Staton is imperative,
so we put on at 5928 Second Boulevard.

Two practical men are there to serve you—
Men who know Detroit and its vicinty
and who know Warner & Swasey Turret Lathes,
C. S. Stilwell, Manager, and Wm. B. Pope.

Turret lathes of each size are on exhibit there.
You can buy one right off the floor if you like,
and equip it with tools from the stock we keep there,
or you can buy tools for the machines you have.
Our tools are adaptable to any make turret lathe.

Come and look us over—or telephone us.

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.
Branch Offices: Detroit ..... 5928 Second Boulevard
Boston ..... Oliver Building
New York ..... Singer Building
Buffalo ..... Iroquois Building
Indianapolis ..... Lemcke Annex
Dayton ..... Mutual Home Building
Milwaukee ..... Sycamore Building
Chicago ..... 618-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building Telephone Cherry 6010

DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Pitt Gerald, Second Vice-President; Ira W. Walton, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, JUNE 4, 1921

The Reduction in Railroad Wages

THE determination of the Railroad Labor Board to authorize a reduction in wages of railroad employes throughout the United States promises to help solve some of the difficulties of railroad management in the United States. The proposed reduction does not entirely take away the most recent advances nor does it disturb the earlier ones which were made under the Adamson act. From the earliest advices of the statisticians it indicates a saving in operating expenses of approximately $400,000,000. This is a long ways from the billion and a quarter that has been added to the operating expenses of American railroads since the beginning of the war in labor costs alone, and the difference between the figures will be answer enough to those who are engaged in the industry who may cry aloud that labor is being oppressed.

As a matter of fact not only in the prices paid for skilled railroad labor, as compared with the compensation of others whose attainments and efforts are of about even value, the railroad men have been overpaid, and most of them know it. In the classification of employment, not only have the patrons of the railroads been wronged, but the skilled employes themselves have been put in a false income position by reason of the payment to casual and handy-men the price of real honest-to-God workers. There have been some very interesting statements put out of casual employes at out of the way places being paid the rates of full time skilled men, though the services of these casuals were limited to but a few movements per day.

The American railroad system is undergoing a transition at the end of which we believe a higher scale of wages will prevail than that which prevailed before the war. It is not likely that the pre-war scale, in terms of dollars and cents, will ever return, for many economic reasons. Neither will the condition which characterized them during the war period in which, whether the policy was a determinate one or not on the part of organized railway employment, the using public, who are the consumers of the railroads' services, believe that the men took an unfair advantage of popular necessity. It is quite certain that organized railway labor has, by its conduct during the war period, lost a great deal of the sympathy which was formerly accorded it. It is reported that votes are to be taken in the associations to determine whether or not the new scale will be accepted, or to whether the associations will strike. If any such coercive measure as the latter is resorted to, it would not be surprising to see the public favor the open shop in railway employment. This we do not believe would be the best thing for the railways or their operatives, but the best thing is not always favored by the public when it gets its "mad" up.

The cut in railroad wages is almost certain to be followed by a partially corresponding cut in railroad income. No matter how mathematically one may figure the income necessities of even a natural monopoly like the transportation system, there is the law of supply and demand to be figured with as effecting the volume of the traffic. Figures of volume can never be forced to remain static. There is a charge which the traffic will not bear, and some of the recently established railroad rates are so high that, added to the cost of the goods carried, they have made marked prices which have discouraged consumption. Already sensible railroad managers are suggesting revisions of the schedules of freight rates. Already, too, we observe railroads resorting to the old time periods and forms of rate reduction, variously described as tourist rates and convenion rates and the like, to help rebuild the volume of traffic which the high rates cut down, and which must be restored if that feature of the railroad service is to be made profitable.

The railroad situation is not yet settled by a long shot, even with the reduction in the wages of railway workers. There are many other nice adjustments to be made yet before the situation is cleared up.

Shall We Subsidize the Farmer?

IT IS REGRETTABLE that the farming interests of the country have made a political issue of their demands for special financial consideration at the hands of Congress, for it means two things: first, that the members of that body will largely divide themselves into two classes, a part dangerously near a majority which will cease to represent the people but will heed the special agents of this newest class combination, and a remainder which will be about evenly divided between dare-nots and malcontents; and, second, that the natural, orderly readjustment of business to normal functioning has got to wait a while longer until the newest stunts are tried out.

It is not surprising that the farmers have got together, for have they not had before them for some years the successful example of Gompers and the labor leaders, and is there not a justifiable feeling amongst them that it is their turn for "pie"? The serious aspect of it all is the dangerous trend of Congress, by yielding to demands of succeeding classes of the people for special financial favors, to make it easy for whomever bands together a formidable enough number of citizens engaged in similar endeavors.

But there is this much good in the present farmer combination movement, *i. e.*, it may mean that their contentions will so absorb the people and Congress that the railroad labor unions at their Denver convention next month will deem it the part of wisdom not to stir up a new railroad labor rumpus while the farmers have the whip seat, Congress manifestly being unable to please both at once.

The elbow room which we have in this confederation of states is one of the greatest safety valves in the world against domestic revolution. If a man doesn't like his job in Kalamazoo he can get one in Keokuk by a little bestirring, and if he who runs a corner grocery in Muskegon becomes dissatisfied with his lot he can still obtain land in Montcalm or Mason, so that we haven't the fears of social troubles such as bother the statesmen in England and France with their highly congested areas. But the same elbow room opens a door to a series of political exploitations of one class by another, according as each class gets itself organized and advertised and puts its agents at the throats of the legislators ahead of the other classes. We are witnessing a cycle of class exploitations now. The farmers propose that the Government lend up to 75 per cent of value of staple crops—they have already the farm loan banks—but do they stop to consider whether the Government has money to lend? And second, if it can lend money, from what sources do the funds come?

We have often referred in these columns to the fallacy of trying in finance to make water run up hill, and with every recurring effort by special agents of new classes to obtain favors at Washington the figure of speech comes quickly to mind. Thus again we have a set of people proceeding on the theory that down in

Digitized by Google

Washington there is a charmed source of money which will flow merely by legislative act. If the farmers have not overlooked the fact that the funds of any government are obtained by taxation or borrowing, and that in the end all comes from taxation, they are asking this special aid with knowledge that all the people are going to be taxed for their special benefit. We wonder whether there would be the same zeal for government help if all the taxes necessary for the job were raised solely among farmers. We think not, for if any one has had experience with assessing and collecting taxes in the farming districts he will recall how speedily every proposed public expense is traced straight to the assessment roll long before the proposition comes up for vote. But if the cost can be shifted to someone else or the process of collecting is indirect, so that the farmer does not get a picture of paying out more at tax time, he is ordinarily in favor of the proposition.

Therefore, it is at this point that the business of the country finds itself today. There is no more equity, for instance, in taxing the people of Detroit to provide special loan accommodations for the farmers of Clinton county than there is in the reverse operation, unless it is the will of all the people to subsidize the farming business. It would be precisely as fair to levy taxes on all the farming land of the nation to provide a fund for special help for the multitude of corporations which have passed their dividends, unless it were the will of all the people to subsidize the industrial interests. A subsidy in theory is set up only because there are common benefits to all citizens.

Instances are rare among farmers who fail where any are left without slender means, at least, with which to start up again. Even during the lean years 1910 to 1914 in North Dakota, where accumulations of debt forced many of the farmers, after four successive crop failures, to hold auctions for the purpose of paying up, most of the unfortunate ones came out with at least credit enough to retain a team of horses and a few implements. And where their honesty has not been questioned there is usually a chance to rent land on favorable terms. On the other hand, consider the merchant or manufacturer who is forced to clean up. The story does not run the same.

We do not think that the rank and file of the farmers want any special favors. We believe that all they want is a fair chance to get their goods into a fair market. But the farmer, like the union labor rank and file, has been taking unwise counsel from those who are in it to make fat jobs for themselves and who are telling wonderful tales of the green valleys of profit that lie ahead of those who do their biding and espouse their quack theories. The thing cannot be stopped by heaping abuse on the farmer, for that only makes him more blindly obstinate; but we can take care that the farmers in our own backyard get "a fair shake." In so doing we will gain his confidence. Once he is shown that the big business of a single city is willing to go half way, he will spread the gospel to his brothers all over the nation without high priced organizers for his mouthpiece, and normalcy will return without government help.

The Income Tax

AS this paper goes to press the house of representatives of the Michigan legislature haas affirmed the recommendation of an amendment to the state constitution providing for an income tax. Whether the senate will pass the joint resolution for the submission of a constitutional amendment on the matter or not we are not at present advised. Whether it does or not, there is the greatest likelihood of the submission of such an amendment by petition.

Michigan's public sentiment with regard to accumulated wealth and organized capital has never been as radical as that of Kansas, before Kansas got wealthy, or even as that of Wisconsin during the palmy days of unrestrained Lafolletteism. But there are terms and phrases which creep into public discussion which sometimes lead the people to fear that there is an antagonism to the accumulations of initiative and thrift which would, if it could, express itself in legislation which would tax accumulated wealth out of existence. We do not believe that this sentiment is by any means in the majority of the voters' minds; but we do believe that the majority is not fully awake to the dangers of the application of an income tax in this state.

To begin with, the income tax has been very generally set apart by tax economists as a source of supply of some of its funds to the federal government, and its duplication by the state governments has been feared as leading to a further extension of inquisitorial methods and a further inroad upon the results of industry and commercial activity. In Michigan the income tax theory has been advanced for the very frank purpose of relieving the agricultural land owners of their share of the burden of state taxation and of laying it on industry. A very plausible statement is made that even if the impost seems rather unjust to industry at first, it will adjust itself in the long run, the agriculturists paying their share as consumers of the products of industry. This is very far from being an accurate statement. Michigan stands sixth among the American states in industry today, which means that six leading states in the United States are competitors for the trade of the rest of the country and of the world. The conditions in each of the states have some peculiar advantage for industry. In New York, Massachusetts and Pennsylvania the advantage is that of ready access to raw materials brought in by sea and to the markets to which the open sea is the way. To Michigan, Ohio and Illinois their locality in the center of population and distribution and their access to readily transported coal are the general advantages. Special ones exist in the way of railroads, labor and tax legislation. They are very nearly in equilibrium. Were Michigan to put her industries out of equilibrium in competition with the industries of the neighboring states it is not hard to see how readily they can be moved into territory in which the disadvantages would not exist.

The income tax is a direct thrust at industry, and as such our industrialists owe it to their enterprises and their employes to begin an active campaign of education against it. The people should at least be given the chance of knowing what results may accrue from the things they are asked to vote for.

Short Measure Stuff

TABLE MANNERS IN NEWPORT AS SEEN BY IONIA

(From the Ionia Sentinel-Standard)

Word comes from a woman formerly of Ionia, who knows a swell society woman, who visits a sister, who has a cottage at Newport, the dining room tables, which for years have stood in the dining room are no longer used by those of the "upper cretes." It seems the old fashioned table with drop leaves is placed against the wall in the dining room. When the time to serve the meal comes the butler, or whoever it is, lifts the table to the center of the room, sets it, and after the family is seated, a waitress passes the dinner. Also buffets, which followed the old-fashioned sideboards are no more. The family silver hides its grandeur in a closet and is no longer set forth on the dining room buffet. It is used when necessary in serving a meal, and at other times is out of sight.

* * *

PAYS

We'd like to belt at golf or play,
Do something that's not solemn;
Instead of that, we have to toil
With this infernal column.

Says the office philosopher: Hard times are not coming—soft times are going.

* * *

THEY OUGHT TO THROW IN THE DIRT

(From the Down-River Suburbanite)

For Sale—Ice box in good condition, dirt cheap.

* * *

Our idea of nothing to do would be to try and take orders for Grover Bergdoll's coming book at meetings of the American Legion.

* * *

A Cleveland lighting expert says that a pale blue light will aid a bashful suitor in proposing marriage. Just on the chance that the lady of our heart might see this, we're going to take a red light along next time we call.

* * *

Wouldn't it be a grand and glorious feeling if that bonus of ours were being paid out of the Bergdoll exchequer?

* * *

Judging by the press reports from the several world capitals, it is much easier to arm than disarm.

—A. F.

Digitized by Google

FINANCIAL

Some Thoughts Brought Home From Scandinavia

By PHIL S. HANNA

IT IS ALWAYS interesting to learn how others look at us. The observations of a representative of the Irving National Bank, New York, just returned from Sweden and Norway gives a fair picture of what part of the world outside the boundaries of these United States think of our efforts toward business readjustment, particularly the tariff. The Irving investigator says that business men in all the Scandinavian countries follow every change in American affairs with utmost interest and that whatever happens here is taken over there as apt to have far reaching effects all over the world. Such are the emoiments of the party to a free-for-all who comes out unscathed, comparatively.

It will be a long time before New York becomes the actual financial center of the world, although it is now the potential center. But changing the world's money center from London to New York will come only as a result of making the latter the world's center for settling trade accounts; and we cannot accomplish this without having goods moving both ways in and ont of New York in greater volume than they move in and out of London.

Thus in the Scandinavian countries it is not surprising that this representative found much amasement at our recent steps to establish a tariff. They argue over there that since Scandinavia has taken all the goods from the United States that their people can absorb, the erection of a tariff against their goods is simply a notice that we do not wish to continue trade with them. it is true that countries with depreciated currency, and exchange running against them, are aided by the premium which their exports bring when sold for dollars, but these gains are more than offset by the discounts they have to pay on their imports if the latter are greater than exports; and at best the advantage is a constantly diminishing one as exchange improves.

The former unity between the Scandinavian countries seems to have been broken up, as Mr. Lindhjem says, "by the rates of exchange and dissimilar commercial conditions have created new problems and now each country is working out its own salvation. To some extent they are competing with one another." in this connection we note that exchange on Sweden is now .2350, as against a par of .2680, or a discount of about 12 per cent, while that on Norway is .1610, as against a par of .2682, or a discount of 40 per cent.

But here is another thought in relation to this matter of a tariff. It will be interesting as the new tariff is tried out to see whether it is going to accomplish under the changed conditions what it accomplished formerly. When we were in debt to Europe four or five billions of dollars and when the difference between the cost of production here and the cost abroad was only one-half or one-third of its present width, the tariff worked nicely, but with the tables turned—Europe in debt to us fifteen billions and the difference in cost of production varying from two fold in England to twelve fold in Germany—is the tariff going to do the trick again? It is the first time in the history of these United States that we have faced a situation composed of factors which are new and strange. And while a poor pian well administered is better than no plan at all, should one blindly place his faith in the efficacy of an old prescription when the patient has developed so many new and unfathomed symptoms in combination with the old ones?

* * *

There is no topic in our minde which has brought out conflict of opinion like the subject of the price cuts in automobiles and its first cousin, whether the cuts are going to stimulate business and keep orders coming in. It cannot be said that the daily press has failed to co-operate with the industry; glowing reports of re-employment and cheerful construction of had news was freely indulged in all through the low period of last winter and some facts of a discouraging nature concerning factory conditions of the last three or four weeks were carefully avoided until an insurgent newspaper let go. So that insofar as publicity is a factor in determining sentiment, the motor industry has had the edge going and coming.

But murder will out eventually, and it were much better to retain the public's confidence permanently than to gain a small portion of its money temporarily. The cuts are proper, should have been made sooner (but never will that) and should the great majority of the manufacturers will be in line, and there will then be some surprises in store for the pessimists. Just as some retailers have closed shop, there will be some car builders disappear, but the industry of making motor cars is no more apt to be crushed than the industry of supplying water power when prices get down to a basis where the buyers have confidence again, we shall find an agreeable amount of business.

DURANT STOCK LISTED

Further recognition of Detroit as the motor center of America is indicated in the application of Durant Motors, Inc., for the listing of its common stock on the Detroit Stock Exchange. The application has been approved by the board of governors and the issue is expected to become one of the most active traders on the board.

In his application the company indicates that it has authorized 1,000,000 shares of common without par value and of this number there were outstanding 507,057 on the first of this month.

The following balance sheet as of May 2 was submitted:

Assets	
Cash on hand	$ 800.00
Cash in banks	389,760.46
Accounts receivable:	
Other accounts receivable	217,797.22
Stock subscriptions unpaid	5,000,491.29
Deferred charges, prepaid expenses, etc.	2,332.32
Plant:	
Machinery	11,259.79
Patterns and drawings	44,000.10
Other Assets:	
Marketable securities listed on New York Stock Exchange at cost price	2,502,139.41
Organization	78,557.02
	$8,357,651.70
Liabilities	
Common stock outstanding	$5,232,274.00
Common stock subscribed but unissued	2,126,350.00
Notes Payable	
Other account payable	27.70
	$8,357,651.70

The officers and directors of Durant Motors, Inc., are as follow: William C. Durant, president and director, 1780 Broadway, N. Y. C.; Carroll Downes, vice-president and director, 511 5th ave., N. Y. C.; W. W. Murphy, treasurer and director, 1740 Broadway, N. Y. C.; H. F Herbermann, secretary and director, 43 Cedar st., N. Y. C.; C. E. Healy, director, 2 Rector st., N. Y. C.

The company's proposed office is in Wilmington, Delaware. In view of the many rumors and the speculation regarding Durant Motors proposed activities it is interesting to note that the articles of incorporation say that it shall be the business of the company to not only manufacture and sell automobiles and automobile parts, but also to hold the securities of other corporations.

The issue has been approved by the Michigan Securities Commission. Durant Motors, incorporated of Delaware, is the parent organization of the Durant companies being organized in various cities. The stock went on the board of the Detroit Stock Exchange Tuesday, May 31.

D. U. R. REORGANIZATION

It was announced late last week that Alex Dow, president and general manager of the Detroit Edison Company, and Harrison Williams, of the Central Union Trust Company, New York, had been elected members of the board of the Detroit United Railway, following the resignation of Frank W. Brooks as president of the corporation. It is reported that there will be a reorganization of the management. Allen F. Edwards, vice-president and treasurer of the company, is mentioned as the probable successor to Mr. Brooks.

FISHER BODY OHIO EXCHANGE

Under a plan now being put into operation, holders of common stock (ten-par value) of the Fisher Body Ohio Company are to receive a bonus of $3 a share for their holdings, as well as one share of Fisher Body Corporation (New York) stock for each five shares of Fisher Body Ohio common.

Where holdings of the Ohio company stock are other than in multiples of five shares, holders will have the privilege of selling the odd shares or purchasing enough more to bring their total holdings to some multiple of five—that is, a person holding seven shares may exchange five of them for one share of the New York company and then either sell the odd two shares or buy three more.

The Fisher Body Corporation, New York, already owns approximately 55 per cent of the common stock of the Ohio company. Recent market quotations on the New York company stock are in the neighborhood of $90 a share.

The Security Trust Company, Detroit, already acting as transfer agent for the Fisher Body Corporation, has likewise been selected as the fiscal agent to handle this exchange.

WALSH TO SELL DURANT STOCK

John H. Walsh has been appointed sales agent for the stock of Durant Motors, Inc., and has opened offices in Lansing, according to announcement by G. N. Murchey & Co.

GENESEE ROAD BONDS UNSOLD

Supervisors of Genesee county concluded their session May 26 without accepting any bids for $850,000 of road bonds advertised for sale.

Digitized by Google

Detroit Stock Exchange

Following are the high and low prices on Detroit Stock Exchange securities, together with the total number of shares traded, for April 29 to May 27, inclusive:

	Total Sales	High	Low
Am. Lt. & Trac., com.	4,392	92	60
Char. Iron Co. of Am., com.	200	1⅛	1⅛
Char. Iron Co. of Am., pfd.	675	2⅜	2⅛
Cities Service, com.	30	224⅜	224⅜
Columbia Sugar	2,855	33	2⅜
Continental Motor, com.	42,355	7⅜	6¼
Continental Motor, pfd.	10	21	21
Detroit Creamery	457	21	20⅜
Detroit Edison	1,812	37⅜	34
Federal Truck	275	20⅜	13
Ford Motor of Canada	1,445	299	282
General Motors	324	12¼	10⅜
C. M. Hall Lamp	350	12⅜	13¼
S. S. Kresge, com.	2	140	140
Lincoln Motor, Class A	3,331	20¼	17½
Michigan Sugar, com.	2,922	7⅜	7
Michigan Sugar, pfd.	100	3	3
Motor Wheel, com.	1,332	10¼	3¼
National Grocer, com.	150	7½	2⅜
Packard Motor, com.	27,936	11⅜	3¼
Packard Motor, pfd.	340	76¼	70
Paige-Detroit Motor, com.	6,217	23	15
Park, Davis	80	83½	30
Reo Motor	17,852	21½	17⅜
Scotten-Dillon	20	18	12
Timken-Detroit, com.	3,572	32⅜	32½
Trus-Con Steel, com.	23	19½	13¼
U. S. Radiator, pfd.	2	37	37
Western Knitting Mills	100	11	11
White Star Line	65	25	25
Total	123,339		

Bonds

Detroit Edison Deb. 1923	2,700	93⅜	93
Detroit Edison Deb. 1930	10,700	33	35½
Detroit Edison Deb. 1931	13,000	102	102
Detroit Edison Deb. 1940	1,300	73¼	73⅜
Total	$2,900		

Banks and Trust Companies

First & Old Detroit Natl.	5	272	272
First State	10	131	131
Merchants National	20	151	131
Bank of Detroit	10	185	185
Total	45		
Total Listed Securities			168,529

Unlisted Securities

Columbia Motor	1,600	5¼	3⅜
Detroit Copper & Brass	10	19¾	19¾
Detroit Mortgage, com.	220	2⅜	2¼
Detroit Mortgage, pfd.	2,322	6¼	6¼
Detroit Motorbus	2	3¼	3¼
Federal Discount	1,000	3	3
*Eureka Croesus	290,720	71	49
Gladys-Belle, com.	13,330	24	23
Gladys-Belle, pfd.	19,500	45	32
Hupp Motors	26	16⅜	15⅜
Invader Oil	1,000	1.18	1.16
Jewett-Bigelow & Brooks	40	6¼	6¼
Liberty Motors	100	6¼	6¼
Michigan Copper & Brass	20	14½	14¼
McCord Manufacturing	1,333	10	7¼
Chas. F. Noble, com.	167,443	44	28
Chas. F. Noble, pfd.	30,100	53	52
Paige-Detroit Motor, pfd.	5	70¼	70¼
Total	333,223		
Grand total	333,863		

*Removed from Unlisted Department May 12, 1921.

FIRST NATIONAL BUYS BONDS

The State Administrative Board has accepted the bid of the First National Company of Detroit for all of the new $3,000,000 worth of highway bonds, paying a premium of $21,540 for them. These bonds draw five and a half per cent interest. One million dollars worth of old bonds bearing only five per cent interest were burned. This makes a total of $10,000,000 worth of the highway bonds now sold. The First National and other concerns have indicated they would invest heavily in soldiers' bonus bonds. The state will arrange for registered bonds to be given in exchange for coupon bonds, if purchasers want them. These registered bonds will be for $10,000 each, taking up ten of the $1,000 coupon bonds.

PAR COLLECTION LITIGATION

Par collection opponents drew first blood by reason of the recent supreme court decision but the issue is a long way from being settled thereby. The effect of the decision is to return the case to the district court of Georgia for further hearing.

Business Meets New Conditions

American business has been clearing decks. Budgets have been revised. Every buying, selling and production unit has been overhauled and made ready for intensive service. Economy has been the test—economy of time and effort.

In any study of functions and readjusting of methods, the work done by your bank balance should not be overlooked. Has it been merely a checking account and a basis for commercial credit? Or has it brought to the aid of your organization other constructive services? Are you making use now of all the help it should provide?

Many business men who carry deposits with the Irving or with Irving correspondents have discovered broader service possibilities in their banking connections The Irving investigates markets as well as credits, expedites deliveries of merchandise as well as collections, supplements the information resources of its customers both in domestic and foreign fields. Every transaction it undertakes, either at home or over-seas, is handled with a clear understanding of business essentials as well as careful attention to banking requirements.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK

1851-1921: SEVENTY YEARS A BUSINESS BANK

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor
Penobscot Bldg.

Phones
Cherry 8640

We solicit your inquiries

COURTESY
SERVICE
SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids
National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

Has Prudence Fled?

Do you expect to die bankrupt? We don't expect to, but we do,—two-thirds of us according to the figures.

It is a matter of record that in the United States 66 out of every 100 people who die leave no estate whatever. Of the remaining 34, but 9 leave estates larger than $5,000, and the estates left by the other 25 average a little less than $1,300.

Now, good bonds or the cash proceeds of your life insurance policies,—in fact any lump sum, placed with us IN TRUST, will have a tendency to PREVENT POVERTY. The earlier it is begun, the more time it will have to grow.

Adopt this strong Trust Company as your Trustee.

Get our new book on "What You Should Know"

THE MICHIGAN TRUST COMPANY

GRAND RAPIDS, MICHIGAN

7% FARM DRAINAGE BONDS 7%

There is no better Security on earth than Tax Liens on Cultivated Farms.

Ordinarily FARM DRAINAGE DISTRICT BONDS pay the investor Six Per cent, but for quick sale, we offer ten choice issues to pay from 7% to 7½%. Interest payable annually or semi-annually by coupon collectible at your bank.

They come in $1,000, $500 and $100 denominations, and run from Three to Twenty years and are FREE OF ALL FEDERAL INCOME TAXES.

Upon Postal Card request, we will send Circular No. 1963—"A Few Reasons Why Farm Drainage Bonds Are So Highly Regarded."

Interest is falling. Buy High Income now for future years!

THE HANCHETT BOND CO.

(Incorporated 1910)

Municipal Bond House

CHICAGO

Dime Bank Bldg., Detroit.
W. H. Dunham, Representative.

Motor Stocks

Members Detroit Stock Exchange

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

	May 25, 1921.	May 18, 1921.	May 28, 1920.
RESOURCES			
Gold and gold certificates	279,261	325,281	167,125
Gold settlement fund—Federal Reserve Board..	474,952	454,105	424,452
Gold with foreign agencies	.....	.....	111,530
Total gold held by banks	754,213	779,486	703,117
Gold with Federal Reserve agents	1,666,229	1,638,619	1,112,040
Gold redemption fund	133,505	140,791	137,946
Total gold reserves	2,382,947	2,378,896	1,953,103
Legal tender notes, silver, etc	165,285	170,238	139,392
Total reserves	2,558,232	2,549,134	2,092,496
Bills discounted:			
Sec. by U. S. Government obligations	792,951	774,869	1,117,962
All other	1,076,305	1,067,681	1,071,469
Bills bought in open market	87,128	81,667	418,600
Total bills on hand	1,957,391	1,924,220	2,938,031
U. S. Government bonds	28,571	25,924	26,784
U. S. Victory notes	.....	.....	.....
U. S. certificates of indebtedness—	22	22	59
One-year certificates (Pitman Act)	233,375	233,875	259,375
All other	46,251	128,936	20,156
Total earning assets	2,263,120	2,312,978	3,244,425
Bank premises	23,296	23,192	12,664
5% Redemption fund against F. R. bank notes..	11,174	11,476	11,862
Uncollected items	540,175	580,278	746,071
All other resources	13,863	12,420	6,812
Total resources	5,379,760	5,490,480	6,114,340
LIABILITIES			
Capital paid in	102,173	102,116	91,000
Surplus	202,036	202,036	120,120
Reserved for Govt. Franchise Tax	33,271	31,911	.....
Deposits—			
Government deposits	17,328	15,652	26,413
Due to members—reserve account	1,655,809	1,665,517	1,852,916
Other deposits, including foreign government credits	32,024	35,192	91,037
Total deposits	1,705,956	1,716,642	1,980,386
F. R. notes in actual circulation	2,734,801	2,767,135	2,197,021
F. R. bank notes in circulation—net liability	114,834	147,266	129,185
Deferred availability items	424,829	491,904	561,244
All other liabilities	29,757	29,467	72,381
Total liabilities	5,379,760	5,490,480	6,114,340
Ratio of total reserves to deposit and F. R. note liabilities combined	57.6%	56.8%	*42.7%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	71.7%	70.1%	*47.1%

*Calculated on basis of net deposits and F. R. notes in circulation.

Michigan Bond Items

Three million dollars of Michigan highway 5½ per cent gold bonds dated June 1, 1921 and maturing June 1, 1941, are being offered by the First National Company and Detroit Trust Company, Detroit. They are coupon bonds in denomination of $1,000 and are issued subject to the approval of the attorney general. The price is $102.56, yielding about 5.20 per cent. The First National Company purchased the bonds late last year, paying a premium of $21,540.

On orders of the state treasury, $1,000,000 of Michigan highway bonds were burned late last week because it had been found impossible to sell them. They bore interest at 5 per cent.

The Kent State Bank, Grand Rapids, has taken city filtration and water bonds amounting to $250,000 which were sold to Eldredge & Company, New York, at a premium of $8,025, says the Grand Rapids Press, which adds: "On the $100,000 filtration bonds accrued interest already amounts to $1,134.68. These bonds have been under record of sale for 85 days, and bring the city $12,70 a day pendine liquidation. The company, however, will get a return in interest at 5 per cent on filtration and 6 per cent on water bonds. The $150,000 of water bonds have been running under sale for 21 days at $21.66 a day. The accrued interest amounted to $591.87. The premium on the water bonds was $3,210 and $4,815 on the water securities.

Voters of Grand Ledge have decided in favor of bonding the town for $11,000 to pave North Bridge street and in favor of issuing $10,000 of bonds to build a dam.

Traverse City has sold $250,000 of bonds to the First National Bank of that city, which agreed to pay a premium of $7,525 in addition to accrued interest to date of delivery. The money is to be used for the construction of a dam.

SEYMOUR EXTENDS ACTIVITIES

D. L. Seymour & Company, 1649 Penobscot building, has opened a department to handle expansion issues in rooms on the sixth floor of the building. Walter P. Haier and Thomas K. Wright are in charge of the department.

Muskegon Securities

	Bid	Asked
Alaska Refrigerator Co., pfd	90	100
Austin Machinery Corp., com	2¼	3
Brunswick-Balke-Collender Co. com. A	80	
Brunswick-Balke-Collender Co. com. B		65
Brunswick-Balke-Collender Co., pfd	87	97
Continental Motors Corp., com	6⅞	7¼
Continental Motors Corp., pfd	82	85
Linderman Steel & Machine Co., com.	11¼	13¼
Muskegon Finance Co., pfd., with 100% bonus of common	9	10
Occidental Hotel Co., pfd	80	90
Shaw-Walker Co., pfd	9¼	10
United Home Telephone Co., com	4	6
United Home Telephone Co., pfd	6	8

Quotes by Allen H. Thurman & Co., May 2.

Digitized by Google

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,662,894	$151,493,394
January 12	99,177,447	150,667,006
January 19	101,895,982	121,241,087
January 26	79,915,607	87,641,652
February 2	87,995,926	91,772,822
February 9	76,096,462	101,049,606
February 16	76,021,892	103,283,776
February 23	87,711,051	82,526,787
March 2	81,125,692	127,024,854
March 9	76,762,252	108,011,649
March 15	96,836,462	132,176,052
March 23	84,466,495	114,921,346
March 29	69,091,871	116,461,566
April 5	78,165,971	104,803,564
April 15	81,621,267	126,981,267
April 20	85,777,576	151,635,146
April 26	80,566,950	118,266,578
May 3	91,044,096	114,786,787
May 11	79,645,366	111,752,952
May 18	128,141,704	115,794,715
May 25	84,000,681	115,162,741
June 1	66,502,506	98,256,726
Month of		
January	$86,430,226	467,221,870
February	302,841,888	436,266,896
March	377,878,540	576,435,849
April	284,394,678	540,678,960
May	382,162,221	484,286,955
June		548,706,267
July		626,884,145
August		623,289,686
September		561,592,940
October		518,426,260
November		485,082,440
December		463,561,345
Yearly totals, 1920		$6,105,333,995
Yearly totals, 1919		$4,504,886,156

Detroit Listed Bonds

Name May 31, 1921	Bid	Ask
Cons. Pow. Co.—5s, 1925	80	81
Detroit & Flint—5s, 1921	66½	98½
Detroit, Pt. W. & R. L.—6s, 1957	80	87
D., M. & T. Short Line—6s, 1925	76	81
Detroit & Pontiac Ry.—5s, 1930	96	99
Detroit & Pontiac—4½s, 1926		84
Detroit & Port Huron S. L.—5s, 1950	65	76
Detroit Railway—5s, 1931		86
Detroit, Ypsi. & A. A.—5s, 1924		100
D., Y. & A. A., Jackson—5s, 1926	75	95
Det. United Ry.—4½s, 1562		61
Detroit Edison Co.—5s, 1956	87	89
Det. Ed. Co.—1st & ref. 6s, 1940	79	81
East Mich. Edison—5s, 1921	81	86
Detroit Edison Deb. 7s, 1924	96¾	
Detroit Edison deb. 7s, 1929	95¾	98½
Detroit Edison deb. 7s, 1930	95¾	96½
Detroit Edison deb. 8s, 1931	101	101¼
D. C. Gas Co., G. M.—5s, 1913-23		91
D. C. Gas Co., P. L.—5s, 1923		95
Detroit & Sub. Gas Co.—5s, 1926	81	86
Mich. State Tel. Co.—5s, 1924	87	
By-Prod. Coke Corp.—6s, 1930		

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric		5
Economy Baler Co., com		9½
King Trailer Co., pfd		
Hoover Steel Ball, com	14	
Mich. Milling Co., com	7¾	
Motor Products Co., com		
Prod. Foundries, com	5¼	
C. A. Sauer Co	5	

Quotes by Langley, Hildner & Co., May 16.

Current Investment Offerings

Security	Rate	Maturity	Price	Yield
Paine, Webber & Co.				
American Power & Light Co., secured	5	5-1-41	98.50	8.15
Duquesne Light Co., conv. deb.	7½	7-1-26	98.50	7.85
E. I. du Pont de Nemours & Co., gold	7½	5-1-21	100	7.50
Cleveland, O., School District	6	6-1-24	105.08	5.45
Tulsa Okla., School Dist	5	5-15-52	92.75	5.85
Govt. of Newfoundland, gold	6%	6-30-36	93.625	7.20
Bolger, Mosser & Willaman				
Harrison Co., Texas, Road	5	1926-1927		6.25
Maricopa Co., Ariz., Highway	5½	1920-1949		6.00
Three Rivers, Mich., School Dist. No. 1	5½	1928		on ap.
Plains—S. Mich. Allegan County School District No. 2	6	1928-1931		on ap.
Montgomery Co., Ohio, Road	6	1926		6.00
Morrison Hotel of Chicago, Ill., 1st & ref. mtge	6	1922-1928		7.00

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davisen
Sherman & Chene
Dix & Artillery
Military & Michigan

AS A MICHIGAN BANKING HOUSE

for business houses, financial institutions and individuals in any section of the United States having banking matters in the Detroit district that need attention, the DIME SAVINGS BANK renders a service in which the PERSONAL ATTENTION of officers assures MATURE JUDGMENT and consideration in the handling of every item.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Liberty Bond Range

LIBERTY BONDS	May 31.	Jan. 5.	Dec. 27.	July 1.	Jan. 3.	July 1.	Jan. 2.	July 1.
Closing New York Bid Prices	1921	1921	1920	1920	1920	1919	1919	1919
U. S. Liberty 3½s	87.68	92.50	90.00	91.06	99.20	99.76	99.56	99.82
U. S. Liberty 1st 4s	87.40	88.50	85.72	86.80	92.00	94.80	99.00	94.12
U. S. Liberty 2nd 4s	87.00	86.30	84.10	85.00	91.58	92.84	92.04	94.30
U. S. Liberty 1st 4½s	87.42	86.25	85.50	85.15	93.46	94.30	96.50	....
U. S. Liberty 2nd 4½s	87.08	86.20	84.24	85.00	92.20	94.06	96.70	....
U. S. Liberty 3rd 4½s	90.60	90.04	87.20	88.32	91.86	94.10	94.44	....
U. S. Liberty 4th 4¼s	87.24	86.46	84.90	85.66	92.78	100.76	....	....
Victory Bonds, 4¾s	98.00	96.48	94.90	98.50	94.00	96.08	96.82	96.56

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	May 31, 1921
Canada		.9115	.9115	.9115
London	4.8655	3.6275	3.8580	3.8675
Belgerland	.1930	.1529	.1602	.1740
Paris	.1930	.0599	.0706	.0828
Belgium	.1930	.0625	.0743	.0828
Holland	.40196	.3142	.3375	.3418
Italy	.1930	.02465	.0266	.0528
Greece	.1930	.0762	.0735	.0590
Spain	.1930	.1328	.1293	.1298
Vienna	.20263	.0023	.0028	.0025
Berlin	.23821	.01345	.0158	.0159
Denmark	.26795	.1595	.1940	.1760
Norway	.2682	.1595	.1860	.1525
Sweden	.2680	.2045	.2190	.2280

Quotations show foreign equivalent of $1 in dollars or cents

HOLLAND-ST. LOUIS SUGAR

The three factories of the Holland-St. Louis Sugar Company, Holland, sliced 195,293 tons of beets and packed 46,051,000 pounds of sugar last year, it is announced by M. McLean, manager of the company. The total amount paid farmers for beets was $2,135,770. Total acreage harvested during 1920 was 21,414 acres, while for this year 21,765 acres have been contracted for.

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co	22	25
Auto Body, com.	3½	5
Auto Body, pfd.		7½
Bates & Edmonds Motor Co	15	
Capitol Truck		5
Federal Drop Forge Co	7½	9
Flint Bond & Mortgage Co.		
Lansing Company	38	42
Michigan Mortgage Co	9	9½
Michigan Screw Co	18	20
Motor Wheel Corporation	8	8¾
New Engine Co	22	24
Reo Motor Car Co	17½	18

Quotes by G. M. Murchey & Co., May 24.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE MAY 21st

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Dividends Cash	Annual Dividends Payable	Last Dividend When Paid	Last Dividend Cash	Last Dividend Stock	New Dividend Payable	New Dividend Ex.-Div. Date	New Dividend Amount Cash	New Dividend Amount Stock	Dividends Total This Year Cash	Dividends Total This Year Stock	Capitalization Outstanding
American Chicle, pfd			100			6%	Quar.	4- 1-21	1½%						3%		$3,000,000
Am. Ls. Trac. Co., com.	81½	82	100	114 - 60	204 - 55	**4%	Quar.	5- 2-21		1%				2%		2%	$22,271,000
Do., pfd			100			6%	Quar.	6- 2-21	1½%						3%		$14,230,300
Bower Roller Bearing Co.			10	17½ - 17	29⅝ - 16		Varies	7- 1-20	2%								$600,000
Chas. Iron Co. of America, com.			10	2 - 2	4¼ - 1⅝		Varies	4- 1-21	2%								$2,870,250
Do., pfd	2½	2¾	10	3½ - 2½	8½ - 2½		Varies	7- 1-19	3%								$5,217,350
Citizen Services Co., com. XD	220	225	100	224¾ - 224¾	350 - 330½	176%	Mon.*	4- 1-21	1½%	1½%	6- 1-21	5-14-21	1½%	2½%	6¼%		$3,440,387
Do., pfd XD	64½	64¾	100		70 - 63	6%	Mon.	5- 1-21	1½%		6- 1-21	5-14-21	1½	2½			$76,719,371
Coshocton Land & Zinc Co.	5	20	1	18 - 6	50 - 10		Varies	11-25-17	20%								$300,000
Columbia Sugar	8½	8¾	10	14½ - 8½	20½ - 11½	12%	Quar.	4- 1-21	2%					8%			$3,000,000
Commerce Motor Car Co.			10	7¾ - 6¼	18½ - 6¼		Varies	7- 1-20	1½%								$500,000
Com. P. R. & L. Co., com.			100	16 - 13¾	30½ - 10½		Varies	11- 1-17	1%								$18,585,900
Do., pfd			100	34 - 29	45½ - 23	6⅔%	Varies	4- 1-21	1½%						1½%		$17,953,000
Continental Motor Co., com	6½	6	10	7⅞ - 5¾	14⅝ - 5⅝		Varies	12-20-20	1%								$14,667,250
Do., pfd	79	81	100	86 - 81	100½ - 94	8%	Quar.	4-15-21	2%						3½%		$2,151,700
Det. Br. & Mallenble Whs.	90	95	100	98 - 93	98 - 93	6%	Mon.	5- 1-21	1½		6- 1-21	5-26-21	1½%		2½		$1,472,100
D. & C. Navigation Co.			50	73½ - 71	100 - 87	8%	Quar.	4- 1-21	2%						4½		$6,039,200
Detroit Creamery Co.	20	21½	10	25½ - 20¾	38⅝ - 16	8%	Quar.	4- 1-21	2½%						2½%		$3,182,790
Detroit Edison Co.	94	94½	100	98 - 92½	114 - 92¾	8%	Quar.	4-15-21	2%		7-15-21	6-30-21	2%		4%		$27,652,500
Detroit United XD			100			8%	Quar.	3- 1-21	2%		6- 1-21	5-16-21		2½%	2%		$15,000,000
Edmund & Jones, com.			None	14½ - 9¾	34 - 14½		Varies	1- 1-21	5%								$40,000 shs.
Do., pfd			100	70 - 70	78 - 78	7%	Quar.	4- 1-21	1¾%						3½%		$800,000
Federal Truck	17½		10	23 - 17½	82 - 16¾		Varies	7- 1-20	10%								$2,000,000
Ford Motor Co. of Canada	240	243	100	299 - 217	460 - 220		Varies	7- 1-20	15%								$7,000,000
Gen. Al. & Br. Mfg. Co., com		10½	10	13½ - 10½	28 - 11		Varies	10- 1-20		5%							$1,189,850
General Motors	10⅜	11	None	16 - 10⅜	82 - 12⅝	$1.00	Quar.	3- 2-21	25c						50c		20,317,653 shs.
Godchaux Sugar, com			None		39½ - 39½		Varies										$70,000 shs.
Do., pfd			100			7%	Quar.	4- 4-21	1¾%						3½%		$3,440,000
Hanna Furnaces, com.			10	26 - 25			Varies										$1,865,000
Do., pfd			100			8%	Quar.	3-15-21	2%		6-15-21	6- 6-21	2%		2%		$750,000
Hall Lamp Co.			10	15 - 12	32½ - 10		Varies	12-24-20	5%								$1,000,000
Hayes Mfg. Co., com	2½	2¾	10	2½ - 2½	5 - 2¾		Varies	1- 2-20	5%								$1,500,000
Holland-St. Louis Sugar Co.	7½	9	10	10 - 7½	19½ - 7¾		Varies	10-15-20	6%								$2,000,000
Iron Silver Mining Co.			20	24 - 24	42 - 42		Varies	1- 1-21	10c						10c		$2,500,000
J. S. Kresge, com.	130	140	100	141 - 140	151 - 120	6%	Semi-Ann.	1- 2-21	3%		7- 1-21	6-16-21	3%		3%		$10,000,000
Do., pfd			100	96½ - 96½	100 - 94	6%	Quar.	4- 1-21	1½%		7- 1-21	6-16-21	1½%		3½%		$2,500,000
Lincoln Motor, Class A	17	18½	50	21½ - 17½	30½ - 14½		Varies	7-30-20	$1.25								$8,000,000
Lindstrom Steel, Com.			10		24½ - 15½	12½%	Varies	4- 1-21	2½						60c		$1,000,000
Mexican Crude Rubber Co.			10	6¾ - 6¼	13⅞ - 9¾		Varies	12- 1-16	3%								$750,000
Mexican Drop Forge, com. XD	38		None		50 - 38¾	$1.00	Mon.	4- 1-21	25c		6- 1-21	5-15-21	25c		$1 25		$12,500 shs.
Do., pfd			100		90 - 90	7%	Quar.	4- 1-21	1¾%						3½%		$250,000
Michigan Stamping Co., com XD			10	18½ - 17½	30 - 16	9%	Mon.	5-25-21	1½%		5-25-21	5-15-21	1½%		1½		$1,200,000
Michigan Sugar Co., com XD	7¾	7¾	10	9 - 6¾	13⅜ - 7¾	4%	Quar.	3- 1-21	1%		6- 1-21	5-15-21	1%		1%		$7,471,100
Do., pfd			10	9¾ - 9¾	9¾ - 9¾	6%	Quar.	3-15-20	1½%		6-15-21	6- 1-21	1½%				$3,703,500
Miles-Detroit Theater Co.			10	16½ - 16	21 - 15½		Varies	4-10-21	1½						9%		$350,000
Motor Products	52		None	82 - 37½	60¾ - 47		Varies	5- 1-21	$1 25						$2 50		$2,385,000
Motor Wheel, com	8		10	11½ - 8	13½ - 8¾		Varies	3-25-21	1½						2%		$4,500,000
Murray Mfg.			10				Varies	10- 1-20	1%								$765,450
National Grocer Co			10	9½ - 6¾	15⅛ - 15⅛		Varies	12-31-20	50c						50c		$1,000,000
Do., pfd			100		137 - 90	6%	Semi-Ann	12-31-20	3%						3%		$1,500,000
Packard Motor Co., com	8½	8¾	10	13 - 8¾	23½ - 8¾		Varies	10-30-20	2½%								$13,845,100
Do., pfd	68½	69½	100	79 - 68½	96⅝ - 87	7%	Quar.	3-15-21	1¾		6-15-21	5-31-21	1¾%		3½%		$15,223,500
Page-Detroit Motor Car, com.	14½	15½	10	23 - 14½	30 - 23½		Varies	12-10-20	1%								$2,000,000
Parke, Davis Co.	85	86	25	98¾ - 80	117½ - 93	20%	Quar.	4- 1-21	4%		6-30-21	6-20-21	*6%		8%		$11,878,850
Penberthy Injector, pfd.	92	96	100	92 - 92		8%	Quar.	4- 1-21	2%						4%		$500,000
Rec. Motor Co.	17½	17¾	10	23 - 17½	29⅜ - 16⅜	10%	Quar.	4- 1-21	2½%						5%		$6,937,250
Reuter-Dillon Co.			10	21 - 21	30 - 25½	8%	Quar.	4-15-21	2%						4%	50%	$2,500,000
Timken Axle, com			10	34¾ - 23½	63⅛ - 26⅝		Varies	1-15-21	2%						2%		$3,000,000
Do., pfd XD			100		84 - 84	7%	Quar.	3- 1-21	1¾%		6- 1-21	5-20-21	1¾		1¾%		$5,000,000
True-Con Steel Co., com		20	10	28½ - 10	29½ - 10	10%	Quar.	4-15-21	4						8%	50%	$1,000,000
Do., pfd			10	9⅞ - 9⅝	9¾ - 9¾	7%	Quar.	4- 1-21	1¾%		6-1-21	6-25-21			1¾%		$1,500,000
U. S. Radiator, com.			100		31½ - 20		Varies								4%		$4,000,000
Do., pfd			100	87 - 87	85⅝ - 80	17%	Annually	1-25-21	7%						7%		$2,800,000
Waring Hat Co., com			None				Varies										$30,000 shs.
Do., pfd			100			8%	Quar.	4- 1-21	2%						4%		$1,000,000
Western Knitting Mills	10½	10¾	None	11 - 8½	30⅜ - 8⅜		Varies	11-25-20	50c								$1,000,000
White Star Line	22		50	25 - 22	50½ - 50½		Aug. & Nov	8-23-20	2½%								$750,000
Wolverine Port Cement Co			10	3 - 3	5¼ - 2½		Varies	12-16-17	1%								$1,000,000

*Odd 980-570: new 63⅛ 26 17½ in 1921, 7½ in 1920, 7½ in 1921. No Common dividends since organized. **1½ Extra dividend. †Book value, $1,010,997. Ed. & J. ‡Book value, $3,219,327. Godchaux. †Descript. Book value, $2,622,792.00. Western Knitting Mills. †Book value $5,084,450, Motor Products. **Also 4% stock. ,(With Extras. ‡New. 11⅛%

monthly stock dividend.

N. Y. C. HAS $6,530,000 DEFICIT

For the three months ended March 31, 1921, the New York Central Railroad Company reports gross earnings of $7,344,559, a decrease of $3,039,599 as compared with the first three months of 1920. After provision for taxes and charges had been made there was a deficit of $6,530,000, as against a surplus of $4,427,753 a year ago.

CANT CUT FUR THE PRESENT

Alex Dow, president and general manager of the Detroit Edison Company, says it will be impossible, at least for the present, for the company to reduce its rates for light and after the increase will be $500,000.

power as requested by the mayor of Detroit. The heat rate, Mr. Dow added, probably will be cut. This charge was increased last October and the new schedule probably will go into effect July 1. The Edison Company, Mr. Dow said, was only now recovering from the losses it suffered during the war and in 1919.

TO ADD $100,000 TO CAPITAL

The City National Bank, Battle Creek, formerly the City Bank, of which E. R. Morton is vice-president and cashier, has announced that its capital stock will be increased from $250,000 to $350,000. Combined capital and surplus after the increase will be $500,000.

ATLAS STOCK SETTLEMENT

When the Atlas Tractor Company planned to locate its plant in Adrian stock was sold to Adrian residents. Later the company decided to build the plant in Belleville although trenches for the foundations had been dug in Adrian. Now fifteen Adrian stockholders are seeking a settlement with the company.

EATON RAPIDS BANKER DEAD

Herbert H. Hamilton, former president of the Michigan State Bank, Eaton Rapids, and first mayor of that city died Thursday, May 26. He was 73 years old and had lived in Eaton Rapids 54 years.

Digitized by Google

Union Carbide Will Make Public Financial Statements

According to The Chicago Examiner, the Union Carbide Company has voted to issue periodical financial statements and to take the public in its confidence. It will come as a distinct surprise to those who have been in touch with this situation. Not since the company was organized in 1898 have many outside of the board of directors known the particulars of the company's finances. With this announcement the company made public a balance sheet as of March 31, 1921, which follows, and reduced the dividend from $1.50 quarterly to $1. Michigan is interested because of Carbide's ownership of the Michigan Northern Power Company and the large carbide plant at Sault Ste. Marie.

The certified consolidated balance sheet, as of March 31, 1921, after elimination of intercompany stock ownership and intercompany accounts, follows.

Assets

Current Assets—	
Cash in banks	$ 6,156,375
Cash advances to branches	872,098
Trade notes and accts. rec.	15,316,579
Other notes and accts. rec.	4,369,417
Inventories (raw mat. at market value, finished mat. at mfg. costs)	47,385,096
Total current assets	$74,601,567
Fixed Assets—	
Land, bldgs., mach. and equip	98,736,129
Power leaseholds, undev. water power, patents, trademarks	34,773,236
Real estate leaseholds	90,543
Investment in securities of affil. companies, assets and liab. of which are not included in this statement	2,664,606
Other securities	441,738
Total fixed assets	$136,706,254
Deferred Charges—	
Prepaid items	$28,199
Other deferred charges	504,506
Total deferred charges	742,706
Total assets	$212,049,528

Liabilities

Current Liabilities—	
Bank loans, notes and accts. pay	$ 8,474,601
Bond and mort. int. accrued	226,064
Div. pay. April 1, 1921	3,935,213
Coupons matured and unpaid	5,312
Accrued fed. taxes, etc.	1,394,429
Accrued div. on stock of subsid. company in hands of public	74,666
Total current liabilities	$14,060,727
Bonds and mort., sub. com's—	
Mort. on ind. bldg., 6 2d st. and Madison av., Chicago, 6 per cent due 1925	3,035,000
Bonds of Electro Metallurgical Co., 6 per cent, due 1947	1,165,000
Bonds of Michigan Northern Power Co., 6 per cent due in 1950	3,728,250
Bonds of Union Carbida Co., 6 per cent, due 1950	818,000
Total bonds and mortgages	$ 8,746,250
Res. for dep. accrued since date of organ., Nov. 1, 1917	9,098,342
Pr f. Stock Sub. Co's in Hands of Public—	
Nat. Carbon Co., Inc.	5,600,000
Linde Air Products Co.	750,000
Cap. stock, Union Carb. & Carb. Co., consist. 2,656,817 shares, no par val.	109,023,719
Surplus	65,275,493
Total	$212,049,521

The Union Carbide & Carbon Corporation owns directly or indirectly substantially all of the common stock of the Union Carbide Company, National Carbon Company, Inc., Linde Air Products Company, Prest-o-Lite Company, Inc., Electro-Metallurgical Company, Oxweld Acetylene Company and controls the Michigan Northern Power Company. Union Carbide Company of Canada, Ltd., Electric Furnace Products Company, Ltd., the Oxweld Railroad Service Company, Haynes Stellite Company, Dominion Oxygen Company, Ltd., and other companies. As of May last year the company controlled a total of thirty-three companies.

There is probably no open stock company in the world about which so little definite knowledge has been circulated as the Union Carbide & Carbon Corporation. Its stockholders have never been permitted to peek behind the scenes no matter how large their holdings. Seven sons of the directors, it is said, have been kept in ignorance. Estimates of the company's earnings have been many and widely at variance.

Those who have purchased the stock have bought blindly. At the same time, however, they have prospered, as Carbide is one of the few mystery stocks that has delivered results. There is probably no stock in the country that has made so many Chicagoans millionaires as the stock of this corporation. The stock has book value of $65.50 per share.

Price Range Detroit Bank Stocks

Detroit Stock Exchange

Name	Range 1921 High	Low	Range 1920 High	Low	May 31,'21 Bid	Ask
American State	221	215	230	200	*218	....
Detroit Savings	280	280	....	....	*280	....
Dime Savings	258	258	260	258	*258	....
First and Old Detroit Nat'l	273	271	275	260	*272	....
First State	....	....	....	....	*181	185
Highland Park State	260	260	265	265	*260	....
Michigan National	140	140	153	142	150	....
Nat'l Bank of Commerce	210	210	250	190	220	220
Peninsular State	....	....	220	220	*220	....
Peoples State	300	285	335	306	*305	....
United Savings	209	208	212	209	225	....
Wayne County Home	....	....	347	347	*347	....
American Loan and Trust	....	....	....	....	....	....
Bankers Trust	....	....	....	....	....	....
Commonwealth	....	....	....	....	....	....
Detroit Trust	295	285	380	375	*275	....
Security Trust	....	....	....	....	*200	....
Union Trust	180	180	197	197	*180	190
Commonwealth-Federal	....	....	130	....	1165	107
Bank of Detroit	....	....	....	....	1200	200
Continental Bank	....	....	....	....	1126	....

*Last Sale.
†Nominal Quotation.

Kalamazoo Stocks.

Paper Companies

	Bid	Ask
American Box Board, com	....	10
American Box Board, pfd	17	13½
Bardeen	12½	13½
Bryant	12½	13½
Eddy, com	2	3½
Eddy, pfd	....	10
Hawthorne	10	10¾
Kalamazoo,	17	19
Kazoo Veg. Parch	11	12
King	17½	23½
Lee, units	100	125
Mac Sim Bar	9½	10¾
Michigan	17½	18½
Monarch	13½	13¾
Rex	15	18
Northern Michigan Pulp	....	110
Standard	28	30
Sutherland	....	10
Waterville	19¾	20½
Western Board	....	20¾

Banks

First National	326	....
Home Savings	165	178
Kalamazoo City Savings	190	200
Kalamazoo National	149	150

Miscellaneous

Barley Motor, com	25	50
Barley Motor, pfd	65	85
Hayes Wheel	....	....
Kazoo Loose Leaf	....	14½
Kazoo Corset	....	10¾
Utah Gasoline Subs	....	....
Kalamazoo Sanitary Mfg	....	10¾
Limousine Body	....	....

Quotes by Olmstead & Mulhall, May 31.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	8	8¾
Commonwealth Power	9¾	10¾
Lufkin Rule, pfd	9¾	10¾
Michigan Sugar, com	7¾	8¼
Michigan Sugar, pfd	3	8½
National Grocer, com	7	7¾
National Grocer, com	6½	7
Saginaw Shipbuilding Co	7¾	8¼
Symons Bros	5½	10
Valley Home Tel. Co., pfd	....	46

BANK STOCKS

Second National	235	245
American State Bank	200	210
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	205	225

Quotes by Phipps, Williams & Beeson, May 31.

CHECK ALTERATION INSURANCE

It is estimated that the loss of money through forgeries and check alterations in 1920 amounted to $50,000,000, an increase of $15,000,000 over the preceding year and $27,000,000 over 1912. Various types of check writing and protecting devices have been invented and are used extensively, yet crooks manage to ply their criminal trade successfully. The bank is fairly well protected by law, but the depositor is not.

To provide protection against loss for the depositor check alteration insurance is being issued by the Detroit Insurance Agency. This insurance covers alterations of the check number, date, amount, payee, signature and indorsement, guaranteeing a return of the amount lost through forgery or check "kiting," as provided in the policy. The premium on a thousand dollars has been made small so that it is not a burden.

HALSEY-STUART PARTIAL PAY PLAN

To accommodate the increasing number of bonds buyers who desire to make partial payments, Halsey, Stuart & Company have issued a booklet describing their partial payment plan. The plan calls for a 10 per cent down payment on any bond selected from the company's list of bonds in existence. Monthly payments of at least 10 per cent of the balance in the ten succeeding months. Payments are receipted for on a card which is quite similar to a savings account book and interest is allowed at the rate of 6 per cent from date of receipt to the date of final payment.

LANSING PROPERTY LISTED

The Lansing Real Estate Board has adopted the multiple system of listing, giving all dealers the value of each property listed. A permanent secretary will be employed.

STRAUS OCCUPIES NEW HOME

After ten years in rented quarters the investment house of S. W. Straus & Company, New York, has erected an office building of its own at the corner of Fifth avenue and Forty-sixth street, which it moved into June 1.

KAZOO CREDIT MEN HEAR ALLES

E. R. Alles, treasurer of the Detroit Steel Products Company and president of the Detroit Association of Credit Men, was the principal speaker at the meeting of the Kalamazoo Association of Credit Men, Park-American Hotel, Kalamazoo, May 25. His topic was "Credit Granting," a practical discussion of credits from the standpoints of the wholesaler, manufacturer and Jobber.

FLINT FARE GOES TO SIX CENTS

The common council of Flint last week gave the D. U. R. permission to increase its city fare to six cents from five cents. The request that jitney competition be eliminated was left for future consideration. The increase was granted as the result of the report of an investigating committee headed by Prof. H. E. Riggs, of the University of Michigan, showing that the company was operating at a loss.

MANISTEE RATE INCREASE

The request of the Michigan Light Company to increase its charges for gas has been granted by the Manistee city commission. The maximum charge is now $2 and the minimum charge $1. The 50-cent service charge which had been the object of much criticism has been abolished.

DETROIT EDISON REVENUE INCREASED

Gross revenue of the Detroit Edison Company for April amounted to $1,913,604.93, an increase of 28.5 per cent over the preceding April. The net income was $493,261.96, an increase of 130.6 per cent. The balance after all deductions was $221,555.46, an increase of 548.6 per cent over that of the same month in 1920.

Digitized by Google

Your Money Is Worth 7%

General business conditions together with foreign financial requirements have elevated the value of money to 7%.

Your money now demands a premium.

We are meeting the situation by selling our positively safe First Mortgage Bonds on a basis to yield 7%.

If you are receiving less than 7%—you are paying a premium instead of receiving one.

You should get full value for your money. Let us tell you how.

Resources Over $7,000,000

DETROIT MORTGAGE CORPORATION

Real Estate Exchange Bldg.
Third Floor

COAL C. C. COREY COKE

1903-4 MAJESTIC BLDG. DETROIT, MICH.

STEEL STAMPINGS OUR SPECIALTY

STEEL STAMPING AND SHEET METAL PARTS
FOR AUTOMOBILE AND OTHER USES
QUALITY AND SERVICE

STEEL FURNITURE CO., Grand Rapids, Mich.

Detroit Representative E. H. WELKER CO., INC. 222 W. Larned St. DETROIT

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, from which authoritative figures are obtainable, these quotations must be considered as nominal. We endeavor to obtain figures from responsible sources but do not assume responsibility for their correctness. It should be borne in mind that prices for many stocks which are closely held are apt to vary widely on sale.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	147	147
Columbia National Fire	15½	18
Commerce Fire	26	28
Detroit Mortgage, com	2¾	2¾
Detroit Mortgage, pfd	5½	5¾
Detroit Copper & Brass	17	20
Detroit National Fire	26	26
Detroit Life	24	27
Eureka Croesus	50	51
Federal Bakeries Co	27	30
Federal Discount Co	7½	8
Fisher Body	22¾	22¾
General Necessities Corp	10½	12
Gladya-Belle Oil, com	22	25
Gladya-Belle Oil, pfd	32	34
Great Lakes Engineering, new	13	14
Hoover Steel Ball	12	14
Hayes Wheel Co	..	14
Interstate Fire	26	32
Invader Oil	100	105
Jackson Cushion Spring	7	8
Jewett, Bigelow & Brooks Units	10	13
Jewett, Bigelow & Brooks, com	6½	6¾
Kelsey Wheel	52	53
Little Wonder Stove	1	1¾
Monroe Binder Board	22	23
Monroe Motor Bus	8½	8¾
McCord Manufacturing, com	4½	7½
McCord Manufacturing, pfd	40	50
Michigan Copper & Brass	14	15
Mich. Fire & Marine	75	80
Noble Oil, com	26	22
Petoskey Portland Cement	13½	14
Peninsular Fire ins	21	21
River Raisin Paper	11¾	13¾
Trippensee Mfg. Co	5½	6½
Union Mtge., 100% com	..	7¾
Union Mtge., 90% com	8	11

Motor Stocks	Bid	Asked
Briscoe Motors	15	17
Columbia Motors	2	2¾
Chalmers	¾	1¼
Chevrolet	350	400
Cleveland	21	25
Curtis Aeroplane	3	4
Durant Motors	34	34½
Elgin Motors	4½	5½
Haynes	150	178
Hupp	13¾	17¼
Liberty Motors	3½	4¾
Lee Tire	70	74¾
Pierce-Arrow Truck	22¾	23¾
Mercer	2	4
Mitchell Motor	7	9
Motorbus	8¼	8¾
Nash	200	225
Republic Truck	14¾	14¾
Saxon Motors	4	5½
Scripps Booth	25	28
Stearns	24	25
Stromberg Carburetor	26¾	26¾
Studebaker	70	71¼
Willys-Overland	27¾	28¼
Wilson Truck	2	3
Grant Motor	3	4
Jordan Motor	75	125
Peerless Motor	21	27
White Motor	27¾	23¼

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	19	19¾	15
Dow Chemical	160	160	100
Firestone Tire & Rubber	81	90	67
Do. pfd.	87	88	76
Fisher Body	18½	20	15
Do. pfd	72	75¼	61
Goodyear Tire & Rubber	30	29	21¼
Do. pfd.	29½	53½	26
Miller Rubber	72	90	47
Murray Ohio	6	6	6
National Acme	21½	28¾	20½
Paragon Refining	19	25½	16½
Portage Rubber	17	17	15
Do. pfd.	22	46	30
Standard Parts	¾	11	¾
Do. pfd.	2¾	22½	2
Vulcan Rubber	20	20¾	15
Youngstown Sheet & Tube	59½	78	57
Do. pfd	101½	104½	102¾

Quotes by Otis & Co., May 21.

Digitized by Google

Banks and Bankers

NEW BANK HOMES PROGRESSING

Among Detroit's new building to be shown visitors to the convention will be the new home of the Detroit Savings Bank, the new Continental Bank and the half-completed First & Old Detroit National Bank buildings. The delegates will find much of interest in visiting the new quarters of these institutions. The remodeling of three floors of the old Chamber of Commerce building into one of the most modern banking rooms in the country has taken about a year. The quarters occupied by the new Continental Bank, Broadway, are unique, and the progress of the work on the new building of the First & Old will be a surprise. Viewed from the river boats the 24-story building stands out prominently adding substantial "tooth" to the sky line of downtown Detroit.

MORE ROOM PROVIDED

Rapid growth in the business of the National Bank of Pontiac, which was organized but seventeen months ago, has necessitated a rearrangement of the office space to enable the larger clientele to transact business with comfort and convenience.

The women's rooms and the private consultation room at the left of the front entrance have been removed, and an additional space of about ten feet is being arranged for bank officials.

The directors' room at the rear of the building, will henceforth be available to customers who desire space for private consultations and a desk and bench for women customers has been provided at the front of the building.

In the seventeen months the bank has been doing business the total assets have risen to $2,000,000 and the deposits have mounted to $1,400,000.

DOUBLING ITS CAPITAL

The board of directors of the First State Bank of Royal Oak has voted to increase the capital stock from $50,000 to $100,000. The bank was organized in 1913 with a capital of $25,000. This was doubled in January, 1920.

VALLEY CITY BUILDING & LOAN

The annual report of the Valley City Building & Loan Association, Grand Rapids, shows that total receipts were $254,688. Total assets are $336,903, of which $303,242 is in loans. The outstanding stock totals $163,355 advance payment and $131,129 dues. Officers for the coming year have been elected as follows: President, Herman Van Aalderen; vice-president, Glenn C. Mason; secretary, J. Langdon McKee; treasurer, John P. Otte. Directors are the officers and A. C. Bodelack, C. U. Clark, Clayton Fuller, C. J. Kuennen, Harry Thomasma, A. J. Latte and Martin Pijenbrook.

BANKERS' BANQUET IN FALL

The executive committee of the Bankers' Club of Detroit has decided to defer until November the banquet which was scheduled for May 9 at which Sir Eric Geddes was scheduled to speak. It is hoped Sir Eric will be able to address the fall meeting.

SMITH GOES TO CHARLEVOIX

Leo Smith, for some years assistant cashier of the First National Bank, Boyne City, will become assistant cashier of the Charlevoix State Savings Bank June 1. He will succeed Archie Livingston, who became cashier of the Charlevoix State when A. D. Crimmins left the bank to become cashier of the Grand Rapids National City Bank.

CONTINGENT LIABILITY

The Compensation Act provides that payment of compensation for death and certain kinds of long term disability, may be made in installments over a period as long as ten years.

So until all payments due on such claims have been completed there is a contingent liability upon your part. If the insurance company fails to complete them, YOU must.

Only when the full payment has been actually made can you possibly be released from this contingent liability.

To relieve its members of every possible element of chance—to assure them of absolute protection—the Michigan Mutual very early in its history, adopted the plan of discharging all liability on these long term payments by payment in advance.

When a claim of this kind arises under a Michigan Mutual policy, the full amount due is deposited with one of the largest Trust Companies to the credit of the claimant, who may then draw on this account weekly until the full amount of the claim has been discharged.

Upon all such deposits the Trust Company gives a receipt which, under the Compensation Act, automatically relieves both the policyholder and the insurance company OF ALL FUTURE LIABILITY.

The advantages of this plan to the compensation insurance buyer should be plainly apparent. Much may happen in ten years—the longest term of payment. Even seemingly strong insurance companies may meet with reverses impairing their solvency and if this happens the responsibility for completion of the unpaid installments will be thrown back upon the policyholder, perhaps at a time when it would be a great burden for him to assume them.

Avoid this chance. No matter how remote it may seem it still is a chance—an unnecessary chance as it can be absolutely eliminated by carrying your compensation insurance in the Michigan Mutual.

Other companies promise to pay at a future time—the Michigan Mutual pays NOW, relieving both you and itself of all future liability.

Let us tell you more about this and other advantages of compensation insurance in this company. Write now—a postal will do.

Every policy is non-assessable. Every policy shares in savings.

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — President — Michigan

Home Office-Cherry 2829 Grand Rapids, Lansing and Saginaw Hospital-Cadillac 2676

Digitized by Google



Pressed Steel Parts

Special Sheet Metal Articles and Parts Made to Order:

Oil Pans	Maxim Silencers
Radiator Shells	Gear Covers
Radiator Tanks	Cylinder Top Covers
Radiator Side Members	Chain Covers
Gasoline Tanks	Cylinder Side Plates

We are at your service for Drawing, Stamping, Pressing, Spinning, Blanking and Forming in all sheet metals such as Aluminum, Brass, Copper, Sheet Steel, Tinplate and Sheet Zinc; Hot Galvanizing, Ternecoating, Japanning, Tinning and Porcelain Enameling.

Send us blueprints, samples or perhaps a casting we can replace with sheet metal—consult our Engineering Service.

Geuder, Paeschke & Frey Co.

1325-1600 St. Paul Avenue, Milwaukee, Wis.

Detroit Office, 712 Dime Bank Bldg.



438

Representatives in Michigan Send Us Each Week the Following:

School district, township, village, town, city, county or private corporation bond issues voted or about to be floated;

Pending awards of contracts for public improvements, such as roads, bridges, paving, buildings and the like, and

Bids wanted or contracts to be awarded on supplies or materials of any nature.

In the case of bond issues pending names, dates, amounts, denominations, etc., are carefully noted; and where bids have been accepted, the terms are given fully.

In case of public improvement contract awards about to be made, equal care is taken to see that all the facts necessary to our readers wishing to submit bids are set forth. The same applies to contracts for supplies or materials.

Is this information worth 10 cents a week to you?

SUBSCRIBE NOW

$5 Per Year; 3 Years, $10.00.

MANUFACTURER PUB CO.,

611 Free Press Bldg. DETROIT

New Corporations

FOR WEEK ENDED MAY 28, 1921

The Rowlman Construction Co., Detroit; general contracting business; Edward F. Eiserman 1392 Delaware ave., Thomas M. Bowling, Cash W. Talbot, Detroit ..... $

Belmont Sand and Gravel Co., Grand Rapids; manufacture, buy, sell and deal in building materials, cement, gravel, lime, etc. Fred R. Jean, Peter W. Decker, Burt G. Decker, Grand Rapids 150,000

Miles Amusement Co., Detroit; conduct theatrical and other amusement exhibitions; Charles H. Miles 1220 Griswold st., George H. Wittensperger, George F. Guise, Detroit 325,000

Wyoming Light and Power, Wyoming township, Kent county; purchase or develop electric current for light and power. Eugene Jordan, Herbert M. Fountain, Wyoming township. William J. Brien, Grand Rapids .....

Central Auto Paint and Trim Co., Detroit; paint, repair, trim, enamel and decorate automobiles, bodies, etc.; Philo D. Bates, 3201 Concord ave., Charle A. Bement, Raymond J. Ellis, Detroit 10,000

Cook & Willoughby Inc Detroit; manufacture, install, buy, sell and deal in auto anublers, horns, lamps, etc. Ray R. Cook and David J. Willoughby, 955 Stimson Place, Frank J. Riggs Detroit 1,500

McCaslin Lake Recreation Co. Pontiac; purchasing, holding and dealing in real estate. C. H. Peck, Lewis W. Greenhalgh, Pontiac, M. L. Boughner Detroit, Inc 5,000

Lawrence Tanning Co., operations in Lawrence office at Hoover, dressing, tanning hides, leather, horsehides, and grinder. Indian F. Curtis, Hugh A. Seelbach, Detroit. Inc. George 50,000

Statistical Bureau of the Michigan Grocers Co., operation of America operations in Michigan office at Detroit, solicitation and management under a certain agreement creating an express trust under the common law ownership and management along co-operative lines of various retail grocers; Harrison M. Parker, John Doe, Chicago; Viggo E. Bird, New London, Conn. 1,000,000

Foote & MacFarlane Lumber Co., Grand Rapids; carrying on and conducting business of selling lumber, building material and other forest products; Herbert L. Foote, Alice M. Foote, Robert MacFarlane, Grand Rapids.. Michigan-Arkansas Oil Corporation, operations in Junction City, Okla., office at Grand Rapids; buy, sell, lease, operate, and develop oil properties and gas properties; Colfax Gibbs, Glen H. Bowser, Adolph H. Brandt, Grand Rapids 20,000

Louis Dueweke Sons, Detroit; buy, sell, trade and deal in at wholesale and retail, groceries, provisions, etc. Louis Dueweke, 2161 McClellan ave., Louis E., Albert C. Dueweke, Detroit

Fox Road Tailoring Co., Detroit; manufacture, buy, sell and deal in clothes, wearing apparel and general tailoring business. Louis Roud, 165 Buena Vista ave., W., Jacob P. and Otis Fox, Detroit 75,000

The Chapel Electric Co., Jackson; buy, sell and manufacture electrical equipment; Ralph D. Chapel, F. Bling, Chas. D. Dillon, Jackson.

The Saginaw Courier Press, Detroit; printing, binding, engraving and conduct general printing and stationery business. Francis Morris, 646 Alexandrine, Roy H. Curtis, Melville C. Mason, Detroit 50,000

Federal Grocery Co., Detroit; buy, sell, wholesale and retail, all kinds of groceries, meats, confections, fruits, butter, eggs, etc. Harry and Philip Bottman, 1437 Chestnut st., Elias Kipnis, Detroit 6,000

The Northern Investment and Finance Corporation, Bay City; buy, sell, own and deal in stocks, bonds, securities of all kinds. Paul H. Jennemore, W. H. Beers, Bay City; Ellis C. Leighton, Frederic, Mich. 20,000

Shields Children's Hosiery, Lansing, buy and sell footwear and footwear accessories. Karl F. and Kathleen B. Shubel, Logan C. Urquhart, Lansing 1,000,000

Automotive, Inc., Flint; conduct general garage business; John H. Neubert, Charles M. Duenbury, Lester J. Stevenson, Flint 6,000

Utica Co-operative Oil and Gas Co., Utica, Macomb county; purchase and sale of oil, gasoline and auto accessories; George Weithausen, Charles Hacker, August B. Hahn, Utica..... 30,000

Home Builders Finance Co., Detroit; purchasing, holding and dealing in real estate and real estate securities; Fred A. Hubbard, 1523 W. Philadelphia, Detroit; Thomas F. Hubbard, Detroit; Charles R. Talbot, Farmington 20,000

Automobile Dealers and Owners Underwriters Co., Grand Rapids; act as attorney in fact for the Automobile Dealers and Owners Insurance Exchange. Arthur J. Tuttle, 803 Federal bldg., Detroit; F. F. Wood, Grand Rapids; Paul M. Hutchins, Grand Rapids 20,000

50,000

Gabel Creamery Co., Detroit; purchase, make and sell at wholesale and retail all kinds of dairy products; Philip Gabel, 3594 Oakland ave., Herman Koeln, Carl F. Dielaff, Detroit..... 250,000

6,000

Harry L. Stevens and Company, Detroit; buying, selling and dealing in men's clothing, hats, shoes and other wearing apparel; Harry L. Stevens, 653 Lawrence ave., Andrew E. Causley, Herbert G. Jewett, Detroit... 100,000

20,000

The Continental Refrigeration Co., Detroit; buy, sell, deal in and install refrigeration plants, etc.; Wesley A. Williams, 81 Marston ave., Leon E. Stewart, Marvin B. Clingan, Detroit 20,000

5,000

Tanglie Brothers, Detroit; manufacture, buy, sell, deal in, lay and apply any and every kind of brick, stone; Henry F. Tanghe, Ruth M. Tanghe, 3233 Pine st., Detroit, Edward F. Tanghe, Milwaukee 1,000

10,000

INCREASES

Bad Axe Driving Park Assn., Bad Axe, from $4,000 to..... 20,000

Clayton & Lambert Mfg. Co., Ypsilanti, from $1,000,000 to..... 1,500,000

Peninsular Power Co. (F.), Madison, Wis.-Iron Mountain, from $2,500,000 to 3,000,000

Digitized by Google

Willmarth & Morman
GRINDERS

Brand New at Special Prices

No. 78 Full Automatic, Wet Power Feed Surface Grinder---$800.
No. 3 Full Automatic, Wet Power Feed Surface Grinder---$800.

These Grinders are Brand New, Late Style, Complete with all Standard Equipment and on our floor for immediate delivery, f. o. b. Detroit, Michigan.

The Above Machines Carry the Factory Guarantee

Riverside Machinery Depot
251 ST. AUBIN AVE. **DETROIT, MICHIGAN**

The Babcock & Wilcox Co.
85 Liberty St., New York
Established 1868

THE BABCOCK & WILCOX COMPANY STEAM

Water Tube Boilers
Babcock & Wilcox
Stirling
Rust

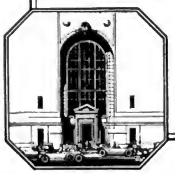
Steam Superheaters
Chain Grate Stokers

Michigan District Office
411-412 Ford Building
Detroit

A Bank Built On
A Nation's Commerce

This bank was established in 1856 for the purpose of furthering the commercial life of the nation. Its organization and experience have been built on the bedrock of the country's commerce and it is in the capacity of a commercial bank that it is best qualified to act for financial institutions the country over.

THE
NATIONAL PARK BANK
OF NEW YORK
214 Broadway



Digitized by Google

Mixing the Ounce of Prevention

(Continued from Page 8)

say that only three measures were passed in the last session that affected the state's industries. One of these was the Corporation Franchise Fee Law. Another was the revision of the corporation laws of Michigan. This bill was advocated by the Association and we followed it closely. It permits the issuance of non-par value stock, removes the limit on total capitalization, simplifies the law and eliminates that section requiring the filing of names of stockholders with the Secretary of State. It will bring into the state fees paid by foreign corporations into other states.

"This act also provides for the issuance of a special preferred stock known as industrial welfare stock, which can be sold to employes. This clause was asked by corporations desiring to issue stock to their employes as rewards for their industry and long connection with one employer.

"The third bill was the amendment to the compensation act. This bill came before the House so drafted as to provide for an increase in the percentage of weekly payments from 60 to 66 2-3 and an increase in the maximum weekly payment from $14 to $20. It provided for a definition of an accidental personal injury that would have covered almost any kind of injury, and in some cases no injury at all. The definition was too broad. Facial disfigurement was provided for, whether or not such disfigurement impaired the worker's efficiency. It was the complete program of the Federation of Labor on the compensation law.

"When the bill was passed it provided only for $200 funeral expenses and an increase in the total disability payment from $6,000 to $7,000. These are the only two sections affecting the manufacturer. A clause was added to put sub-contractors under the act, and another providing for the protection of workers injured outside of the state.

"While all the credit for saving Michigan industry from such burdens imposed by any or all of the 160 bills introduced cannot be assumed by the Association, it is generally recognized that there been no association, or had the Association been less active and efficient, the result would have been much different. Credit must be given those who have shown more interest in the state's welfare than in such glory as they might have gained for themselves, but, on the other hand, so long as industry or any other division of the state's population cannot hope to, or want to reserve the whole legislative representation for itself, the legislature having an honest desire to serve all classes fairly are entitled to information and opinions by which they can decide what legislation to support and what to disapprove. The function of an association is to impart this information and plead its case on its merits.

Some of the Bills

Mr. Lovett's digest of some of the bills introduced, which should bear out the preamble to this article, follows:

"Under the head of general legislation, the bill repealing the act creating the Michigan State Police died in committee, and this organization became a part of the Department of Public Safety. This department consolidated the liquor enforcement, food and drug and oil inspection departments and saved for us the state police.

"The full crew train bill, which could have increased the payroll of Michigan railroads at a time when a reduction in cost and in freight rates was most urgent, was killed in committee. Right here I might mention the fact that the agricultural members of the House appeared to be opposed to the major part of the labor measures. On the other hand, the farmers were favorable to most of the taxation measures. Bills prohibiting cost-plus contracts and approving the Great Lakes-St. Lawrence waterway project were passed. A bill creating a commission to regulate the use of sprinkler heads in fire protection was defeated.

"The Association is not looking after the interest of any one class of industry, but for all industry, and often a measure may be brought forward, which, while it affects but one type of manufacturing, nevertheless contains a principle in which every class of manufacture must be interested. For example, a bill to regulate the manufacture and sale of wire fence was introduced, and as originally drawn provided a jail sentence for any manufacturer of wire fence in the state who had a variation in a gauge of wire and galvanized coating of more than .003 of an inch. You may laugh, but this bill passed the Senate. Nothing short of a lengthy hearing before the agricultural committee of the House, in which wire fence manufacture was traced from ore to the fence on the farm, defeated this bill. It took the farmers to do the trick. It may be that a bill having so much as the interest for you but it does not directly affect your industry, but you must bear in mind that if is just as easy to introduce a measure against your business, which has less merit. Take the coal bill, for instance. It provided for a standard test for domestic coal and was an attempt to regulate every coal dealer in the state, although none of the coal was produced in the state. This measure was in general orders in the Senate before the senator who fathered it withdrew it.

"There was a conditional sales bill which would have had the effect of making sales business with legal tape that a man in that business would have had to have a lawyer sitting at each side of his desk. The measure passed the Senate but lost out in the House judiciary committee. Our packing house members were affected by attempted legislation requiring that interest for years be stamped on all ham and bacon packages. This measure passed the Senate but was defeated in the House. Considerable excitement was created by the bill which would have required that the weight in ounces of each co-stituent part be stamped on almost every product manufactured in the state, but it did not survive.

"Some bills introduced were the result of afore-thought, others from lack of knowledge or business judgment. The measure to prohibit the payment of commissions on materials furnished the state is an example. The proponent did not realize that if every firm had to maintain salesmen on a salary at Lansing it would cost more money than the payment of commissions. He believed that this would save the money being paid to salesmen. He did not know the state bought on contract only.

"The automotive industry was selected as a target for considerable legislation. One senator desired to tax driveaways to the tune of $3 each, which meant that every Michigan automobile manufacturer whose car was driven away would have to pay $3 for the privilege, which was $3 more to be levied against the right to manufacture cars in this state than in any other state. The obvious discrimination against our leading industry killed the bill.

"The 5 per cent tax on gross earnings of motor truck companies provided in another bill was a thoughtless attempt to wring tribute from the industry. It was tabled while the framer of it was out of the room. The Highway Department was behind this bill, and it was admitted that the idea came from an article in a national magazine, which told of such a law in California. The House roads and bridges committee had a bill providing for a tax of one cent a gallon on gasoline. What could be more unfair than to attack the industry that has made Michigan the automotive center of the world?

"The measure requiring rear-view mirrors on motor trucks used outside the city became a law. We were in favor of a bill compelling drivers of all animal-drawn vehicles to attach lights to them, and it was passed with the proviso that hay wagons were to be exempted.

"Then we had a veteran of the Civil War come down from up-state who had a lot of new ideas about legislation. Once he owned an automobile and became to believed that a garage over-charged him for repairs he introduced a couple of bills, one of which provided for the licensing of garages and service stations and mechanics employed in them. His argument was that he had taken his car to a service station where he was told the cost of work to be done would be $10, but when he went after the car the bill was $50. He was determined to get even by exercising his legislative powers.

"There are two kinds of legislation, class so-called legislation desired by some particular group of farmers, labor unions or manufacturers, and personal grievance legislation. When the promoters of such legislation begin work the bills come along in stacks on Monday or Tuesday.

Hours-of-Employment Bills

"The eight-hour bill for male employes was introduced, as usual, but drew only eight votes, one for each of the eight hours. An attempt was made to place a bill prohibiting manufacturers from taking photographs and fingerprints of employes, the incentive for which was the Ford-Communist antagonism for the mining interests. It was said that the fathers of the drafting measures against industrial interests was the outgrowth of resentment against prohibition, which killed the sale of the brewery business. Another example of personal grievance legislation was the bill prohibiting employers from discharging workers who had been injured because of negligence in a factory, which was fathered by a member who had a relative discharged for this reason.

"One legislator introduced a 58-hour bill for women workers, but after he found the state already had a 54-hour bill for women, he requested from the floor of the House that the bill be tabled. A bill to repeal the specific tax on [illegible] per cent, a tax of one-half of one per cent., passed the House, and if it had become a law would have put all foreign securities on the ad valorem list to take a tax rate of about 3 per cent, depending upon where you lived. It did not come out of the Senate committee on banks and corporations.

"Two income tax measures were introduced, one in the House and one in the Senate. The first one was a resolution calling for an amendment to the constitution, which in its original form would have provided an income tax on corporations, with graduations, exemptions and reductions, and it would have required the legislature, if the people had voted on it in its original form, to pass such a law as was set up in this amendment. It lacked three votes of passage, whereupon it was tabled for three or four weeks, when an amendment was offered exempting corporations and eliminating all the deductions, exemptions and graduations. The measure, as it passed the House, provided only for a flat income tax on gross earnings without corporations being included.

"The farmers were divided on this proposition and it was killed in the Senate committee. In the Senate a measure to operate under

Digitized by Google

the present constitution provided a tax of one-fourth of one per cent on incomes from nothing to $5,000; from $5,000 to $10,000, one-half of one per cent; from $10,000 to $40,000, three-fourths of one per cent; from $40,000 on, 1 0 per cent was introduced, but was declared unconstitutinal."

Mr. Lovett might have gone on and reviewed the whole 160 hills but what he has said seems sufficient to show why the Michigan Manufacturers' Association has won its "block letter" and is growing in membership. Also it ought to be sufficient argument in favor of more attention to politics by the manufacturers of the state. It seems likely that more will be given in the future. At any rate, a strong list of officers and directors has been named for the ensuing year, and the newly elected men are as energetic and progressive as were those who retired. Frank C. Whitney, secretary-treasurer of the Muskegon Motor Specialties Company, is the retired president, and it was under his leadership that the Association made such remarkable progress. During 1920 there was added 208 new members, which brought the total increase in membership since 1919 up to 500.

The New Officers

The new president is F. W. Hutchings, vice-president and treasurer of the Charcoal Iron Company of America, Detroit. As secretary of the National Founders' Association Mr. Hutchings built up its membership and influence until it became one of the leading open shop organizations in the country. The vice-presidents are A. B. Williams, secretary of the Postum Cereal Company, Battle Creek, and C. E. Bement, vice-president and general manager of the Novo Engine Company, Lansing. The treasurer is M. J. Murphy, president of the Murphy Chair Company, Detroit, and the general manager, John L. Lovett.

Directors—Three years: L. F. Bomhoff, treasurer, Jaxon Steel Products Company, Jackson; W. O. Adams, president and general manager, Production Foundries Company, Ann Arbor; A. M. Larsen, works manager, Manning, Maxwell & Moore, Inc. (Shaw Crane Works, Muskegon); A. R. Demory, president, Timken Detroit Axle Company, Detroit; George P. Wigginton, general manager and president, Kalamazoo Loose Leaf Binder Company, Kalamazoo.

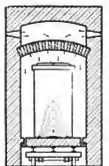
Two years—M. W. Neal, treasurer, the Acme White Lead & Color Works, Detroit; W. C. Rowley, vice-president, Federal Motor Truck Company, Detroit; F. W. Foote, general manager, Imperial Furniture Company, Grand Rapids; W. S. Rowe, president, Valley City Milling Company, Grand Rapids; Arnold Boutell, secretary, Saginaw Manufacturing Company, Saginaw.

One year—David Averill, vice-president, Dort Motor Car Company, Flint; W. H. Burnham, president, Peerless Wire Fence Company, Adrian; W. E. Curry, general manager, Cobbs & Mitchell, Inc., Cadillac; Sydney C. McLouth, Vessels & Shipbuilding, Marine City; P. W. A. Fitzsimmons, president, H. Brewer & Company, Tecumseh.

DICKINSON RETAINS POST

In connection with the taking over by the state of the Michigan State Fair, which will hold its seventy-second annual exhibition in Detroit next September 2 to 11, the services of G. W. Dickinson as secretary-manager have been retained by the board of managers. In the eight years Mr. Dickinson has acted in this capacity the Michigan State Fair has grown from a small, money-losing venture to the greatest fair in America, with splendid grounds and buildings of its own at the northerly limits of Detroit, and a series of premiums and prize awards for exhibitors which are the most attractive anywhere. In addition, the fair's financial success has assured still further growth from its present dimensions.

USES AND LIMITATIONS
of
Car Type and Car-and-Ball Type Furnaces
are clearly defined in Bulletin 222-B.



Irregular heating of high charge in car furnace, showing tendency to overheat at the top and formation of cold zone (X) at bottom due to comparatively cold hearth.

Typical installations are shown to illustrate—

The applicability of car type and car-and-ball type furnaces to the heat-treatment of material that cannot be advantageously handled in other types of furnaces.

Factors governing selection of the type (car or car-and-ball) best suited to individual manufacturing requirements.

Difference in design of each type.

Influence of unequal cooking on the quality of finished product.

In brief, this bulletin is a discussion of principles which will appeal to those interested in furnace design, loading and handling methods, heat generation and utilization, etc.

Write for Bulletin 222-B to nearest branch

W. S. ROCKWELL COMPANY
Furnace Engineers and Contractors
50 Church St. (Hudson Terminal Bldg.), New York.

We Make Industrial Heating Furnaces for Every Requirement.
COAL—OIL—GAS—ELECTRICITY
"FURNACE AND FUEL TO SUIT CONDITIONS"

Branches: Chicago, Ellsworth Bldg. Cleveland, Engineers' Building Detroit, Majestic Bldg



The Luxeberry Painter Says:

"Varnish is what varnish does—when you specify BERRY BROTHES varnish you have said all there is to say on the subject of the best varnish you can buy.

It not only brings out the rich natural beauty of the surface but protects it from harm during long service."

BERRY BROTHERS
World's Largest Makers Varnishes and Paint Specialties
Detroit, Michigan. Walkerville, Ontario.

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

Digitized by Google

WINTON SIX

Merit

Like a charming woman, the Winton Six wins your approval at first glance. Its beauty grows on you too, because the car's merit goes all the way thru.

Comfort that lulls you away from dull care; speed that puts you in front when you want to be there; power that gives you a glowing sense of freedom and safety. These qualities make the Winton Six a thoroly satisfying creation. May we show you? Simply telephone.

GEORGE H. ZUVER CO.
4465 Cass Avenue
Telephone Glendale 4605



Buick, Chalmers, Sheridan and Mitchell Cut Prices

(*Continued from Page 5*)

present lines of new Buick sixes, will be carried through the 1922 season, but that beginning June prices have been reduced from $270 to $660, as follows:

Model	New Prices	Old Prices	Reduction
22-44 Three-pass. roadster	$1,195	$1,795	$300
22-45 Five-pass. touring	1,525	1,795	270
22-46 Three-pass. coupe	2,135	2,385	250
22-47 Five-pass. sedan	2,485	2,885	400
22-48 Four-pass. coupe	2,525	2,985	460
22-49 Seven-pass. touring	1,735	2,085	350
22-50 Seven-pass. sedan	2,865	3,525	660

President J. I. Handley, of the Handley Knight Company, Kalamazoo, which makes the Handley-Knight cars, has notified dealers and distributors that if present list prices are reduced at any time during the present year a refund of the full difference between the old and the new quotations will be made to purchasers and prices will also be equalized to the dealers on unsold new cars.

The Standard Steel Car Company Pittsburgh, has notified its dealers and distributors that there is no occasion for reducing its prices.

A reduction of $200 on the four and six cylinder Elk-Hart cars has been announced by the Crow Elkhart Motor Corporation, Elkhart, Ind., the new prices being guaranteed against further reductions until October 1. The revised schedule is as follows:

	New Prices	Old Prices	Reduction
Four Cylinder Models			
Three-pass. roadster	$1,295	$1,495	$200
Five-pass. touring	1,295	1,495	200
Four-pass. special sport	1,345	1,545	200
*Four-pass special sport	1,595		
Six Cylinder Models			
Three-pass. roadster	1,545	1,745	200
Five-pass. touring	1,545	1,745	200
Four-pass. real sport	1,595	1,795	200
*Four-pass special sport	1,845		
*Seven-pass. sedan	2,395		

*Not listed before.

The LaFayette Motors Company, Indianapolis, Ind., has announced price reductions of from $750 to $950, effective June 1. The new and old price schedules follow:

Model	New Prices	Old Prices	Reduction
Touring cars	$4,850	$5,825	$775
Torpedo	4,850	5,825	775
Roadster	4,850	5,825	775
Four-door coupe	6,250	7,200	950
Sedan	6,500	7,100	900
Limousine	6,500	7,500	750

For the second time since September, when the Ford Motor Company and the H. H. Franklin Manufacturing Company, Syracuse, N. Y., started the general movement to bring prices of motor cars back to near a pre-war level, the Franklin company announce a new reduction in its prices of from $100 to $250, effective this week. The price schedule is now as follows:

Model	New Prices	Old Prices	Reduction
Runabout	$2,950	$2,700	$150
Four-pass. roadster	2,850	2,750	200
Touring	2,950	2,800	150
Sedan	3,650	3,850	200
Brougham	3,650	3,800	250
Demi-coupe	2,950	2,950	100
Demi-sedan	3,650	....	....
Chassis	2,225	....	....

The Lincoln Motor Company, Detroit, has announced reductions of from $300 to $800 on its cars effective June 1. Prices now are:

Model	New Prices	Old Prices	Reduction
7-passenger touring	$4,300	$4,600	$300
5-passenger phaeton	4,300	4,600	300
3-passenger roadster	4,300	4,600	300
4-passenger coupe	4,950	5,750	800
5-passenger sedan	5,400	6,000	600
7-passenger suburban limousine	6,000	6,600	600
7-passenger town car	6,000	6,000	600

Effective July 1, the prices of Templar cars, made by the Templar Motors Company, Cleveland, will be reduced from $500 to $600, as follows:

Model	New Prices	Old Prices	Reduction
5-passenger touring	$2,385	$2,885	$500
4-passenger sportette	2,385	2,885	500
2-passenger touring roadster	2,385	2,885	500
5-passenger sedan	3,185	3,785	600
3-passenger coupe	3,185	3,785	600

Durant Motors Factory in Lansing

(*Continued from Page 9*)

be cut through from Michigan avenue to Saginaw street. Tied into the main "stem" of the plant are to be three supply units 90 by 400 feet each. These will take care of all body processes, motor chassis machinery, etc. Another wing, 80 by 260 feet, and one story, is devoted to the enameling processes.

Sidings, feeding from the Manufacturers' Belt Line to the rear of the plant, serve the various supply units. One siding to the south takes care of the finished product. The heating plant is shown in the rear. The administration building faces the proposed new street and is located in front of the main plant.

The factory will be operated by electric power. The entire scheme is, in a word, the condensed whole of Mr. Ver Linden's long experience as production manager. Efficiency, economy, conservation of time, ease of operation all are embodied in the plan.

The buildings will be of reinforced concrete, with brick trimmings and plenty of glass. The office is of the same material. With the exception of the enameling unit the remainder of the plant and the administration building will be two stories. Excavation work is under way, the building to be ready for occupancy in November. Manufacturing starts January 1, 1922. The cost will be nearly $3,000,000.

Detroit Tigers' Home Dates for 1921

June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
Aug. 16, 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

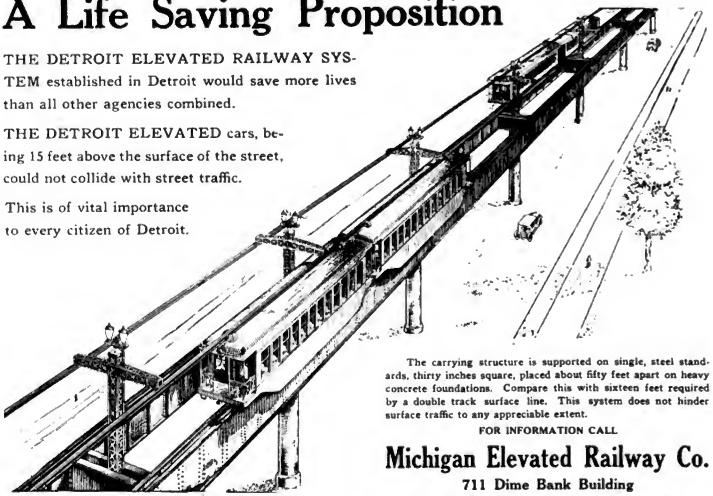
Digitized by Google

A Life Saving Proposition

THE DETROIT ELEVATED RAILWAY SYSTEM established in Detroit would save more lives than all other agencies combined.

THE DETROIT ELEVATED cars, being 15 feet above the surface of the street, could not collide with street traffic.

This is of vital importance to every citizen of Detroit.



The carrying structure is supported on single, steel standards, thirty inches square, placed about fifty feet apart on heavy concrete foundations. Compare this with sixteen feet required by a double track surface line. This system does not hinder surface traffic to any appreciable extent.

FOR INFORMATION CALL

Michigan Elevated Railway Co.

711 Dime Bank Building

Phone Cherry 4728 **Detroit, Michigan**

Digitized by Google

Columbia Steel & Shafting Co.

MILLS — GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON	CLEVELAND		DETROIT	
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:	Atlanta	Denver	Portland	
EUROPEAN:	Columbia Steel & Engineering Co., Ltd., London, Eng.			

Detroit Warehouse—1300 West Fort Street **Cherry 6700**

Every Dye Plant An Arsenal

(*Continued from Page 10*)

Dr. Julius Stieglitz, director of the department of chemistry, University of Chicago, said in a recent address that many lives and much suffering could have been saved during the war had the United States and the other Allies had well developed dye industries. He counted, he said, twenty-nine important substances from coal tar in the letter A columns of a list of drugs. Mr. Choate mentioned in his Detroit address that during the war, when antiseptics and drugs were scarce, dyes were used in dressing wounds, with the result that many of the wounded soldiers "looked like Easter eggs."

Although this whole subject has been treated superficially in these articles, it must come home to Michigan manufacturers as one which is of the utmost importance. We have in Michigan Parke, Davis & Company, the Dow Chemical Company and the Charcoal Iron Company of America making chemicals, so that the state is not entirely immune from such evil results as might develope from failure to support such legislation as will protect the dye industry from selfish interests and the German ambition to cripple every other nation industrially as well as in armaments.

In the absence of Mr. Dow, G. Lee Camp, sales manager of the Dow Chemical Company, Midland, writes this paper as follows on the general subject of competition in chemical manufacture:

"We presume the problems presented by the abnormal exchange situation are not generally understood except by those manufacturers who are forced to meet the German competition.

"The ratio of exchange between the mark and the dollar, as compared with 1914, has so changed that a mark has depreciated sixteen fold, whereas the cost of labor in Germany has increased only 800 per cent. As compared with this, we have the corresponding increase in cost of production here in America, as compared with pre-war days. Unless some action is taken to offset this great difference in costs, the future position of the American chemical industry is indeed precarious. Assuming that the mark has depreciated in value double the extent that German labor cost has increased. German labor cost has increased only 50 per cent. Labor is the basis of cost for most all raw materials, and in addition there is the advantage of idle boats which will eventually mean much lower ocean freight rates.

"While it is the hope of every one of us that the United States may never again be compelled to engage in war with another country, this hope does not justify us in total disarmament. When it is shown that we may provide ourselves with numberless battleships, supplies of artillery, etc., but that without the necessary chemicals these implements under modern conditions would be practically useless, it brings it home to every one of us that the chemical industry must be maintained by adequate governmental protection.

"The tendency of exchange conditions is to throw the world's chemical business toward Germany, which will result in greatly strengthening her manufacturing facilities and placing her in a more complete position again to dominate the world in chemical manufacture. The temporary protection provided for in the Knox amendment is of assistance but this covers only coal tar products.

"While Germany thus far has not been able to attack the American heavy chemical trade seriously, should her position remain long as at present there is no doubt that she can do so, barring artificial means to prevent her, and this country will be placed in a dangerous position unless we are able to supply the crudes, or heavy chemicals, required as the raw materials for dyestuffs manufacture.

"It is not safe to return to the position of exporting raw materials and importing manufactured products, which was largely the basis of our foreign trade prior to the war."

NEW RIVER RAISIN CO UNIT

One section of the new unit of the River Raisin Paper Company's plant at Monroe, was opened a few days ago for production and the capacity of the factory was increased by 60 tons daily output of 92-inch corrugated straw board.

The new section is 720 feet long and 60 to 80 feet wide. It is composed of steel, brick and concrete. The machine just put into production is a Black & Clawson drying machine. The plant will be further equipped with eight iron rotaries made by Biggs Boiler Works, Akron, and six 1,500-pound heaters from the Valley Iron Works, Appleton, Wis.

The company's plant, when completed, will rank with the first in the United States in size. It will have a daily capacity of approximately 700,000 pounds of stock. When operating at capacity it will employ about 1,450 persons. Its railroad yards can store 350 cars at one time.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Volume [illegible] Number [illegible]

Bankers and Investors Annual

Detroit, Mich., June 4, 1921
Single Copies Fifty Cents

ESTABLISHED NINETEEN HUNDRED SEVEN

IN MICHIGAN—
and Elsewhere

Michigan has always been the territory in which the DIME SAVINGS BANK specializes in service to banks and bankers—and to business houses.

But the bank also has connections in many other sections throughout the country, these enabling it to handle with dispatch any banking transactions which banks at a distance may have in Michigan, while also adding to the value of its service to its correspondents and depositors in the Michigan District.

Personal attention of the bank's officers is given to inquiries from banks that may wish information regarding this great field which is essentially Detroit territory, or regarding our specialized Michigan banking facilities.

When in Detroit, make the DIME SAVINGS BANK your headquarters.

OFFICERS

William Livingstone, President
George H. Barbour, Vice-President
Walter E. Dunbar, Vice-President
David S. Connolly, Vice-President
C. E. Pettibone, Vice-President
T. W. P. Livingstone, V. P. & Cash.
Edwin Hussey, V.-P. in charge of Branches
Duncan W. Duke, Asst. Cashier
Fred D. Lambert, Asst. Cashier
W. P. Brown, Asst. Cashier
A. E. Medill, Asst. Cashier
George T. Dunn, Auditor
B. H. Moore, Credit Mgr.
A. MacLennan, Mgr. Foreign Dept.

DIRECTORS

William Livingstone
George H. Barbour
Henry Ford
James H. McGee
Benjamin DeFord
Augustus C. Stevenson
Humble N. Howe
R. H. Fyfe
R. H. Webber
Seebourn R. Livingstone
Fred J. Robinson
Charles A. Warner
Walter E. Dunbar
W. H. Lolley

DIME SAVINGS BANK
Fort and Griswold Streets
DETROIT, - - MICHIGAN

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

A Word From the Editor About This Issue

THE FEATURE of this issue of the Michigan Manufacturer and Financial Record is neither novel nor unusual. From being the current source of supply of news respecting the financial developments of Michigan, the chronicle of those events in finance which combine to make cycles and whose continuous record is history, the paper becomes a bit more intense in this issue in the way of increasing the breadth of its weekly picture of the doings of them who have money in Michigan and employ it and them who have not, and of the consideration of the investment field in which the croppings of commerce and industry are sown and from which their fruitage must be reaped. In this issue we are simply making a survey of the field of investment from the point of view of the period of reconstruction and reorganization of the demand for investment money which is arising from several causes and from several sources, and endeavoring to set it out all together to our readers. Much pains has been taken to put this information into permanent shape, in the hope of two eventualities. The first of these is that this effort may not be considered of ephemeral value, but that the conclusions arrived at and set forth may be held to be of sufficient value to be preserved for reference. The second is that, from time to time in the future, perhaps annually and perhaps oftener, such a resume of conditions may be made again at some of the mile-posts of investment and business development.

The conditions which confront the owners of money in Michigan and those whose business it is to retail investments to owners of money are absolutely unique. Never before has there been such a demand for fresh capital, or for the reorganization of capital already invested. Since the beginning of the world war the price which has to be paid for the use of money has constantly advanced. Great fortunes of the ante-bellum period, invested in the low return securities which were then the vogue, have ceased to be the producers of the incomes, measured by their purchasing power, to which their owners once looked forward. Most of us who have been familiar with the doings of the marts of money for any period can readily remember the demand for long-time investments, which would relieve their purchasers of the annoyance, often more feigned than real, of reinvesting their capital. The insurance companies, the rich estates, the educational and charity foundations were all ready to put their capital into investments at comparatively low rates provided they were of long enough period. The rate of standard interest had been going downward steadily in Europe since the Napoleonic wars, and in the United States since the Civil war, and what the investors feared was not the inconveniences of reinvestment but the very great convenience of tying up the debtor class for a long time to a rate of interest which, while it might be low at the moment of investment, might be lower still thereafter if a contract for its continuance did not prevail.

Great sums of money are today invested in various forms of American securities at these low rates. There are millions of municipal securities on which but 3 per cent is paid, while very fine opportunities exist today to purchase the same class of securities, and of equal or better credit, realizing 6 per cent. There are millions of railroad bond issues now drawing but 4 per cent, some of them but 3½ per cent, while the unissued and unsold remnants of these issues will not be looked at for less than a 6 or 7 per cent basis today, reducing their returns to the issuing corporation to an impossible sum in new capital, or calling for riders to their secured coupons in the way of interest coupons which are really notes of the corporations and do not come within the security of the trust deeds or mortgages. There are millions of real estate mortgages, and of bonds secured by them where they have been subdivided, which cannot be sold except at a discount which will equalize the low interest rates upon the basis on which they were contracted with the much more advanced rate of interest returns which prevail today.

Similarly in industrial enterprises forms of participation in interest which were formerly attractive have ceased to possess their attractiveness. Bonds on the properties, preferred stock liens on their earnings and distribution of assets have all been tried, had their day and come to be unattractive, for the time at least. The reasons for this unattractiveness are many and varied. The primary one is the return on the investment. Another is that much surplus industrial capacity was provided for the war period that has since proved unnecessary, at least for the present demands of trade, and, as a consequence, the securities issued to provide them must be maintained from the operations of the earlier and lesser capacities.

Briefly, there has come from these various causes a turn in the investment road which has already called for reorganizations of financial structures, readjustments between the conditions under which capital was invested at earlier dates and those under which it can be obtained today, and other operations, not unusual nor unprecedented, but marked by increased greatness of number compared with their number in the past. The Wabash railroad reorganization of a quarter of a century ago, as conducted by Mr. Solon Humphreys and, as we remember, Mr. Thomas Tutt, was an intricate financial event, the novelty of which and the details of which were really so interesting as to attract the attention of the public who were not investors at all. Yet brilliant as that scheme was, and fairly successful withal, it has been discounted a dozen times in the last year or two by the refinancing of great automotive industries involving today as much capital as the great railroad system did then. The first example was, after all, the scaling down of income to meet the necessities of income production, the investors being the meek, shorn lambs who had to take the medicine the reorganization doctors prescribed for them. In the reorganizations of this period the process is duplex. There is a scaling down and retirement as to priority of security and return of the "ins," and a scaling up of conditions for the new capital which has to be attracted to set these organizations on their feet again.

The same condition is measurably true of steam railroads, of public utilities and of other classes of investments. So that we have come to a new viewing point of securities and investments therein, based upon the assumption that for a considerable period of time in the future interest rates are going to be higher than they were during the period from 1884 to 1893, and much higher than those of the period from 1896 to 1914. The demands for new capital have also become more varied and more urgent. Luckily the supply of new capital is always coming on in these United States, and proportionately, very fast in this state of Michigan. The evidences of this condition are both statistical and practical.

Prof. David Friday, of our state university, sets the annual contribution of new capital from the national earnings at about 7,000,000,000 dollars. We add more than our average share of that from Michigan. Yet we hear of tight money and of unavailability of funds for certain operations. In the face of this let some brazen promoter or stock seller put out some attractive blue sky proposition, or some extraordinarily tempting gamble, and lo, and behold you, the money comes out like peas from a pod; from where the Lord only knows, but it comes. It may not be as respectable money as that of the elect of the investors, but there it is, with the dollar mark on it,

Digitized by Google

and a capability of buying 100 cents worth for every dollar, just like anybody else's money.

In the hope that in these reorganizations of capital already assembled and in the demand for new capital, and in the orderly assemblage of this "wild-cat" capital that seems to be available when risk and compensation are apparently decently balanced, some help may be given to the regular and the casual investor and to the organization of security dealers who act as marketmen between the demand for money and its supply, this publication is made. It is neither a primer of investment nor an encyclopedia of finance. It is, what this paper always seeks to put out, a good honest effort at presenting useful information which may be of some good to people endowed with that ordinary amount of brains which enables them to accumulate and conserve modest holdings of capital, and who care enough about the return upon it to want to get the most money for its use, without courting the possibilities of its extinction, so far as their personal ownership of it is concerned.

What the Investment Bankers Are Doing for Michigan Business

They Are Taking Surplus Capital, Wherever Found, And Distributing It to Enterprise, Wherever Needed

By PHIL S. HANNA

Financial Editor, Michigan Manufacturer and Financial Record

THERE is a species of banker at large in Michigan who does not make the cold chills creep up and down one's back when he is approached, but who on the other hand is likely to warm up agreeably if you get within smiling range. His natural habitat is in places where persons congregate who have money for investment and he is usually in a state of constant hunger, meaning thereby that he is usually hungry to make you buy his wares. But it should not be construed for a moment that because a bond salesman importunes you to buy his offering the security is any the less desirable than it might be if you were obliged to seek the salesman.

Unthinking people sometimes advance the theory that if all investments were as good as salesmen make them out to be there would be no need of salesman or of advertising. Let us dwell on this for a moment. On such a theory every time anyone came into possession of surplus wealth he would be oblized to go on a shopping tour to find the investment suited to his particular case and in order that a dealer might prepare himself to care for both large and small customers he would be obliged to carry in stock an enormous bulk of securities of all kinds and denominations. He would have to employ a sum of money in carrying his stock of assorted investments larger than that represented by a fair sized city bank and his margin of profit would necessarily have to be widened to permit of absorbing the large carrying charges. Thus to begin with there is this essential, that if investments are to be handled on a moderate margin of profit the dealer dispose of his new stocks of merchandise with the greatest possible speed. So the bond dealer sends his salesmen and his circulars to all his clients, real and prospective, whenever he has a new issue of bonds to offer and in this manner he conducts his business with the minimum expense of carrying stock on hand, and at the same time the investor gets the same choice of goods which might be possible if bonds were carried in stock the same as clothes or hardware.

But the big distinguishing difference between bonds and other merchandise is the lack of uniformity in quality of goods handled. One load of coal may vary from another, shoes may vary in quality according to the makers but in all merchandising the buyer sees the goods, whereas in selling investments the buyer seldom "sees" the goods purchased. He must rely on the statements of the bond merchant as to the facts surrounding any particular security. And right here is where thousands of investors fail to appreciate the protection which they get from the far-reaching and painstaking examinations made by high grade underwriting syndicates before any issue of bonds is offered to the public. It were much better for the investor to begin reading bond circulars from the bottom of the page, first noting the name of the offerer, for there are hundreds of houses whose name alone, attached to an offering of bonds, is accepted in the same manner and means among investors as the mark "Sterling" is taken by purchasers of silverware. Thus to begin with there is one outstanding service that the investment bankers are rendering to the people of Michigan, namely: furnishing a supply of carefully selected investments for the thrifty and the wealthy.

The query often comes to mind in connection with the investment banking business, whether the average investor realizes what it would cost him individually to make the preliminary examinations coincident with the underwriting of a bond issue. Does he realize how much expert legal and engineering and accounting talent is usually employed in sizing up a proposed offering? Does he realize the expense to which he might be put in collecting the interest and the principal and that oftentimes he might be obliged to step in and take part in the management of a borrower's business to protect his investment? Possibly the big investor appreciates the value of the underwriter's service in this connection and possibly he also appreciates that this service is rendered without extra charge. But it is the "little fellow" who needs the missionary and it is he who usually expects the largest returns on his investment. And it is he also who gives the fly-by-night investment banker the same railing as one who has spent a small fortune putting his name and his business up beyond the reach of scandal mongers. Yet when the reputable investment dealer approaches the small investor he is immediately put on the defensive; good name, reputation, standing are all overlooked and the test of the reception accorded him is mainly the plausibility of his proposition and the size of the returns offered.

There is no dependable way even to approximate the amount of money which the people of Michigan have sunk in blue sky schemes but here and there one finds striking instances of how this waste of money has been measured. In a small upstate town which has only one bank the cashier kept account of checks which his customers gave blue sky promoters and also took special notice of the notes which were offered him by promoters, and he figured out that the amount of actual cash which went out of his town for questionable investments was approximately equal to the amount which his bank had to borrow from the Federal Reserve. Now no one will question any person's right to do what he wishes with his own money but in this instance the investors not only crippled themselves but also curtailed the available credit of the bank to such an extent that the ordinary business of the town has been held back seriously. Had this money been invested in sound securities there would be in this little town a base upon which credit upwards of $50,000 could be secured.

In the early days of the development of the automotive industry bankers in the West used to worry about Detroit. They used to say that people were buying automobiles so fast that Detroit was apt to draw money from banks all over the country. The writer recalls vividly a bankers' convention where the principal speaker expressed great fear of such a calamity. But this man did not realize the function of the investment banker. He did not know that perhaps as he spoke persons in Detroit, through the medium of the investment bankers, were using the same funds, drawn from his section by a Detroit automobile plant, for the purchase of bonds of his city. There can be no doubt that more money has gone out of Michigan than into it due to the attractive tax-exempt bonds of other municipalities, and while this article is not intended to deal with the tax exemption subject, the incident illustrates fittingly the function performed by the investment banker in the banking machinery, namely: he makes the surplus wealth of one community available for the development of industry in another community, or the surplus of one line of business

Digitized by Google

available for other lines in the same place. He is sort of a master distributor, considered collectively, taking the surplus wealth of the automobile industry, for instance, and distributing it in small lots to other lines of business both within and without the source of production of that wealth. This process is accomplished when a Portland, Ore., light and power company bond is sold to a Detroit investor.

Nor is the current of funds always away from Detroit. It is stated that the recent issue of Packard notes was much more heavily purchased in the East than at home and in this instance, therefore, the investment banker performed the same function. The same with the municipal railway bonds. In fact the opinion of well informed observers, i.e., that tax exempt bonds have robbed Michigan of much of its own natural capital, seem to be more obvious every time it becomes necessary to go away from home for money. But this of course is not the fault of the investment banker. His business is to take surplus capital wherever found and distribute it wherever needed, although as a citizen and Christian he is going to stand behind legislation that will give us equal advantages as to retaining home money for home investment; and he will likewise be just as satisfied to sell home investments to home investors as he has been to sell foreign investments to home investors. When the Michigan Manufacturer and Financial Record started the agitation against tax exempt bonds early this year there arose a storm of protest from many investment bankers who could see in the changes sought only injury to the municipal bond business, and it is therefore significant to quote the remarks of one of our best known bond men, who said recently:

"I was very much opposed to this matter when your paper first proposed to reinstate taxes on municipal bonds, but in the light of experience since that time I am now thoroughly convinced that there should be a tax. By keeping money at home we will be developing our own community and making future bond buyers, whereas by permitting so much of our surplus to go away from here we are encouraging development of other cities and making thereby bond buyers for someone else."

It has been thought that perhaps a few concrete instances of what the investment bankers have been doing for Michigan might be of interest, in that it will tend to show to what a large extent business depends on this species of banker for its capital and its long time loans:

Below is a partial list of issues sold by Detroit bond houses recently. It should be borne in mind that where syndicates have handled a large issue there may be some over lapping of the figures and further that the list is only partial, many of the houses not being represented. Nevertheless these few figures show to what a large extent the business interests of the country depend on the investment bankers.

Watling, Lerchen & Company during the last three years have underwritten directly and indirectly $6,855,000 of securities of local corporations among which are the following:

$ 250,000 Jas. Vernor Company, First Mortgage 6½% Bonds.
$ 175,000 Lartowe Realty Company, First Mortgage 6½% Bonds.
$ 125,000 Tristate Baking Company, First Mortgage 7% Bonds.
$1,250,000 Eddy Paper Company, First Mortgage 7½% Bonds.
$1,400,000 Chemical Iron Company of America, 7% Notes.
$ 375,000 Jefferson Force Products Company, First Mortgage 6% Bonds.
$ 400,000 Fort Shelby Hotel Company, First Mortgage 6% Bonds.
$ 200,000 Arctic Ice Cream Company, 8% Preferred Stock.
$ 100,000 W. A. C. Miller Company, 8% Preferred Stock.
$ 200,000 Joseph N. Smith & Company, 8% Preferred Stock.

In addition to the volume of corporate securities handled, this house has distributed a large number of outside corporation and municipal securities and bonds of about 100 Michigan municipalities, the aggregate thereof being approximately $11,000,000 during the last three years.

The main business of Keane, Higbie & Company is handling municipal bonds, but the house does in the neighborhood of $1,000,000 annually of corporation financing. Another prominent house which does not wish to be quoted has sold the following:

$1,500,000 Detroit Pressed Steel Company, 7% Preferred Stock
$ 600,000 Hayes Iotin Company, Serial 6% Notes.

Merrill, Lynch & Company, since June 1919, have handled the following industrial issues:

$1,150,000 Crown Oil & Refining Company, First Mortgage Serial Convertible 7% Gold Bonds.
$3,000,000 Spicer Manufacturing Corporation, 6% Serial Gold Notes.
$3,000,000 Spicer Manufacturing Corporation, 8% Cumulative Pfd
60,000 shares Spicer Manufacturing Corporation, Common stock.
$3,000,000 S. S. Kresge Company, 7% Serial Gold Notes, due serially 1922 to 1926.
$3,000,000 Liquid Carbonic Company, 8% ten-year Sinking Fund Gold Notes. Dated October 1, 1920. Due Oct. 1, 1930.
$ 141,888 Simms Oil Company, 6% Equipment Trust Notes.
$ 215,000 Maryland Refining Company, 6% Equipment Trust Notes.
$ 374,000 White Oil Corporation, 6% Equipment Trust Notes.
$4,000,000 Marland Oil Corporation, ten-year 8% Sinking Fund Participating Gold Bonds. Dated April 1, 1921. Due April 1, 1931.
$ 700,000 Sinclair Refining Company, 6% Equipment Trust Notes.
$ 600,000 Neptune Meter Company, 7% Serial Gold Notes.
$1,150,000 Crown Oil & Refining Company, First Mortgage Serial Convertible 7% Gold Bonds.
$1,500,000 General Phonograph Corporation, First Mortgage 7% Serial Gold Notes.
$1,000,000 Panhandle Producing & Refining Company, 8% Cumulative Preferred stock.
$1,500,000 Patrhouse-Plymouth Mills Corporation, 8% Cumulative Preferred stock.
320,000 shares White Eagle Oil & Refining Company, Capital stock (No Par Value).

Harris, Small & Lawson have sold the following local industrial issues:

$ 500,000 Windmill Point Land Co., First Mortgage 6% Gold Bonds.
$200,000 Square D Company, First Mortgage 7% Gold Bonds.
$1,500,000 of Michigan Municipal Bonds in addition to many other Municipal issues. This is another house which confines itself more to Municipal than Industrial Bonds.

Industrial securities handled by Hornblower & Weeks recently are as follows:

$3,250,000 Chicago Pneumatic Tool, Serial 8s.
$1,800,000 American Bosch Magneto, Serial 7s
$3,000,000 Connecticut Valley Lumber, Serial 6s.
$7,500,000 Brown Co., Debentures.
$2,500,000 American Chicle Co., Serial 6s.
60,000 shares American Bosch Magneto stock.
95,000 shares Atlas Tack Corporation.

The firm also has raised capital in varying amounts for the following: Chandler Motor Car Company, Chevrolet Motor Company, Edmunds & Jones Corporation, Endicott-Johnson Corporation, Federal Furnace Company, Harmony Mills, Lee Rubber & Tire Corporation, McCrory Stores Corporation, Mullins Body Corporation, Ohio Body & Blower Company, Thos. G. Plant Company, Parish & Bingham Corporation, Punta Alegre Sugar Company, Trinidad Sugar Company, Gardner Motor Car Company of St. Louis, and many others. In addition to the above this house reports many millions of dollars of municipal bonds sold.

Fenton, Davis & Boyle have raised capital for the following Michigan corporations and cities as follows, in addition to a large amount of outside financing:

Name.	Participation.
Baker Lane Company, First Mortgage 7s, due 1928	$175,000
Eddy Paper Company, First Mortgage 7½s, due 1931	200,000
Packard Motor Car Company, 8s, due in 1931	10,000
American Light & Traction Co., 6s, due in 1925	35,000
Continental Motors Corporation, 7s, due 1923-1925	75,000
Detroit Edison Company, 5s, due 1940	50,000
Detroit Edison Company, 6s, due 1940	100,000
Detroit Edison Company, 8s, due 1940	150,000
United Fuel & Supply Company, 6s, Serially	100,000

The following are a few municipal issues they have sold:

St. Clair County 6ss	$100,000
Macomb County, 6s	50,000
State of Michigan, 5s	100,000
Rochester, Michigan, Sewer & Water 5s	75,000
Fremont, Michigan, City Hall 5s	50,000

In addition to a large amount of financing in New York and Chicago and other large cities, S. W. Straus & Company have raised capital for local building projects in large volume, of which the following is a partial list:

1700 Jefferson Avenue, First Mortgage 6s	$2,450,000
McCord Mfg. Co., First Mortgage 6s	1,500,000
Lincoln Square, First Mortgage 6s	400,000
Hotels Statler, Detroit, Cleveland, Buffalo, St. Louis and New York, First Mortgage 6s	2,000,000
Canton Building, First Mortgage 6s	400,000
Warwick, Brainard, Petticord, Buhols, Jefferson Hall, Bigelow, Pickert, Gordon, Prince Rupert, Collingwood, Milford, Dunedin Court, Rex Arms, Apartment Buildings, which aggregate	1,500,000

Oils & Company report the following new issues underwritten in the last three years:

Issue.	Amount
American Strawboard Company	$ 1,500,000
H. F. Goodrich Company	7,000,000
Fisher Body Company, Preferred	10,000,000
Fisher Body Company, Common	2,000,000
Bulkley Building Company, Preferred	3,000,000
Bulkley Building Company, Common	1,400,000
Jefferson Sargent Company	1,000,000
Wm. Davies Company	5,000,000
Producers & Refiners, Common	1,800,000
Lakewood Engineering Company	1,000,000
Continental Gas & Electric, 6s	1,200,000
Continental Gas & Electric, 7s	1,100,000
Continental Gas & Electric, 8s	500,000
Standard Parts Building	350,000
Scotland Building	1,000,000
Hickox Building	525,000
American Trust Building	550,000
Park Building	275,000
Sears Nichols Canning Company	750,000
	$40,150,000

The American Loan & Trust Company reports the total of new

Digitized by Google

issues it has underwritten during the last three years as $3,017,700, among which are the following:

Adolph Meyers, Detroit	$ 50,000.00
The Berub-Robinson Company, Detroit	150,000.00
Walter P. Haase, Detroit	130,000.00
Clayton & Lambert Manufacturing Company, Detroit	550,000.00
The Burkhardt Building Company, Detroit	48,000.00
Oakman Boulevard Theatre, Detroit	75,000.00
Kunstler Hotel Building, Detroit	125,000.00

E. E. MacCrone & Company—Capital raised for local enterprises as follows:

$1,000,000	General Aluminum & Brass Mfg. Company, 8% Preferred Stock
$500,000	Detroit Gear & Machine Company, 8% Preferred Stock
*$500,000	Penberthy Injector Company, 8% Preferred Stock

*Underwritten jointly with Keane, Higbie & Company.

Another company which does not wish to be quoted has sold the following large issues of municipal bonds, the proceeds of which have contributed indirectly to the growth of business through municipal expenditures:

$ 375,000	Benton Harbor School bonds
250,000	Battle Creek School bonds
2,000,000	Detroit bonds (for various purposes)
500,000	Genesee County Road bonds
500,000	Jackson County Road bonds
800,000	Jackson City Improvement bonds
294,000	Jackson School bonds
500,000	Kalamazoo School bonds
200,000	Kalamazoo Improvements
500,000	Pontiac, Schools
400,000	Pontiac, Improvement
200,000	Redford, Schools
175,000	Three Rivers, Schools
950,000	Saginaw, Schools
315,000	Wyandotte, Schools

The Guaranty Trust Company of Detroit has raised $2,596,000 since May 15, 1918, in the form of 375 mortgage loans.

Where Have the Liberty Bonds Gone?

Some Facts to Show That We Should Be Thankful That the Price Slump Has Not Been Even Greater

AFTER an accident or a loss of any kind there is always more or less consolation in looking at the trouble from the standpoint of "how much worse it might have been." When the United States government started issuing "war" bonds the people of the country little dreamed that market values would ever slump off 10 to 20 per cent. For years government issues bearing 2 and 3 per cent had sold above par and at times there was so little supply on the open market that none could be had at any reasonable price. This was especially true when national banks began to bid against one another to obtain eligible bonds to secure circulation.

The thought which comes to mind in discussing this subject is that rather than feel bad because the market values have slumped, we have reasons for jubilation that the slumps have not been greater. The basis for this statement is the fact that from the moment the bonds were delivered there have been many holders who either from force of necessity or otherwise have offered their bonds on the market.

Bankers who worked in the Liberty Loan campaigns recall vividly the many instances where purchasers had to borrow nearly the entire purchase price. And even now they can point to instances where loans made originally to buy bonds have never been paid. Federal Reserve reports for 820 member banks in principal cities show the following record:

Loans on Liberty Bonds—

September, 1918	$ 500,000,000
March 3, 1919	1,000,000,000
July, 1919	1,400,000,000
February, 1921	600,000,000

Financing a war is unlike any other kind of business. The government collects about half of the cost in taxes and borrows the other half, and usually about 90 per cent of the total money collected is just as much wasted and destroyed as if the government collected the money in currency and immediately built a bonfire with it. This is a pretty general statement but nevertheless the picture carries the distinguishing difference between borrowing money and levying taxes to spend for improvements (or even to spend on foolishness) and spending money for bombs, bullets, gas and a thousand and one other articles that are shot up into the air.

War, to use a billiard term, puts the reverse English on economics.

Digressing a little, first, however, it is interesting to look back at the course of market prices of government bonds during and after the Civil War. In January, 1860, all issues hovered around par except the 6s of 1868, which were selling around 106. By November the 5s of '65 and the 5s of '74 had dropped to 93 and 95. During 1861 several issues got down 20 and 25 per cent from par, but by March, 1862, they all came back strong, and by August, 1863, only two issues were below par. By January, 1864, all the issues except the one-year certificates were above par. In 1865 the premiums ran from $6 to $25 per hundred above par. Of course there is little similarity in the banking conditions now and then. We had no greenbacks in 1917, 1918 and 1919. Possibly on a greenback basis the Liberty issues would have sold way above par in terms of greenbacks. But even after specie payments were resumed, several years after the Civil War, the market for government bonds remained above par for all issues until the 2 per cent bonds came on the market in June, 1893, when they sold between 97 and 99 for a considerable period of years, reaching 101 in July, 1899. In March, 1902, the consolidated 2s of 1930 got up to 109¾ and in July, 1913, the 2s got down to 95½.

One of the main reasons advanced, and a very common one, which is present in any transaction, why the Liberties have fallen below par is that there were more sellers and buyers. An examination of the table following will show at a glance how large the supply of bonds was during 1917, 1918, 1919, 1920, compared with the pre-war period.

Total United States Debt 1909 to 1920.

Years.	Amount.
1909	$ 1,023,861,531
1910	1,046,449,185
1911	1,031,850,808
1912	1,027,574,697
1913	1,028,558,103.
1914	1,027,257,009
1915	1,089,848,006
1916	1,047,294,579
1917	1,908,635,225
1918	10,924,281,354
1919	$24,479,302,376

Liberty issues outstanding June 30, 1920.

Issue.	Amount.
1st 3½s due 1947	$ 1,410,074,400
1st 4s due 1947 Conv	45,803,950
2nd 4s due 1942	240,003,250
1st 4¼s due 1947 Conv	473,089,200
2nd 4¼s due 1947 Conv	*3,492,150
2nd 4¼s due 1942 Conv	3,085,363,750
3rd 4½s due 1928	3,662,715,800
4th 4¼s due 1928	6,394,354,500
Vic. 3¾-4¾ due 1923—3¾	818,385,650
4¾	3,427,969,700
	$19,581,201,450

*Outstanding Nov. 1, '20.

In round figures, the total government indebtedness between 1913 and 1920 jumped from $1,000,000,000 to $25,000,000,000. In fact the suddenness of the rise in quantity was the most abrupt change in the history of the nation. In 1794 the total debt was $78,407,404, which was whittled down to $45,209,000 in 1812, but rose suddenly to a high point of $127,334,000 in 1816, a rise of three times in four years. (Contrast this with a jump from $1,908,635,225 in 1917 to $10,924,-281,354 in 1918.) From 1816 the course of the debt was downward steadily, until in 1835 it was reduced to the remarkably small sum of $37,513. Between this date and the Civil War the total debt ranged up as high as $68,000,000 (in 1851), but in 1861 it was only $87,614,650. As a matter of information we give the total debt by years from 1860 to 1909; from 1909 to 1919 the figures are given above:

1860	$ 59,864,402	1874	2,104,159,153
1861	87,614,660	1875	2,090,041,000
1862	505,312,762	1876	2,060,925,420
1863	1,111,356,727	1877	2,019,275,421
1864	1,709,452,277	1878	1,999,282,280
1865	2,674,815,856	1879	1,996,414,905
1866	2,636,036,163	1880	1,919,326,747
1867	2,508,151,211	1881	1,819,650,154
1868	2,480,853,413	1882	1,675,023,474
1869	2,452,771,873	1883	1,538,781,825
1870	2,331,169,956	1884	1,438,542,995
1871	2,246,994,068	1885	1,375,352,443
1872	2,149,780,530	1886	1,282,145,840
1873	2,105,462,960	1887	1,175,168,765

Continued on Page 18

Digitized by Google

F. D. B.

Money may be made to make more money in two ways, through—

1. SPECULATION
2. INVESTMENT

Our business is the business of distributing credit in the form of investment securities carrying the market rate of interest, with the element of speculation reduced to a minimum, and safety of principal the paramount consideration.

Our current offering list of securities yielding from 6½% to 8½% mailed on request.

Fenton, Davis & Boyle

CHICAGO DETROIT GRAND RAPIDS

Congress Building

Main 6730

Digitized by Google

The Demand for Public Funds

Public Utilities, Municipalities, Corporations, Building Industry and Railroads in the Market

By THE EDITOR

With the readjustment that has come upon the country since the close of the war a demand for new capital has arisen quite out of proportion to any that has been heretofore observed. That demand is due to a great many causes. Simmered down, they may be summarized as having been the application of almost the entire labor supply of the country to war work and similar application of the money supply. By reason of various legislative and administrative acts progress along ordinary lines of endeavor was practically prohibited from 1917 until well into 1919. As a result the following things happened:

First: Municipalities were held up, both because of the supply of labor and the supply of money, from undertaking the usual and ordinary public works which form a great part of the construction operations of the country and which are the precedent to growth of the cities and villages. Important extensions of city services, such as of water and sewerage systems, the construction of school buildings and of public structures of various kinds, were not made, with the result that now that the country has gotten its breath, there is the accumulated demand of several years to supply in the matter of structures of this class. This demand has been allowed to go unsatisfied for so long a period as this after the war, for two leading reasons, the one the general prediction that the raw materials for building operations would decline in price; the other that the wages of labor would come down in terms of money paid, or that its efficiency would go up, which would accomplish the same result. There is no denying that the efficiency of labor employed on construction work during the war was woefully bad, which was probably only human nature after all. For example, bricklayers who used to set 1,200 bricks for a day's work when wages were $6 a day, fell in efficiency to 500 bricks a day when $10 and $12 became the compensation for eight hours' work. Last year in Detroit the architects and superintendents noted that the bricklayers were doing better, getting up to 800 bricks as the result of a day's work, while this year 1,000 bricks are being laid, while the wage has gone down to $8 a day. It makes a good deal of difference in the cost of large construction jobs whether it costs two cents or four-fifths of a cent to lay each and every brick, and this difference is to none so apparent as to the wise city dads who have to make the taxpayers' money go as far as they can. Conditions quoted as of Detroit were and are typical countrywide. Materials have fallen measurably in price as well, so that between the public demand for extension of facilities and this decision that prices have come down to a reasonable level, an immense amount of public work has been started. Most of this work is paid for with the proceeds of city bonds. Many of these bond issues had been authorized long before the necessity for their proceeds was finally established and they all seemed to come upon the market at once, thereby creating a very great demand. Under the influence of this demand last winter and during the spring of this year a new and higher level of interest rates on municipal securities was established, until 6 per cent is the ruling figure today, disposals from original buyers to private investors being on a slightly lower basis of interest return, this margin covering the wholesale buyer's profit. At any rate, there is an immense amount of municipal securities seeking a market today. The higher interest rates now prevailing have, of course, depreciated the sale prices of the older and lower rated securities, the holders of many of which are throwing them on the market to get the benefit of the use of their money for engagement in the new issues which are productive of higher returns. That constitutes one great demand for the money of the investing public.

The Situation of the Railroads

Second. The war played hob with the railroads. These utilities were pretty badly handled long before the war, between the legislatures, the commissions and Congress. The tendency to reduce their revenues, increase their operating costs by imposing new safety conditions, and give labor the opportunity to raise its costs while there was no balancing addition to earnings had put the American railroad system into bad shape. This was especially true of railroads whose operators had neglected to conserve the physical condition of the properties. When they needed money they had no earnings to carry the burden of the added capital, not even any surplus to attract the new capital. The guarantees of the Government carried them through the war period, but the stresses which were put upon them left a good many American railroads in 1918 where they needed a lot of new money for rehabilitation. Then came the delays in government settlements. These have only recently been concluded. The result is that the railroads, having finally been conceded rates which will be profitable, and being promised an adequate reduction of wages by the Railroad Labor Board, are seeing their way to the use of money for the renewal and amendment of their properties. But this demaud is also all coming at once, so that demand impinging on supply has had the result of raising interest rates for this class of securities. Inasmuch as those who invest in railroad securities are a class by themselves to a large extent, there appears to be a pressure upon the companies on the part of those who hold low-rated securities to bring about adjustments of existing debts before they "loosen up" with new money. A marked example of this demand and of accession to it is to be noted in the recent refinancing operation of the Burlington road, in which $230,000,000 of bonds were issued, providing higher interest returns for the old capital invested in the mortgage securities as well as for the new money. So many railroad issues are closed that available means for improvements are impossible without taking account of present holders of low-rated issues before the security can be divided between them and the new supplies of money. This means that the railroads will have to pay more for their money than they used to do, at least for the immediate present.

The Utilities Come Into Their Own

Third: The public utilities have lately come into their own. By these we mean the utilities which have electric energy as their basic operating power, and to which gas-making and distributing plants are usually subsidiaries. To begin with, the electrical utilities never did get a fair start. In their inception the promoters had none but theoretical figures of their operating costs. People who are not old enough to have been familiar with the figures which were presented at their inception need only study the kind of operating figures that are nowadays being presented by proponents of municipal enterprises of the kind to get an idea of the looseness of the figures upon which installations were originally made. These early-day promoters and engineers seem to have been impressed with the idea that they must show wonderful economies in cost of service compared with the cost of the services which they were supplanting. It never seems to have entered their minds that the public was amply able and willing to pay for a better service than it was getting. Then they had no experience with operating costs and conditions. So it came about that installations were made which rapidly became obsolete from lack of capacity and reserve. As the art was developed still another process of obsoletion was experienced by the fact that the newly-devised apparatus presented such advantages that it was unthinkable that it should not be immediately installed. This was particularly the case at the time of the development of long distance transmission of alternating current. That bit of progress in the art made it possible to operate long lines of railway from a single power station with a light investment in copper, where theretofore direct current was transmissible only from eight to ten miles on either side of the station, with a relatively very heavy investment in copper. The writer has in mind a very costly direct current station that was contracted for on a Michigan interurban which was actually obsolete before it was installed. The bonds which paid for it twenty years ago are still bearing interest, despite the fact that it was replaced a year after it was put into operation.

This and other causes of the same type led to some early overloading of the utilities with bond issues. Unfortunately, none of the early operators of these public utilities had any concept of the sums of money which would be required for the development of these properties. It is true that bond issues of considerable size for that

Digitized by Google



Ground Floor
Peoples State
Bank Building

Selecting Your Investments

Wise investment in securities requires comprehensive view of the entire bond market and familiarity with its practices.

This is the service we provide. Our company was organized in 1915 by men of long experience in marketing bonds. Since that time we have specialized in the distribution to investors of conservative issues, basing our operations always on this prime consideration—Safety of Principal.

Conditions are favorable for investment today, when your money procures a greater income than at any time in the past decade. In many classes of high grade bonds, one thousand dollars will yield 50% more now than before the war.

Profit may be made, too, in many instances, by exchanging securities you now own for some of the many excellent present offerings.

Our list includes Bonds and Preferred Stocks purchased by us only after careful analysis that enables us to recommend them for safe investment.

Now is the time to buy. We offer you intelligent, frank, conscientious service in the selection of your securities.

Watling, Lerchen & Company

Investment Securities

Corner Congress and Shelby Sts., Detroit, Mich.
Telephone Cadillac 2302, 2303, 2304

Member - Detroit Stock Exchange

Michigan Trust Bldg.
Grand Rapids. Michigan

Digitized by Google

period were authorized as to many of them in the past, but the possibilities of these for producing capital funds have very generally been exhausted. The companies have had to have recourse to various other artifices for the production of funds from credit. Collateral trust issues, short and long-term notes, preferred stock issues and the like have constituted the artifices by which temporary financing has been accomplished. Now that these concerns are facing the future, there has been and will be some very large programs of finance or reorganization, which in turn will call for fresh money, largely from the same investment field which is already interested in the low-rated earlier securities.

It has already become patent to the operators of these companies that they will have to pay higher rates of interest in the future than they did in the past. Some investors in public utilities, who, though they knew the financial structure of the organizations, have been shocked in the last two or three years to see their company paying as high as 10 per cent for the use of money, have wondered whether the business with the restrictions placed upon it by commissions and local authorities would return a net of 10 per cent. It is worthy of note to this class of thinkers to call their attention to the fact that funds which were obtained at these high rates did not constitute all the capital of the companies, but only a small portion thereof, and that taking into account the earlier financing at low rates the recent temporary financing has not seriously increased the average rate on all the capital involved.

The attitude of the state commissions during the war toward these utilities was very generally in the direction of making them wait for the higher rates which should have accompanied higher production costs. Indeed in some states the companies were actually forced to experience a loss before the commissions came to their relief, and then not appreciably. Of late, however, a more generous attitude has been shown toward the utilities, permitting them to earn not only a standard return upon the cost of the properties, but a return upon something like their present true value. The "hidden values" of public utilities have come to be recognized and brought into view just as in the case of the steam railroads. It has come to be accepted as a principle in establishing the fair value of these properties by the commissions that the present value is the fair value; that the properties have acquired greater value with the growth of communities and that properties constructed at low prices many years ago are entitled to an earning power based upon their present value, which is materially higher. The acceptance of this theory, coupled with a willingness of the commissions to constitute a commercial return upon the newly established values, points to the possibilities of earning power which will support the new capital required for extensions and substantial renovations.

Inasmuch as the utilities companies have all suffered for a long time from lack of facilities in getting capital, and as the new conditions have come all at once, the companies are either in the market or getting in the market for new capital, and their demand is coming en bloc, as it were, constituting from another angle a great demand upon the resources of the investing public. So far as there have been reorganizations of the financial structures of these companies, and so far as these are indicated, they are all upon a higher basis than prevailed in the early days of the industry, and are along the line of providing for a standard form of financing in the long future, under conditions of safety regarding the expenditure of these funds, that cannot be said to have prevailed in the early days, and which are characteristic of the similar conditions now prevailing in the steam railroad industry to which some attention will be given further along in this study.

Home and Business Construction

Fourth: The growth in the population of the United States and particularly in the cities calls for a larger investment annually in homes and business structures than is demanded for other purposes with which we are familiar. We sometimes lose our sense of relativity. Some years ago in a discussion between engineers of the vast amount of capital required to build the American railroads, and of the difficulty of getting contributions of that type of capital, a shock was given to the disputants by the statement of a matter-of-fact engineer, who held that, valued in terms of money, the labor, effort and expense of making the ordinary mud road systems of the United States represented more capital than was invested in the steam railroads. The need of housing being basic, it can be readily seen how great an amount of capital is required for the shelter of the people. Practically no serious amount of house building was done in the United States from 1917 to 1920, the reasons being the high price of material and the pre-occupation of labor. That has led to a positive shortage of homes and a most insistent demand for generous house building.

The construction of homes has become a general business rather than a matter of individual effort, so far as their financing is concerned and so far as their construction particularly relates to the growth of American cities. Where one home is built today by an individual user of the home, a hundred are built by marketers who have to provide the financing of the entire investment over a sufficiently long period to permit of the retailing on easy terms. At bottom the business of house building is financed by the real estate mortgage, a form of investment which while not actually reduced to statistics, consumes, normally, more money every year than any other single form of investment made in the country. The creation of mortgage credits in part payment, which mortgages are either held by the original owners or offered to other investors; the necessity of building loans, and the financial establishment of the building credit upon a basis of several years existence have all contributed toward making up the demand for money for real estate mortgage purposes vastly greater than the public sometimes credits.

Junior Securities Created

Furthermore, in the great cities the percentage of interest in the property which is mortgaged has been growing steadily greater. Where formerly a first mortgage was rarely given for more than 50 per cent of the conservative cash value of the realty and its improvements, we have a tendency today to extend the mortgage limit to 60 per cent. Meantime, in order to provide facility for purchase by the ultimate consumer, forms of junior credits have grown up. This was originally true in the East, where second and third mortgages added to the existing first mortgage constitute in the aggregate as high as 85 per cent of the cash value of the property. In the West these junior securities have taken the form of second mortgages and land contracts. Investment organizations have been built up which take these and peddle them out to the public either in units of the mortgage, or in groups representing the collateral of series of bonds, at a higher rate of interest than is returned by straight first mortgages. Whether these are good securities or not is not in point, although most of them really are.

What is to the point in this discussion is that the widening of the limit of mortgage security, whether senior or junior, has constituted a new demand upon public and private capital, which being properly dressed up and made attractive either by the process of periodical retirement of the principal by instalments, or the offer of high interest rates, is taking up a great deal of money and is constituting a demand which must be reckoned with.

Like the railroads and like the utilities, the building of homes having been interrupted for three years, an accumulated demand for new homes has come about which is very insistent and which is being prompted not only by the actual user but by people who are interested in the betterment of living and industrial conditions. The market for money is therefore likely to be attacked vigorously by the energetic people who are engaged in home building and the selling and buying of the same, so that for some years to come investors will have presented to them a very large field of choice for the placement of their money in real estate securities which, when all is said and done, must be recognized as being the favorite appeal to the American people for investment, owing to the strength of the security and the likelihood of the principal's being always safe.

During the war period an immense amount of corporate financing had to be done by industrial companies. The favorite method of doing this work was through the medium of preferred stocks, of which a very great quantity was marketed. In addition to this source of funds the banks were relied on largely for loans and many issues of short-term notes were made. Bank paper and short-term notes mature, and the tendency of the attitude of the banking system toward industrial and commercial organizations has been to require more and more closely every year the retirement of loans made to take the place of capital, making necessity for the fixing of capital and the using of bank resources only to handle paper liquidable at its maturity. The operations of the federal banks have impressed this principle on the local banks and during this period of re-organization a very considerable amount of fixed capital will have to be obtained to liquidate the long and short-term notes. At the moment preferred stock issues are not the vogue although they were very favorably received a couple of years ago. Some of the larger concerns have put out bond issues and this style is likely to be followed. At any rate, the indications are that for the next few years very large requests for capital of a fixed character will be made by the industrial corporations.

The prices which have been paid for the use of money, even in

Digitized by Google

HIGH GRADE BONDS

	Rate	Due	Price	Yield
Government of French Republic (non-callable)	7½s	1941	95	8.00%
United States of Brazil (non-callable)	8s	1941	97½	8.25%
Government of Newfoundland (non-callable)	6½s	1936	93⅝	7.20%
Federal Land Bank	5s	1941	100	5.00%
Northern Pacific-Great Northern Joint Convertible	6½s	1936	96½	6.87%
Detroit Edison Co., First and Refunding Mortgage	6s	1940	88½	7.10%
Duquesne Light Co. (Pittsburgh) Convertible	7½s	1936	98½	7.65%
Puget Sound Power & Light Co., Gen. and Refund. Mtg.	8s	1941	97½	7.75%
Mexican Petroleum Co., Ltd., Sinking Fund Convertible	8s	1936	98½	8.15%

Circulars on Request

Hughes, Gordon, Brasie & Company

High Grade Bonds

DETROIT

Cadillac 5050 **Dime Bank Building**

Digitized by Google

What Our Buying and Distributing Ability Means to You as an Investor

In your choice of bond investments two factors are pre-eminent: first, their safety; second, their adaptability to your individual requirements.

The safeguards provided by our buying experts resulting from their extensive experience and specialized knowledge assure in our offerings, so far as is humanly possible, the first of these qualities—safety.

Our extensive distributing capacity provides a frequency and variety of new offerings which assure at all times a wide and diversified list of bonds from which every investor can make a selection exactly conforming to his individual needs.

The character, extent and variety of our offerings are best indicated by the issues herewith enumerated, representing a partial list of bonds in the purchase and distribution of which our organization has shared since January 1, 1921.

FOREIGN ISSUES

State of San Paulo 8%, Sinking Fund Gold Bonds, Maturity 1936.
United States of Brazil 8%, (non-callable) External Gold Bonds, 1941.
Province of British Columbia, 6%, Gold Bonds, 1926.
Kingdom of Belgium External, 6%, Gold Notes, 1941.
Government of the French Republic External 7½% Bonds, 1941.

RAILROAD ISSUES

Northern Pacific-Great Northern Joint 6½%, Convertible Gold Bonds, 1936.
Farmington R. R. Company 6%, Gold Bonds 1936.

PUBLIC UTILITY ISSUES

Public Service Co. of Northern Illinois 7½%, Convertible Gold Debentures, 1936.
Pennsylvania Power & Light Co., First and Refunding 7% Bonds, 1931.
Wisconsin Power, Light & Heat Co., Collateral 7% Notes, Series "C," 1931.
The Empire District Electric Co., First Lien & General Mortgage 8% Bonds, 1948.
Wisconsin River Power Co., 7% Collateral Gold Notes, Series "A," 1931.
Portland Railway Light & Power Co., First Lien & Refunding Mortgage Gold Bonds, 7%, Series "A," 1946.
Southwestern Bell Telephone Co., 7% Notes, 1935.
Southwestern Power & Light Co., 8% Bond Secured Gold Notes Series "A," 1935.

MUNICIPAL ISSUES

State of South Dakota General Obligation 4½%, 5%, 5½% & 6%, 1931-41.
Brown County, Wisconsin, 5% Highway Improvement Bonds, 1932-41.
Janesville, Wisconsin, 5% School Bonds, due April 15, 1932-41.
State of Oregon 4%s, 1926-40.
Dayton, Ohio, School Dist. 5%, 1940.
City of Cleveland, Ohio, School District 6% Bonds, January 1, 1932-41 inc.
State of Minnesota 5% Loan, 1924-1929.
State of Washington General Fund 5½%, Gold Bonds, 1941, optional 1931.

INDUSTRIAL ISSUES

The Goodyear Tire & Rubber Co. First Mortgage 8% Sinking Fund Gold Bonds, Due 1941.
Tennessee Corn & Fruit Products Co. First Mortgage 8% Bonds, 1932-39.
Kelly-Springfield Tire Co., Sinking Fund Gold Notes, 1931.
Gulf Oil Corporation Sinking Fund Debenture Bonds, 7%, Copper Export Association, Inc., 8% Secured Gold Notes, Feb. 15, 1932-25.

May we, without cost or obligation to you, send our current offering sheet and add your name to our list to receive subsequent offerings? Ask for list FG 9.

Halsey, Stuart & Co., Inc.

Ford Bldg., Detroit : Main 726

CHICAGO ST. LOUIS MINNEAPOLIS MILWAUKEE
NEW YORK PHILADELPHIA BOSTON

fixed capital of these companies, have come to be higher than they were in the past. Long-time note issues—and by this we mean issues running as long as ten years—and preferred stock issues carry on their faces an 8 per cent rate, although we are advised that the brokerage charges and other trimmings make this money cost those who borrow it pretty nearly 10 per cent. The industrial corporations are in a better way to pay higher prices for capital than either the railroads or the public utilities, because their interest costs can be added to the market value of their products, while this is not so broadly true in the case of utilities governed by state and national commissions.

Without going deeply into this phase of the demand for money, it is quite certain that the industrials will be competitors for the public's capital in great quantity during the next few years. If it should turn out that the excess profits and other corporate taxes levied by the federal government shall be mitigated as to their burdensome character, it is not at all unlikely that many companies will see their way clear to a reorganization of their financial structures along the line of fixing much of the capital now engaged, and which is carried in the form of bank loans or long-time note credits. This constitutes the fifth phase of the increased demand for public money.

Sixth: The likelihood of a change in the financing of the Government, whether it be from the funding of the existing federal debt into securities of much longer life than those now outstanding, or, as has been suggested in certain high quarters, the funding of the debt of the Allies of the United States into bonds which may be used to pay all the Liberty loans, seems to indicate that there will be more or less opportunity within the next two years for American capital which likes that sort of investment to place itself in government securities. This is not at all likely to take the form of increased public debt, but rather of conversion, and the operations in government securities do not seem to indicate that they will constitute a new demand upon the public capital. It is worthy of note, in passing, that the emission of the government securities during the war uncovered an unsuspected amount of wealth in the United States. People interested in finances of every kind were accustomed to say during the war that the sale of the government issues was a splendid education for the American people in teaching them the possibilities of investment of small sums. This was undoubtedly true but the experience of these holders of government securities since they have acquired them has also done another good turn, in that the holders have been taught to have fortitude during their experience of lowered prices in holding on to their property until it comes back to its original value.

There will undoubtedly be very large movements of blocks of government bonds in the future. In another portion of this issue a writer has made an illuminating statement of the great movements of government bonds from the custody of the large subscribers of an industrial class to the general investor. Those who remember the details of the issues of the Liberty bonds will recollect that every great industrial institution invested very heavily in them. The investments represented a high percentage of the capital which these organizations had for their ordinary corporate purposes. It was recognized that these investments made with corporate capital subscribed for and devoted to the production of commercial articles could not long continue to be held invested in low return government securities, and that such a movement as the statistician in another part of this paper has shown to have taken place must inevitably come about. That movement is likely to continue, but to the extent that it does occur it will be simply a shifting of capital rather than a demand for new money. Indeed the disposal of their government bond investments by the industrial companies cannot have any other effect than to alleviate the demand from the industrials themselves.

New government issues, however, made by the states and the municipalities, are selling to be the fashion. One of the financial results of the World War as affecting the finances of state governments has been the insistence upon state bonuses to the citizens of the respective states who entered the service of their country. In the case of the state of Michigan alone it requires $30,000,000 of state issues to provide the necessary funds to equalize the condition of the men who went abroad with that of those who stayed at home. Other states are making large issues, not only for this purpose but for public works, and that brings to the fore a phase of the security of state bonds as compared with other securities. That phase is that it is not possible to enforce the payment of state bonds. From the time of the repudiation of the Georgia bonds in 1873 it has been well established that a state cannot be sued for its debts, the federal constitutional limitations having been pretty well proved at that time, so that state bonds rest peculiarly and solely upon the moral character of the people who make up the state.

From this rather hasty review of the investment demands of the

Digitized by Google

Invest Safely---

At the disposal of any investor today are hundreds of excellent investment opportunities, insuring safety of principal and attractive incomes. We have an investment service to offer you. Our connections enable us to secure for you almost immediately any desired information concerning any good security. Advice and counsel will be cheerfully given to any investor.

NICOL · FORD & CO. *Inc.*
INVESTMENT BONDS
Ford Building
DETROIT

Digitized by Google

Twenty-five Thousand Home Stockholders

The strength and standing of the operating units of Standard Gas & Electric Company are evidenced in the fact that 25,000 home citizens own 17½ million of dividend paying stock in the properties serving them with electricity and gas. We originated the term Customer Ownership and were pioneers in developing this evolution in public utilities.

Byllesby securities are based on modern, efficient properties, supplying indispensable services—and the confidence and good will of the public in more than 500 cities and towns.

Ask for Securities List.

H. M. Byllesby & Company
INCORPORATED

Detroit
1614 Dime Bank Building

Chicago
208 S. Lasalle St.

New York
111 Broadway

Boston
Minneapolis

Providence
Madison

New Haven
Oklahoma City

Michigan Columbia Holland-St. Louis

Direct private wires New York, Detroit and Chicago.

Correspondents:
Merrill, Lynch & Co.
Members New York Stock Exchange

SUGARS

The protective tariff will directly benefit the beet sugar manufacturer.

We are recognized specialists in beet sugar shares and we maintain the closest markets.

Complete analysis of these stocks mailed on request.

Phipps, Williams & Beeson
Members Detroit Stock Exchange
116-118 South Jefferson Ave.
SAGINAW, MICHIGAN
Bell: 4470-3921 Valley: 205

future, which may not turn out to be any more exact than any other pronouncement about the future, because the gift of prophecy passed with the prophets themselves, it is proposed to make a few deductions. First of all, while these statements are general they can be particularly applied to Michigan as well as to the whole country, and it is with their applicability to Michigan that the paper is most directly concerned.

Michigan has a great need of new investment money for the purpose of the development of its municipalities, its railroads, its public utilities, its industrial corporations and the housing of its citizens. There is a great deal of money in Michigan that has never yet been charmed in the direction of safe and sane investments. These figures may not be exact but they are based upon fairly good information as to the offerings and tolerably good reports as to the takings, and we wish to impress them upon our readers. There is not a village of a thousand to fifteen hundred people in this state that does not average, year in and year out, a contribution of $25,000 to the cause of speculation. This is equally true of Ohio, Indiana, Illinois and Wisconsin, so that Michigan does not stand alone. Next, there is not a city of 4,000 to 10,000 which does not average a "blow-up" of $150,000 a year to enterprises which have no foundation in merit, no proper introduction from people of experience and no management by people of skill. Going a bit further, we venture to make this statement upon information and belief, that there is no city of 50,000 in Michigan that does not, year in and year out, give up a million dollars to enterprises which have no reasonable hope of paying. And when one passes cities of this size and gets into the class of thriving industrial communities like Flint, Saginaw, Bay City, Jackson, Lansing, Battle Creek, Kalamazoo, Grand Rapids and Detroit, the possibilities for the unskilled, thousands have whitened in the deserts and the mountain passes in which their luckless owners pursued their quest of the gold they never got. They forget that white every ounce of gold represents $21.67 of value, the $21.67 represents the energies and the labors and the hardship of all the people who mined all the gold and the rest who tried to get it and not merely the success of those who got it.

But there are smart people, too, who send their dollars into the beyond, and find big chunks of dollars, too, sometimes because their vanity is fed; sometimes because they are flattered into investment; but generally because they think they are going to get something for nothing, or at least, very many times the face value of the comparative nothings which they invest. For instance, what a fine lot of estimable business gentlemen in Michigan paid $50,000 apiece for front row seats in the directorate of Kansas City, Mexico and Orient, and what a fine lot of Michigan gentlemen sent their good money after bad in trying to recover the cash which Mr. John Heffron and Mr. Francis Palms lost in the mud of the levees along the Illinois shore of the Mississippi! And how many millions of Michigan money were put at the behest of "fly promoters" and oily-tongued "birds" who really made people believe that inexperience and amateurishness could make more money in the conduct of the telephone business than seasoned and experienced ability! Or is it necessary to recall how freely men without a knowledge of chemical engineering were endowed with the people's money to build Portland cement plants or to turn the muck of our Michigan marshes into briquettes of peat-coal which would have more heat in them than anthracite and less smoke than was finally left after the adventures blew up.

These investors constitute a class of contributions of the private wealth of Michigan to enterprises created by exponents of the theory that a sucker is born every minute. Their contributions will continue to be made forever and a day, when the people who have money devote at least as much thought to its investment as they do to its gathering.

Another Class of Investments

There is another class of investments into which the public is charmed and in which they have a better chance, but which, for the investor, represents a handicap to the investment from the moment that it is made. This is that class of enterprises in which the assemblage of the capital is burdened with too heavy a promotion expense in the gathering of it. There are certain classes of investments that are peculiarly rich men's investments. Time was when the business of insurance, both fire and life, was looked upon as an investment for the idle capital of wealthy men. A group of these met in the back room at a bank, decided that they wanted to organize an insurance company, subscribed the capital, paid for it at a hundred cents on the dollar, which actually went into the company's treasury, and set to work. These men had an advantage that has been held up to thousands of others in Michigan who thought they were doing the same thing. These thousands were solicited and besought and persuaded to put their money into similar enterprises in comparatively modest sums, the number of stockholders making up in

Digitized by Google

"When Commodity Prices Fall--"

On October 13, 1920, we used an advertisement in which this economic law was stated:

> When commodity prices go up, more money is required to move a given volume of goods. Hence, money becomes scarce and the price of money (the interest rate) goes up. As the interest rate goes up, bond prices go down.
> On the other hand, when commodity prices fall, the exact opposite is true; money is released, the supply increases and the interest rate goes down. The demand for bonds increases and bond prices go up.

Today—eight months later—a falling commodity market is demonstrating its inevitable influence on bond prices.

No one needs to be told that commodity prices are declining. That bond prices are steadily rising is proved by the lower rates of interest in the new security offerings, as well as by the published quotations of listed bonds.

Higher bond prices or lower interest rates—whichever way you care to look at it—mean the same to the investor as commodity prices do to the merchant. As prices rise, the merchant can buy less goods with a given sum—*the investor can buy less income.*

Various issues on our list, because they are now selling at a discount, yield a high income that makes them very attractive purchases. This income possibility will disappear as prices rise. Therefore, we suggest action now.

An additional advantage in buying now is the benefit to be had from the rising prices of bonds. Income is what the conservative investor buys—but he has made an even more profitable purchase when his bonds *increase in market value.*

That is the opportunity that exists today. We would be glad to discuss it with you if you will call at our offices. Or, if you wish it, we will send an experienced representative to you.

Let us send your our graphic charts showing the effect of commodity prices on the market for sound bonds. Ask for Circular MM-12.

A. B. Leach & Co., Inc.

Investment Securities

Chicago
Philadelphia
St. Louis
Cincinnati

New York
Boston
Milwaukee

Baltimore
Cleveland
Minneapolis
Duluth

420 Ford Building, Detroit

Telephone Cherry 1952

Digitized by Google

volume what the individual subscriptions lacked in comparative size. The difference was that, where the rich man's subscription to the class of insurance company earlier referred to found its way into the treasury of the company at a full hundred cents on the dollar, the subscribed capital of the latter class of companies was stripped of from 25 to 50 per cent of the amount paid in for the cost of bringing it together. Now there may be some methematics in business which can make 65 or 75 cents earn as much as a dollar earns, under precisely identical conditions, but if there is, the information concerning it has not been given general circulation. Yet, in the face of this fact, from 1912 to 1917 not less than two millions a year of Michigan money was charmed into enterprises of this class, which began with a handicap of at least one point in a possible four. As a result, there are nearly a dozen weak insurance organizations in this state which are not even paying a commercial return on the par of the subscriptions made to them, although those subscriptions were made at the rate of two for one, and in the case of one of them, at least at the rate of three for one of the par, upon the assurance that the excess was to go into the surplus. As a matter of fact it went to the promoters; and the promoters are still out of jail.

Next, there is a class of investors who have been led to lose their money by being overloaded. Courage is a good quality in investment, and caution perhaps a poor one. Chances for results lie somewhere in the mixture of the two. During the real estate booms which have taken place in Michigan, and generally just before their climax, thousands of good people have been induced to take on, with comparatively small initiatory payments, and with modest but frequent periodical payments, rather more real estate than they had any business engaging. This statement applies to wholesale and retail buyers alike, for while the wholesaler was usually a man of some capital to start with, the retail buyers, as a class, were people who in making their engagements were discounting their future earnings. If by any chance the steadiness of those earnings were interrupted, the partially paid interest in their real estate ventures becoming unliquidable, suspension of payment was bound to follow, and with it forfeiture of the payments already made after the contract limit of delinquency had arrived.

This condition is not specially to be blamed to the sellers of such properties, because, as a rule, they have not profited by the delinquencies in payment but have rather, from their multitude, been embarrassed; because the sellers themselves depended upon the aggregate of the individual payments to meet their own as they became due. At any rate, they had the burden of carrying their properties thrown back on them.

By this process millions of dollars were lost to the buyers of real estate during 1892 and the years immediately following, during and following 1914, and more will probably be lost this year and in the succeeding years unless there is a very early resumption of industry. Even if there is such a resumption, these people will have to pay off in dearly earned dollars what they contracted to pay in cheaply earned ones. If they save the property they will have it and their experience to the good, and it is a matter of doubt which will be the more valuable possession in the end.

It is from a view of this panorama of hopeful but disappointed investment that this publication proceeds to a discussion of the relative merits of investments. The designer of this issue asked the writer of this article to stress the relative desirability of investments as between the various classes of securities which have been heretofore described as investment applicants for the capital owned by the people. The relativity of the safety of such investments can be readily summed into three classifications.

The first of these is: That the safest investment on earth is in earth, in real estate bought for cash or within one's means for paying for it in deferred installments, purchased at a fair price, either in a settled center of industry or a properly located and developed agricultural section.

Second: The next safest investment is other people's debts, properly secured, and that takes in the whole field of individual and corporate debt, whether it be that of the federal government, the state, the cities and villages, the railroads, public utility or industrial organizations, and to these rather more extensive consideration will be given further on.

Third: Investments in the equities of business, well-founded or giving promise, are good speculations, whose safety depends altogether on the adequacy of the invested capital, the experience of the management, the permanency of the market and the facility of the business to earn over and above a current commercial return upon the capital invested and surplus. This surplus must act as a buffer which will take up the shocks between realized losses and normally expected gains, which will be the granary in which the fruits of the seven years of plenty may be husbanded against the seven years of famine, and which will generally be the stabilizing fund between constancy of return to the investors and inconstancy of adequate income to meet the normal demands of the stockholders.

In the remarks which follow no attention will be paid to real estate as an investment. Its standing and the principles which would govern investment therein have been already sufficiently stated. The application of those principles furnishes a new case for every transaction.

The Desirability Of Public Utility Investments

PUBLIC UTILITY INVESTMENTS are comparatively new. They have come within a generation as a class. As a matter of fact, when the country was growing, capital had no confidence in the only public utilities, by which we mean municipal utilities which were offered. The investor did not believe they would pay. The only class of public utility investment offered was waterworks. A great many fine spun theories have been offered for the ownership of waterworks by municipalities rather than by private owners. Periodically some contributors to the gaiety of the nations who talk on this subject, like the editors of the Detroit News, or the present incumbent of the mayoralty of Detroit, tell their open-mouthed and empty-minded confidants that by some dispensation of grace in the past, waterworks became municipally owned in a general way because the city dads of the past were wiser than them that have come between their time and those of the present day politicians. As a matter of fact, there have been many privately owned waterworks, but these usually had to be attached to them some bonus to induce people to go into the business. The charter of the Bank of Manhattan, of New York City, is based upon a waterworks grant in the reign of Queen Anne, the bonus attached to the duty of providing a waterworks supply for the inhabitants of little old New York in those days being an opportunity to go into the banking business. New Orleans had a private water system for years, and, what must edify modern municipal fadists, the private sewer system as well. Louisville and Akron, Ohio, are examples of long continued private water systems, the latter being owned by that wise old financier of Detroit, since dead, Mr. Joseph Berry. There are half a dozen private water systems in Michigan today, but the reason that waterworks are generally municipal is that the country grew so fast and the demand for water supply and fire protection was so insistent and the call for the extension so rapid, once they did begin, and the likelihood of their paying out so remote, that people who had money would not invest in waterworks unless the taxing power was pledged to guarantee the investment. That is why waterworks are municipalized so generally and not because of any earlier superiority of wisdom on the part of the city dads who flourished when American waterworks systems were most largely inaugurated.

Before 1880 there were practically no issues of public utility securities such as we know today. It is true that there were gas companies and street railway systems. Gas companies date back as far as 1810 in New York, but prior to 1880 the American gas works was a clumsy, unscientific sort of thing which wasted half its raw material and got double prices for its result and product. From what we can learn of their financial structures they were nearly all organized with low capitalization and their extensions treated as part of their operating expenses, rather than a charge to capital. They were literally built out of their own bowels. When the Germans learned the hidden resources of coal tar and found in the refuse products of coal the fortunes that lay in the material of dyes, phenols and benzols and their derivatives and of the searchlight rays, when they found the wealth hidden in the ammoniacals, when their chemists discovered new illuminating values in the incandescents of earths and clay, the gas making business came into its own. Today the retail sales value of the products of a ton of coal is a fair stand-off with the cost of the coal itself, leaving the income from the gas distribution to support the capital costs, maintenance and personnel of the processes of distribution. The cheapening of gas to the public has raised within thirty years the annual per capita consumption in progressive American cities from 1,000 to 10,000 cubic feet, thereby creating a business of volume which did not originally exist.

The street car business was very much like the gas business in horse car days. It was usually capitalized low and its extensions were made out of its own bowels. The application of electricity in the late 80's, with prospects of economies figured so attractively as to lead everybody to believe that immense fortunes lay in the business—beliefs which were not realized; the anxiety of the newly organized

Digitized by Google



UNITED LIGHT & RAILWAYS COMPANY

Grand Rapids, Mich. **Chicago, Ill.** **Davenport, Iowa**

NO OTHER BUSINESS has withstood the press of adverse business conditions in so substantial a manner as has the Public Utility business.

Furnishing a service which is necessary to Industrial, Commercial and Home Life, the well-managed Public Service Company is least affected by temporary slackening of Industry and Commerce.

The product is consumed as it is manufactured.

It is paid for as it is consumed.

No surplus of goods is produced from high-priced materials, to be sold on a falling market.

While the demand for service in Industry may fall off in slack times, the use of Gas, of Electric Light and of Transportation in Commercial and Home Life *must continue on about the same scale.*

On the other hand, the price at which the service is sold must be sufficient to pay the cost of producing and delivering such service, *and a return on the investment adequate for the attraction of capital.*

This ultimate safety of principal, combined with a fair return for the use of capital, should interest the conservative banker and investor.

United Light & Railways Company has never failed, in the eleven years of its history, to pay every interest charge on the day it was due.

It has never failed to pay, in cash, on the first day of every January, April, July and October, a quarterly dividend of 1½ per cent (equal to 6 per cent per annum) on its 6 per cent Preferred Stock.

There is a ready market everywhere for the securities of this Company.

WALLACE & COMPANY

Members Detroit Stock Exchange

DETROIT

Digitized by Google

Municipal Bonds

Exempt from Federal Income Taxes

Michigan
Tax Free Bonds

High Grade
Corporation Bonds

Bolger, Mosser & Willaman
JOHN W. BALLMANN, Manager
2020 Dime Bank Building, Detroit, Michigan
PHONE CADILLAC 8

Buy Bonds Now

Income rates have never been more attractive than they are at present.

Write for circulars descriptive of our Municipal and Corporation issues yielding 5½% to 8%.

Our list of Michigan Tax Free Municipals is especially attractive.

DANSARD-HULL-BUMPUS CO.

161 Congress St., W.

Phone—Main 3410 — Detroit, Mich.

electrical manufacturing companies to promote and get business; the earnest eagerness of municipal officials to grant franchises for electrical transportation when the old horse car grants were on the verge of running out, and the prevailing cheapness of investment money at the same period all conspired to bring about an enormous investment in electric transportation.

The development of the electric light was almost coincident. How many people recall that it is less than forty years—to be accurate, it was 1884—since the first arc light of the brush type was shown in Detroit, although Vandepole had shown an experimental candle nine years before that? These investments in the electric street railway and the lighting business have had their ups and downs. During periods of low priced coal and moderate priced labor they have made a commercial return upon the money invested in them. It is probable that if scientific accounting methods had been applied to them from the outset, this would not have been the case, because anyone at all familiar with the conduct of the business since its inception can recall scores of cases in which real operating expense was charged into construction, or, what was worse, operating losses covered into capital. The history of the street railway and lighting business has been one of a succession of obsolction of plant, all of it, however, having tended toward the perfection of central station practice, the development of long distance transmission and the continued increase in the economy in the production of electric energy, its distribution and the efficiency of its use. We seemed to have settled down to standard practice in the construction and operation of plants using electrical energy, whether for transportation, industrial power or lighting purposes, and with the settlement has come greater security for the capital invested in the business. For a long time the public mind, at least so far as it was directed by the yellow newspapers and the red politicians, was centered upon the constant reduction of rates. Indeed so able a document as the Wisconsin law regulating public utilities seems to have been written wholly upon the theory that rates might ever go down. Recent experiences have shown, however, and in most parts of the country the theory has been accepted, that public utility service must be compensated by rates which will pay the cost of providing the service, maintaining the fabric of equipment and returning an attractive income to the capital involved.

The public utilities have not been good investments in the recent past when taken as a class. They have had to do considerable makeshift financing, but one thing has been brought out clearly during their recent period of hard luck, and that is their necessity, a characteristic which becomes more and more impressive as one studies the statistics of demand for the services which they render, not only the gas companies but the street railway and lighting companies have generally been given adequate rates, this betterment of conditions being part of the history of the last two years. With the drop in the price of coal from war time rates and the prospective return of the cost of labor to something approaching ante-bellum prices, with the revival of industrial demand for their services there seems little question that the public utility corporations are coming back into their own, and that their bonds, their preferred stock and their long-term notes are safe investments for conservative people. Their hardships have brought about one condition of advantage to the present day investor, and that is, so much of their current earnings have had to go into plant within the last five years that the proportion of security to the aggregate of issues is greater today than it ever has been before.

The Desirability Of Governmental Securities Investments

AS ALREADY INDICATED, there is likely to be a very great demand for money in the next few years from the various forms of governmental organizations which administer public affairs. The likelihood of public transactions in bond issues of the American national government has already been discussed along the lines of the unlikelihood of the demands of the federal government involving the use of much new money. From what can be forecast in this division of public finance it looks as if the operations would be along the line of conversions rather than of new emissions.

Government securities which are most likely to offer themselves to the American public in the form of new issues are likely to be foreign demands for money. This is comparatively a new kind of investment for American capitalists. Yet it is not unlikely to prove attractive. Continental Europe is "broke" financially, and those who are our best students of American business have taken the view that in order that Europe shall get upon its feet it will be necessary for us to lend money to her governments. This does not mean that the money itself will go abroad, but that the money will be spent in the United States for the products of American manufacture which

Digitized by Google

Europe needs, and that the proceeds of the bond issues of the European countries will be spent here. Already there have been some examples of this form of foreign financing. During the war the great Anglo-French loan was put out in this country on practically this basis, much of it having been already repaid. French cities, like Paris, Lyons and Marseilles, have put out their local securities for various purposes and in considerable amounts, which are still in existence here. Right at the present time the French government is making a new loan, which the newspapers say has been pretty well taken up.

These securities are being put out to net approximately 8 per cent, which is a high rate of interest, based on the necessities of the borrowers and not necessarily upon their lack of credit. It is unlikely that a nation like the French would ever default upon a so-called external loan, because while such a loan could not be enforced in its collection by legal methods, the ways of trade operate to make it necessary for nations to pay to the citizens of each other what they have borrowed. A very interesting example of this is contained in the recent news from Russia, to which our government lent directly some three hundred millions of dollars before the old imperial government went "belly up," was succeeded by the soviet government, and had its earlier obligations repudiated by the latter. Now Mr. Lenine and Mr. Trotzky are said to be inviting a return of the capitalist system, having decided that the socialistic system leads them nowhere. That means that they are going to get into export and import again, but before they do that they will have to make some arrangement for the security of the debts which they owe the United States or they cannot trade with us; so that composition of the debt is inevitable.

If we as a nation are to do much trading with the rest of the world, we are going to have to take a great deal of its debt in the next two years, and the offerings of foreign securities will become really a part of our own industrial system, so that a citizen of Michigan who has money to invest and who is interested in the industries of Michigan can perhaps do them and himself a very good turn by investing some of his spare cash in these foreign securities. In that event he will do well to take the advice of the investment bankers, because their judgment is better seasoned than that of other buyers, and they are not likely to undertake the distribution of foreign securities which are not safe, even though they be attractive so far as interest rates are concerned. It may be fairly premised that securities emanating from other countries, like Great Britain, France, Holland, Belgium, Spain and perhaps Italy, will be well grounded in credit; while securities emanating from the countries which have to be re-constructed, like Germany, Austria, Poland, Jugo-Slavia and the minor nations, will really become the subject of substantial guarantees before they are attractive to the general investor. It is not unlikely that even these will be attractive to their own nationals—that is to say, to people who have emanated from those countries and who are now included in the citizenship of the United States. The love of fatherland will lead to investment by these where nice decisions as to security might not be entirely conclusive.

While considerable demands may be looked for from these sources for investment in national securities, our greatest demands are going to be from American states and cities. The American states have been singularly free from debt for a long time. Until recently many of them had constitutional prohibition against going into debt, our own among the number. Of late it has been the expressed judgment of our people that certain large financial transactions are worthy subjects of debt making. The most striking of these are the road-making programs which have been entered into by various states in this country. Another which seems to call for a great amount of borrowed money is the theory of paying bonuses to soldiers of the World War for the purpose of equalizing their loss of opportunity during the war with the opportunity of the men who stayed at home. Already in Michigan something like 20 millions of road bonds have been issued or are on the way to issue, the eventual limit of this class of debt for this state being 50 million dollars. Already authority to issue 30 millions for bonus purposes has been given, so that here is an eventual demand for 80 million dollars from a single state. The demands from other states will be in proportion. Now it is well to remember that a state cannot be made to pay its debts. It is sovereign and may not be sued in its own courts or in the federal courts without its consent, and all that the investor who invests in state bonds has to depend upon is the good faith of their people. Of course in Michigan we know each other well enough to know that this state is not going to repudiate any of its obligations, yet in the past the states of Georgia, Mississippi, Tennessee and North Carolina have repudiated their debts, and by waiting long enough have been able to get into the market for new credit, so that for Michigan investors at least it may be good policy to confine their purchases of state bonds to the

STACY & BRAUN

INVESTMENT BONDS

Underwriters and Distributors of high grade

MUNICIPAL BONDS

We specialize in Federal Tax Exempt Michigan, Ohio and General Market Municipals

Copies of our Quick Reckoning Income Tax Table furnished on request.

NEW YORK — CHICAGO — DETROIT — CINCINNATI
TOLEDO

Michigan School Bonds

YIELDING 6% PER ANNUM

We own and offer:

$40,000

Muskegon County, Michigan, School 7% Bonds

Issued by

Muskegon Township School District No. 1

Dated April 1, 1921—Due $3,000 Annually April 1, 1924, to 1936

Total Value of Property	-	$1,000,000
Assessed Valuation for Taxation	-	421,560
Total Debt	-	40,000

Population 4,500

Area of District 1920 Acres

This School District is located between Muskegon and Muskegon Heights and will probably be absorbed by the former City at an early date.

Legality approved by Attorneys Chapman, Cutler & Parker, Chicago

Price to Yield 6% Per Annum

Free of all Federal Income Taxation

Tax Free in Michigan

The Hanchett Bond Company

(INCORPORATED 1910)

Municipal Bonds Chicago

Dime Bank Building, DETROIT - W. H. DUNHAM, Representative

Digitized by Google

Principles of Sound Investment

We have available, in the selection of safe investments, the accumulated experience of fifty-six years of successful investment banking.

We can do more than sell you safe bonds and notes. We can help you to get at the principles underlying all safe investments.

We now offer such investments yielding a return of eight per cent.

Ask for Descriptive Circulars

Peabody, Houghteling & Co.

ESTABLISHED 1865 — INCORPORATED 1918

10 South La Salle Street, CHICAGO

DETROIT OFFICE: 920 Dime Bank Building. PHONE MAIN 6537

Cleveland Milwaukee St. Louis New York

Municipal Bonds

Yielding up to 7%

Do you hold corporation bonds selling on the market at large discounts?

Would you prefer to hold long time 5% Municipal Bonds selling at about the same discount?

EXEMPT FROM ALL FEDERAL INCOME TAXES

Our offering of Cherokee County Texas 5% Road Bonds provides the opportunity for profitable exchange. These bonds are the direct obligation of the entire district and are payable from a direct tax on all taxable property therein.

Assessed valuation . . .	$2,521,470
Bonded Debt . . .	169,000

Population 5,000

Legality approved by Messrs. Wood & Oakley, Chicago

Maturities 1922 to 1945 yielding 7% to 6½%

Prices from 97.80 to 82.17

TAXLOR, EWART & COMPANY

Safe Investments

105 South LaSalle Street *CHICAGO*

state of which they themselves are a part and whose policies they and their neighbors can influence by their own votes.

The great field, of course, from which the demand for money is constantly coming is that of the municipalities, the term being used here in its broadest sense to include cities, villages, counties, school, road and drainage districts, and the other forms of municipal government which may be from time to time erected. Indeed in order to devise new ways of making public credit possible, a tendency has grown up in late years of forming overlying municipalities each capable of making its own debt. For instance, when Chicago was overburdened with debt and there was a necessity for the drainage canal, the credit of the city of Chicago was not invoked in procuring the money necessary for that purpose. A new municipal corporation was organized, including not only the area of Chicago but of much adjacent territory, to become the basis of the credit of the sanitary district bonds. By this means the one set of properties was made the basis of credit for two sets of municipal issues. It is not unusual to find that school districts have a right to pledge the credit of the property of their areas for their securities, a recent example of that demand having come right in the city of Detroit from its Board of Education, which was formerly dependent upon the consent of the city government itself for the use of credit for educational purposes. In practice the territory which is benefited by the presence of a waterworks system is made the credit giver for the debt necessary to produce and extend the system; although a water system being a remunerative public utility cannot be classified in the same group of investment as sewers, schools, fire halls and other non-remunerative investments.

Next, it used to be the style to put out municipal securities only on permanent properties which could at least live out the life of the loan. Under the commission form of government which has become more or less popular in recent years there have been some divergencies from this policy. In order to show that the "city dads" were keeping down taxes they have thrown certain forms of public expense on the public debt; for instance, we know cities in Michigan which have issued their bonds running for thirty years to motorize their fire departments and have spent the proceeds of the issue upon public property having a life of from five to seven years. In other words, the property acquired by debt will not survive until maturity of the bond issues. These issues are not worthy of encouragement because sooner or later these cities will get the financial belly ache and will have some trouble meeting their interest promptly, when heavy interest payments, intense public demand for improvements and statutory tax limitations are taken into account.

Next, under our new-fangled ideas of municipal ownership of public utilities, provision is being made in the law for the issuance of straight municipal bonds for primary installation up to a certain limit; after which another class of bonds may be issued, secured only by the fabric of the utility itself. So far we are not aware that any great number of this class of issues has been marketed or that the necessity for offering them has come into existence. But when it does come about and such offerings are made, the ordinary buyer will owe it to himself and his capital to distinguish clearly between the utility bonds issued on the faith and credit of the cities and those issued with the fabric of the utility as their sole security. In the latter case it is likely that the investor will only be inviting trouble, because when that stage of the utilities come their earning power will probably not take care of the interest, and they will have the general characteristics of privately operated public utilities that have got into trouble.

This of course is only the blue side of investment in municipal securities. As a rule they are better supported by credit than either government or state bonds. If it were possible to conceive that the Government or the state could lie down on the payment of the interest or principal of their issues, there is no method of court action that can be invoked to make the Government or the state pay. Not so with the municipals. These corporations pledge their taxing power and when they default, as they sometimes have done, the courts can be invoked to force them to levy a tax to meet both principal and interest all at once. So that the security on municipal bonds is actually invokable for collection.

Most American cities which go into debt are limited to the tiniest fraction of their assessed valuation so far as debt making is concerned. Formerly the rule was approximately 2 per cent of the assessed value of the property subject to taxation within their limits. Lately there has been an advance from that very conservative limitation, but the wildest variation that we know of has not exceeded 10 per cent. Inasmuch as few American cities are valued at more than an average of 60 per cent of their true cash convertible value, it will be seen that even this highest rate does not exceed 6 per cent of the true cash value of the communities which ask the general investor to accept their credit. This is interesting to the investor only to the

Digitized by Google

extent that he wants to know that his interest is being paid cheerfully and that it does not become a burden upon the taxpayers. As a general rule investors may go blind in investing in municipal securities which have sinking fund provisions made in connection with their issues. Or be it known that many issues of municipal securities have been put out in the past without any provision for their payment. Of course they have refunded into new issues and the like at the maturity of the old ones. But it does not add to the saleability of a municipal bond to be obliged to admit that while it was properly issued, has a good interest return and splendid credit, no provision has been made for paying the principal when it becomes due.

For certain classes of investors, such as guardians, trustees and administrators, who have long-time trusts to administer, and for educational and charitable trusts, the municipal bond is about the safest kind of investment they can make. While they may go it blind, as we suggested, in the selection of their investments, and remain safe, there is still enough variation in credit and the characteristics of the issues for buyers to be willing to take the judgment of the investment houses in their selections. This should be done if for no other reason than that such judgment carries with it an assurance of the legality of the issue. The making of public debt is no haphazard adventure and must be done according to the law. There have been cases where the formalities required by the law have not been complied with, and while the majority of the people of the community remain undoubtedly favorable to the carrying out of the contract, sometimes a grouchy taxpayer has invoked the courts to prevent the carrying out of its evident purpose when some of the necessary legal steps have been omitted. The investment houses look after this feature as a rule and use lawyers for that purpose who specialize on the subject and who are therefore more than ordinarily familiar with defects in an issue where they exist. So that municipal bonds, which includes counties, school districts and the like, and which excludes issues made for public utility purposes when based upon the credit of the utility alone, and which also excludes issues for which sinking funds are not provided, are bound to be perfectly safe investments for surplus money. Of late they have become very attractive as to interest return. Whether this will continue when the country has accumulated a fresh supply of capital and there is more money available or not, remains to be seen.

The Desirability Of Industrial Securities Investments

IN THE PRELUDE to this review of the availability of securities there was included a suggestion of industrial issues as a separate class. It is really remarkable what a change has come in the organization of the finances of American industry in the last few years. The old style corporation was a purely common stock enterprise, and such of those as survive still are characterized by being built up on the one-class stock basis. That is a survival of the actual ownership of the property by the people who are at its head. With the consolidations which began a quarter of a century ago the variety of interests in industrial companies which have been created has become very great. Indeed it is really surprising in the cases of some of the companies to see how little the controlling interest actually owns. This is not the result of any evasion of responsibility but rather of the great growth of many of these companies and the insistent demand for fixed and casual capital, which come to them as the result of the ordinary growth of business. Take any great American manufacturing institution and it will be found that its financial organization is something like this: a bond issue secured by all its property acquired or to be acquired; a preferred stock issue having a lien upon the net earnings of the company after the bond interest has been paid; an issue of long-time notes, the proceeds of which became necessary after a closed preferred stock issue was exhausted, and the principal and interest of which are payable prior to the liquidation of principal and interest of the preferred stock, although when the preferred stock was put out its buyers were very certain that they were getting a second lien; perhaps an issue of short-time notes, and after that the current banking transactions in which current income is pledged to their liquidation.

Adventures in industrial corporations do not belong in the field of the casual investor. As a rule they should be made only by people familiar with machinery and business, and, as a better rule, only by people familiar with the machinery and business in which they invest. For general investment their bonds are good, so far as security is concerned, but their plants are specialized, and if by foreclosure they fall into the bondholders' hands it means that they must go into the

DILLON, READ & CO.
Formerly
Wm. A. Read & Co.

INVESTMENT SECURITIES

NEW YORK
CHICAGO PHILADELPHIA
BOSTON

Detroit Representative
Thomas H. Bradford
707 Majestic Bldg. Telephone Cherry 6342

BONDS

Municipal
Railroad
Public Utility
Industrial

E. H. ROLLINS & SONS
FOUNDED 1876

Boston, New York, Chicago
Detroit, Milwaukee, St. Louis, San Francisco

Digitized by Google

Tax Free in Michigan

Federal Bonds

FEDERAL BOND & MORTGAGE COMPANY

Phone Cadillac 5989 526 Griswold Street, Detroit

The sum and substance of every effort of this company is to provide sounder, safer, better First Mortgage Real Estate Serial Gold Bonds. Each day our business continues is a replica of the day before—a renewed and changeless adherence to the high principles upon which this institution was founded years ago.

(416)

business themselves and find people competent to run their plants, which is a helpless kind of a proposition at the best. Yet these concerns are going to need money, and investment in them is really a matter of public duty; so that the best that can be said of them is that the prospective buyer should depend upon his broker and his lawyer in making such investments. As they are not all bad by any means, they are not all good either. The intricacy of analysis of their statements is something which appeals more to the professional than the amateur can be best undertaken by him.

Much of betterment in the attractiveness of these properties has been accomplished by the recent inauguration of banking house control. This has been exhibited in a number of reorganizations of motor car companies. Industrial companies frequently require large sums of money and banking house alliances permit of the speedy use of current assets for temporary credit purposes. On the whole, the industrial is an investment to be undertaken by people who can afford to lose money if they have to; by people who keep the run of general business well in mind, and especially by people who know the particular business into which they are putting their money.

These admonitions apply only to the real investor who wants to put his money away for a considerable time, with the hope of realizing a regular and respectable income upon it. They do not apply to the investments of those who go into the stocks and out of them to take a scalper's profit dictated by the changing quotations on the ticker tape. Any fool can do that, and whether he makes or loses money by it is not of much public moment.

The Desirability Of Real Estate Securities Investments

THE POPULATION of Michigan has increased by more than 20 per cent in the last ten years. This increase has not been spread over the farm areas in due proportion, but has been almost wholly amassed by the cities. The cities of Detroit, Saginaw, Bay City, Lansing, Jackson, Battle Creek, Kalamazoo, Flint and Grand Rapids account for more than 60 per cent of the growth of population in Michigan between 1910 and 1920. As a consequence, they also account for the very great demand for new homes which has accrued, and the very largest amount of which has accrued within the last five years and is to a large extent still unsatisfied. For reasons which have been hitherto discussed in these pages not much building has been done since 1916. There is therefore the accumulation of demand of the last five years for new homes, minus the amount to which it has been satisfied by actual building, minus also the relief of demand which has come from the departure of workers and their families from the state as the result of the industrial depression. It used to be said by the extremists that Detroit alone was 45,000 houses short of the actual demand. This was never true, but a maximum unsatisfied demand for 35,000 homes once did exist in that city. The best figures that we are able to put together from the information given us by associations and correspondents is that, taking Michigan by and large, there is today a demand for 65,000 new homes in the state. At an average cost of $3,500 each, which is about that now prevailing, this means that there is a call for more than $22,000,000 of new capital to be invested in home building. The average capital of the builders and the buyers of homes does not exceed 20 per cent of the finished cost of the product, so that there is call for approximately seventeen and a half millions of new money to catch up with the demand for homes, and of more than half as much more annually to provide for the 40,000 homes which should be built annually in the cities of Michigan to keep up with the growth.

Investments in securities based upon home-building, real estate and industrial buildings and apartment buildings, which we have not included in the foregoing figures, call for very much larger sums of money from the ordinary sources of supply. The ordinary sources for such supply are the savings banks, which aim to keep a large proportion of their deposits in first mortgage securities. These institutions have not of late been investing to any great extent, for two reasons. The one and most pressing has been the reduction of the aggregates of savings investments. The other has been an unwillingness to accept the figures of cost which have characterized the last few years as figures of permanent value; so that by the time the real estate mortgage banker got property values reduced to what he thought was likely to be their permanent level, and was ready to lend 50 per cent of that figure, he had got down to 35 or 40 per cent of the actual cost of such construc-

Digitized by Google

Our Bonds Will Pass Any Test

Q.— What is the security back of your Bonds?
A.— Each Bond is a unit of a closed First Mortgage on a specific parcel of improved income producing Detroit property worth in all cases double the amount of the total Mortgage Bond issue.
Q.— On what kind of properties are your mortgage bonds issued?
A.— Apartment houses located in excellent residential neighborhoods and business blocks on good business streets.
Q.— Are your bonds tax emempt?
A.— Yes, as all our bond issues are secured by First Mortgages on Detroit property, our bonds are free from all local and State taxation. Normal Federal income tax up to 4% is paid by the Mortgagor.
Q.— How do you guard against depreciation in the mortgage property?
A.— A portion of the Mortgage Bond issue is paid off each year, thereby constantly decreasing the amount of the mortgage obligation and steadily increasing the margin of safety.
Q.— What rate of interest do you pay?
A.— 7%.
Q.— Why do you pay 7% while several other houses pay only 6%?
A.— Your money is worth 7% in the current market due to present business conditions, and due to the fact that there is strong demand for American funds by foreign Governments and Municipalities. We would feel that we were not dealing fair with you if we paid less than 7%.
Q.— Are 6% First Mortgage Bonds safer than your bonds that are yielding 7%?
A.— Absolutely not—The bonds we offer at 7% are the same class of bonds we formerly sold at 6%—In fact some of these bonds are unsold portions of our 6% issues.
Q.— What are the resources of your Corporation?
A.— Over $7,000,000.00.

DETROIT MORTGAGE CORPORATION

Third Floor REAL ESTATE EXCHANGE BUILDING *Main 9482*

Digitized by Google

tion. The savings banks have not, therefore, been any relieving source of supply to the speculative and private builders who have lately been willing to make adventures in real estate investment, whether for sale, rental or personal use.

In the last few years a new class of institutions for the gathering of capital and its release for real estate investment purposes has come into being. These are the so-called finance or mortgage companies, which, not coming under the purview of the state banking laws, are quite free to take a more liberal view of the amounts which they may lend upon real estate security. These companies put out two classes of investments to their savings subscribers, namely, the entire amount or subdivisions of the first mortgages upon which they lend usually 50 per cent of actual present-day costs, while for their preferred stockholders investments are made in what is practically good second-mortgage security, the actual owner starting off with a 20 or 25-per-cent interest in the properties, while he is amortizing his debt in monthly payments, after the form of rent, but usually at a much higher than rental rate. These securities are self-liquidating, and require from four to eight years for the home-getter to pay off his equity, when he still has the mortgage to attack and pay off.

The mortgage and finance companies, where they are well managed, pay a handsome return to those who put their money into them, and, in addition, serve the useful purpose of collecting from the resources of many small capitalists a large portion of the great sums annually required in Michigan for the provision of new homes for its people. As a matter of fact, these are the only available places in which good returns can be obtained on such small sums as $100. Some years ago the public utility companies issued some $100 bonds for the purpose of attracting the capital of the small investor, but we have seen none of these in a long time, their places being filled by offerings of preferred stock of those companies to the general public. The mortgage companies look for the investment of the small capitalist as well as those of the large one, and it is worthy of note that their solicitors emulate the life insurance agents and the real estate men by the thoroughness with which they canvass the public. Some of their critics in the larger amount investment trade are inclined to turn up their noses at their fine-combing processes, but it is worthy of note that it is just such processes as are saving that capital of the thrifty worker and the small tradesman from being charmed into fly-by-night and blue sky investments, usually never to return. The mortgage companies are in most cases furnishing the only safe and available investment, returning the normal return to the small investor that is available to that class of investor. Indeed we are not sure that, for the person who enters deliberately upon the financial program of buying a home, the mortgage corporation investment, as an initiative, is not a better way to undertake his program than by loading up on contract real estate, which may overwhelm him when he is only partially paid up. A thrifty and saving person can accumulate his money under the mortgage plan in units of a single hundred dollars, with no liability ahead of him if reverses come, and with liquidable security when he is ready to undertake home purchasing.

The method of subdividing mortgages into fractional beneficial interests in the entire mortgage is a financial convenience, and if buyers select the properties into the securities of which they buy they have frequently as good a chance to select their investments as if they were buyers of the entire mortgage debt. An instance of the oddities and at the same time the safeties of such investments came to attention only a while ago. A guardian, having accumulated $500 for his ward, looked over a list of mortgage interests offered by one of these companies. Much to his surprise he was able to buy such an interest in a property located less than a block away from his own home, of the security of which he could and did have personal knowledge. Much more to his surprise he discovered on inquiry that all the other interests in the same mortgage were held by neighbors of the mortgaged property, some of them not even acquainted with the other, but all brought under the operations of the system, into investing their little surpluses in the immediate vicinity of their own homes.

These securities are now paying 7 per cent. How long that will last is uncertain. They have always been good at 6 per cent. The preferred stocks of these companies, which is only another form of real estate investment, usually pay 7 per cent and are as a general rule well secured by a margin of assets over and above the stock liability and can be bought in amounts as low as $25. They are the backbone of the real estate mortgage investment business and where well conducted, are just as good investments as railroads or public utilities, besides being a mighty sight nearer home, as a general rule.

The Desirability Of Steam Railroad Investments

THE American steam railroad as an investment has had a rather honorable career, despite the criticisms which have been put upon it. For a time the railroads were the plaything of speculators in their stocks; for a time the management of some railroads felt that construction jobs should pay them a profit. In the cases of railroads built before their justification had arrived, the people who subscribed and paid for the stocks lost their money. This was because such enterprises really needed bonuses, and the loss on the stock subscription was usually made up by the appreciation of the other property of the stock subscriber.

Investments in American railroads from this time forward are apt to be not only more remunerative than they have been in the past, but safer.

To begin with, the days of wild speculations in railroads are over. There is not an American railroad of consequence whose stock control is not tucked away safely in some banking house or held by some group of conservative business men, or controlled in some similar way to prevent speedy and unexpected changes in its ownership.

Next, it is not possible today for any group of railroad operators to "milk" the properties over which they have been given charge. The period of government control made such operations offenses against the government and led those managers who were accustomed to milk their properties, to become mighty weary.

Again, the proceeds of bond issues and preferred stock issues go into the railroads nowadays and not into construction company profits. Construction contracts used to be mighty handy things to hand out to "phony" construction companies composed of railroad officials. The Clayton act took care of that to the limit.

There can be no inconsiderate debt-making since the control of issues went over to the Interstate Commerce Commission. It is true that in many states the public service commission have long had such control but they have not had it long enough to have made the condition general. The recent federal legislation gives the United States government through the Commerce Commission, control of the expenditures for new property. This means an assurance to investors that their money is being spent on their security of investment rather than in profits to operators.

And speaking of security, there has come to be a better appreciation of values of railroad properties upon which, under regulation, they are legally permitted to earn a standard legal return. In the appraisal of American railroads, begun before the late World War, and now being resumed, figures of hidden values are being constantly disclosed to be added to the aggregate of values upon which an income may be obtained. These hidden values are not unreal. For instance, a general look over of a railroad property in the light of today may show a piece of track upon an embankment which appears now only as an earthwork; yet the history of its construction may be that the well settled embankment of today was constructed over a bog which had to be mattressed and pile-driven till the cows came home, before stability was accomplished. That was an investment upon which income should be returned; but with loose records, bad accounting and changes in management or ownership much of this investment was lost sight of. In the new appraisals these cost items are being uncovered where possible and made to reappear in the aggregate upon which net income may be legally earned. Moreover, under recent decisions affecting fair value, steam railroads, equally with public utilities, are being permitted to earn upon the appreciations of value which have come to property which has appreciated. The logic of this was a long time in being recognized. Users of railroad service were ever willing to have depreciations recognized and taken out of the aggregate upon which income might be earned, but what was sauce for the goose of depreciation was not, until recently, held to be sauce for the gander where appreciation was concerned. What this is going to mean to railroad properties can be estimated when one considers the constant growth in value of terminals in our cities gathered in with wise provision when the railroad systems were young, defended, extended, improved, grades separated and developed for the industries which have come to them. These terminals are not priceless but they have a constantly appreciating value, which the courts have recognized as being entitled to earning power, from the constantly increasing volume of business which they serve.

These conditions mean that from this time forward steam railroad bond issues authorized by federal authority are going to be safe and remunerative investments, with a constantly increasing margin of security, and that the readjustments of finances which take in the underlying bond issues, and take up the makeshift financing of the re-

Digitized by Google

So the People May Know

Rents Will Not Come Down Until Buildings Go Up

S. W. Straus & Co. Offers Capital to Finance Construction at 6%

IN VIEW OF THE HOUSING SHORTAGE that exists in Detroit and elswhere—and the vital need of relieving this shortage in the interest of public welfare—S. W. STRAUS & CO. will make loans at SIX PER CENT in the form of first mortgage bond issues to assist in financing the construction of modern apartment buildings IN AMOUNTS OF $200,000 AND UPWARD.

This policy is put into effect because there exists a menace to public health, morals and national security, growing out of the existing lack of sufficient and proper homes for people to live in. It is our contribution to the cause of humanity—our response to the call of patriotic duty.

We, therefore, invite those who have deferred building projects for one reason or another to avail themselves of the service we are ready and most eager to give. Architects, engineers and contractors are urged to advise clients, who have been contemplating building that all meritorious housing projects conforming to our requirements and safeguards can be financed immediately through this House.

Building costs have receded from 15% to 25% below the peak of 1920. Many commodities have been reduced as much as they reasonably can be, and prices of some materials, which have gone under cost of replacement, will rise again when demand increases.

Build now is our advice. It is economical, safe and profitable.

The underlying cause of the housing shortage and the paralysis of the construction industry has not been the high cost of labor and materials—although, to some extent, they may have been contributing factors—but the lack of sufficient capital to finance construction. Rents are high because SUPPLY IS SHORT and DEMAND IS GREAT—and rents will remain high until supply is equal to demand. In other words RENTS WILL NOT COME DOWN UNTIL BUILDINGS GO UP. Buildings cannot go up until they are financed, and they will not be financed until the money is provided. This is the whole story in a nutshell.

Plainly, the logic of the situation is this: The public should, for the time being, at least, invest its savings and surplus in the safe real estate mortgage or mortgage bond, or it will continue to suffer from lack of homes and constantly rising rents. Those who need a home and are financially able should build for themselves. Those who are fortunate enough to have a comfortable home should LEND THEIR SAVINGS so that others not so happily situated may have a place to live.

There is something else to be thought of in this connection. Stagnation of the building industry has prevented the proper flow of general business. Restore building activities by helping to finance them, and there will be an immediate revival of every industry in the land. Thousands of men and women, now unemployed, will go back to the shoe factories and the textile mills. Railroads will be given freight to haul from forests, mills and mines, and money will be placed in the hands of the consumer to buy the products of the farm, now locked up in warehouses and granaries because there is no demand. Every human activity will be benefitted, and prosperity will return almost overnight.

We believe that money for building should be borrowed at SIX PER CENT. That is all a mortgagor should be asked to pay.

We will make loans ONLY on the best projects—those which meet the requirements of the STRAUS PLAN. Because of our nation-wide organization and a clientele of tens of thousands of investors, who rely upon us to furnish them with safe investments that will never cause them a moment's anxiety, we can market a large volume of such loans.

Our Message to the Builder is:

If your project is sound, we will lend you the money to finance it at SIX PER CENT.

Our Message to the Investor is:

If you are looking for safety—and safety is what every man and woman wants in the investment of their savings—then the question of high yield should not take precedence over that which time and tried judgment have taught the experienced investment bankers.

Our Experience Extends Over Thirty-Nine Years Without the Loss of a Single Dollar to Any Investor.

S. W. STRAUS & CO.

INCORPORATED - ESTABLISHED 1882

PENOBSCOT BUILDING—DETROIT

Straus Building, Chicago — Straus Building, New York

THIRTY-NINE YEARS WITHOUT LOSS TO ANY INVESTOR

Copyright, 1921, by S. W. Straus & Co.

Digitized by Google

cent past are going to be permitted to earn from the rates charged for services, their interest in addition to a reasonable amount for interests of the stock class.

This does not mean that the general and casual investor is advised to put his money into the railroad stocks. That is an investment for the specialist and the person who has time, intelligence and taste for the observation of railway management and the many items that enter into the prosperity of railroad systems.

THUS we come about to the conclusions from which we started: That there is going to be a great public demand for money; that this demand is going to come from the railroads, the utilities, the requirements for housing, the various forms of government and the industrial corporations, and that they are all good proportionally, except that some are apt to cause a little more grief than others. The counsel that we have been giving has been that of taking the advice of those who know the business and who from daily contact with issues are able to recognize upon the face of them amplitude of security, experienced management and public demand for their products or services. After all, the choice of these securities as favorites in investment depends largely upon the individual buyer. So there you are.

Michigan accumulates a great deal of wealth in the way of fresh capital annually. Michigan has a demand for a great deal of new annual investment. Michigan people owe it to their state and to the property which they already possess to invest their surplus funds, without being ultra provincial, in the securities of their own neighborhoods. Such investments will react favorably upon the property holdings which they already possess. In addition there is always a convenience in being near enough at hand to the location of one's investment to enable him to see how his money is being blown in, if that is what is happening to it, so that a stopper may be put upon the process before all the capital is gone. It is true that far-away cows have long horns, but those nearer at hand are easier to get to market. If Michigan's enterprises which need money could have put into them every year the sums which are wasted on blue sky propositions, the industrial supremacy of the state could be maintained without question. Too much money goes in this direction.

There are first of all the deliberate promotors of money-getting propositions which have no conscience behind them. There are the thousand-to-one shots which are pure gambles. There are the investments made at the behest of the "handy men" of communities, by which we mean that class of unskilled people who know how to make an affidavit or draw a deed, and whose wisdom is so much superior to that of those who trust them that they are readily made blind leaders of the blind.

Some day the investment bankers and brokers, as the result of a long campaign, will drive these people out of the field and the business of investment will be guided by skilled people to whom the general public will look with the same spirit of selection as they do for decent mechanics to repair their watches. If that period ever arrives the reason for it will be found in some such classical statement as that of the late Governor Bliss, "Eddication done it, me boy, eddication done it."

What Does the Future Hold for Liberty Bond Owners?

"What Will Most Benefit the American Holders Is a Completely Stabilized Condition of Trade"

By S. MAYO BOYD

Secretary of C. F. Childs & Company

ANYONE who attempts to prognosticate future values of Liberty bonds or to answer the question, "When will the 4¼s go to par?" must take account of a number of factors encompassing roughly tax revision on the one hand and rehabilitation of world commerce on the other. It is not probable that Liberty issues can advance in price substantially without repealing the excess profits tax and modifying the super-income tax schedule. Fortunately there is good reason to believe that this much-needed reform will be supported by fair Congressional majorities and will soon become a law. On the other hand, U. S. bonds can hardly sell on a better basis than at present if the few remaining embers of dependable credit in Europe are to be extinguished by the militaristic plots which now alarm business men in England and America (to say nothing of the neutrals) possibly resulting in a complete breakdown of order on the Continent.

The fiscal recommendations recently made by the Secretary of the Treasury, Mr. Mellon, ought to be thoroughly understood by bankers, merchants and manufacturers, to the end that every Congressman and Senator representing industrial communities may be given plenty of first-hand evidence from his own constituents as to the harmful effects of present taxation methods upon local trade and industry. The necessity of the hour is to direct the flow of capital, as formerly, into industrial channels through the purchase of industrial, utility and railroad securities. Every bond salesman knows how frequently investors are accustomed to remark: "I am all through buying anything except municipals; I can't afford to pay the super-tax." It is safe to say that if super-tax rates were cut in two there would spring up at once a new and healthy demand for Liberty 4¼s on the part of well-to-do investors who now shun them altogether. The policy of our Government in not to create any further issues of fully tax-exempt securities, and in consequence, when the national treasury proceeds to borrow, it is obliged to play second fiddle to obscure counties and cities. By following Mr. Mellon's recommendations Congress would be able to ameliorate the conditions which are compelling the proprietors of large incomes systematically to unload their taxable investments (including Liberty bonds and Victory notes) in order to buy municipal bonds. Otherwise it will soon be generally remarked, with accuracy, that "Mr. So-and-So is far too rich to pay any federal taxes at all."

Collateral to the reform of our federal taxes is the policy which the treasury may be expected to pursue in refunding the Victory Loan, which matures in May, 1923. It has been proposed to issue three and five-year notes, thus somewhat relieving the pressure of governmental borrowing in the short-term money market and disposing of a certain amount of floating debt, at least for several years to come. The rates to be offered on the proposed three and five-year notes will not likely be so high as to cause any depression in the market value of the long-term bonds. Yields obtainable by investing in the various 4¼ per cent issues at present prices vary from 5.20 per cent to 5.90 per cent. It can hardly be hoped, therefore, that the proposed new three or five-year notes will bear less than 5 per cent or 5¼ per cent.

Prospects of stimulating our declining export trade through a revival of the pre-war European demand for our goods are not encouraging. Given foreign trade conditions that afford our producers of raw material and manufactured goods an opportunity not only to liquidate their present holdings but to market their future production as well, we might expect to see a considerable amount of permanent investing in 4¼s. But, unfortunately, such conditions do not now exist. On the contrary, the decline in our exports persists to a most disheartening extent. There are those who treat "foreign" considerations with scorn when it is suggested that European prosperity has a bearing upon the price of Liberty bonds; but they will all learn in time. The sooner America, as a creditor nation, realizes that the only way a debtor nation can pay its external loans is by the creation of balances abroad through excess of exports over imports, the sooner our national policy will take on a character suitable to the economic

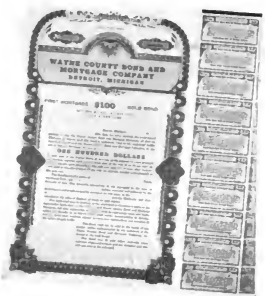
Digitized by Google

WAYNE COUNTY BOND & MORTGAGE COMPANY
and
NORTH AMERICAN MORTGAGE CORPORATION

OUR POLICY

RESPONSIBLE FINANCING,
CONSERVATIVE MANAGEMENT,
COURTESY AND HELPFULNESS,
A GREATER—BIGGER—STRONGER
DETROIT

It is the ambition of those who direct the affairs of the above named corporations to encourage every important and practical project which will tend towards the development of building and housing in Detroit and vicinity.



We discount land contracts, land mortgages and make construction loans

808-11-12 Free Press Building
(Eighth Floor)
DETROIT, - - MICHIGAN

Digitized by Google

predicament in which we find ourselves today. Our existing manufacturing plant capacity is probably twice as great as our domestic consumption can utilize. In April our exports were down to $340,000,000, as compared with a monthly average of $686,000,000 in 1920. American agents in South America uniformly report the virtual impossibility of selling American merchandise in that market, while at the same time regretfully admitting the difficulty of obtaining payment for goods previously shipped to South American purchasers. On account of our national inexperience in dealing abroad, and the unfortunate inadequacy of our past diplomacy, the hot-heads on the Continent are reducing business to a state of virtually total paralysis and lowering the standards of living to such an extent that the disparity between the living conditions of our own manual workers and the workers of Europe may soon be comparable to that existing between American and Oriental labor before the War. What chance can our exports have in foreign markets against articles made by highly skilled and intelligent European factory workers who are being obliged to exist on a mush and water diet?

Our only hope lies in co-operating with those abroad who are opposed to any more military raids upon the limited areas where coal and iron deposits are concentrated. We must insist upon the orderly upbuilding of Europe's industry and commerce; and any forces, whether traditionally friendly or otherwise, that persist in thwarting such a development must be over-ridden as tactfully as possible, but nonetheless as resolutely as necessary. The new Administration at Washington may be relied upon to pursue the proper course to a successful conclusion, provided an intelligent public opinion can be built up to support the inevitable program for the protection of American interests which must sooner or later be presented to Congress.

The remarkable strength of the demand for United States Treasury Certificates of Indebtedness cannot be interpreted as an indication of an expanding supply of free capital for permanent investment. It indicates rather that working capital is idle for the time being, and gives warning that with the first sign of renewed industrial activity temporary funds will rapidly find their way back again into industry to finance American products from producer to consumers, both domestic and foreign. There is nothing upon which to "peg" the recent high prices of industrial plants and similar capital assets except their continued profitable use; and in order to keep them employed foreign outlets for their products are indispensable. Without an industrial revival these values cannot be maintained, and renewed investing in United States Bonds cannot be expected to account for a very large amount of the floating supply so long as property owners are obliged to charge off capital losses in plant, inventory or real estate account. It becomes increasingly apparent that without a revival of our trade there is no great probability of Liberty bonds selling on a much better basis than they are today, which is only another way of saying that if European conditions do not speedily improve, investment capital may be expected to become permanently more difficult to obtain.

What will most benefit American owners of Liberty Bonds is a completely stabilized condition of trade. Those who are still carrying bonds for which they paid par would like to see the value of their collateral speedily restored to par. But when no adequate supply of new capital is being created, what chance is there for that to happen? The statement can be made with confidence that our Government's 4¼ per cent bonds cannot be worth par until the creation of new capital through nation-wide industrial activity induces active competition for 4¼ per cent taxable investments. It is not agreeable to force oneself to face such barren realities as these, but if a realization of the facts once becomes general throughout the American business community, the voice of our Government will be heard abroad in unmistakable terms—thus bringing results. America is not primarily interested in European boundary disputes except insofar as conditions for doing business around the world are disturbed. But an end should be made of the widespread belief that America is not alert to back up the forces of order and thus to protect her own foreign trade.

How to Figure Yield of a Bond or a Stock

How Time Element and Premium or Discount Affect the Actual Return on the Investment

FREQUENTLY the expression "to yield 7 per cent" or "on a 7 per cent basis" is heard in connection with the bond business. Most everyone knows that $70 annual income on an investment of $1,000 is a yield of 7 per cent. This holds true in cases of dividend-paying stocks because stock never "comes due" or matures except in special cases. Thus if I pay $900 for ten shares of stock which pays an annual dividend of $70 I need only to figure the percentage of income against cost to find yield. In this particular instance the yield would be $70 divided by $900, or 7.77 per cent.

In Case of a Bond Below Par

But suppose I buy a bond with a face value of $1,000 which pays an annual return of $70 and I happen to purchase the bond for more or less than $1,000. If I pay less than $1,000, or less than par, my yield will be more than 7 per cent on the cost thereof because at maturity I will collect the difference between cost and $1,000, in addition to collecting the principal. For example, suppose a $1,000 bond bearing 7 per cent having 20½ years to run is purchased for $900. The holder will receive annually 7.77 per cent on cost, and at maturity will receive $100 additional, which has a certain diminishing present worth at each interest period during the life of the bond. So at each interest day the present worth of the $100 to be collected at maturity is theoretically added to the interest actually received. By means of logarithmic computation we can tell exactly what fraction of a dollar should be added in such cases. There have been made up for use of investment bankers a comprehensive set of tables, known as "bond tables," which are consulted to find this information. By use of the tables, therefore, we find that the value of the $100 collected at maturity when spread out over the 20½ years of interest payments brings the actual yield of the bond in question up from 7.77 per cent per annum to 8 per cent per annum.

Conversely, suppose you agree to purchase a bond running 20½ years, bearing 7 per cent interest with par value of $1,000 at a price "to yield 8 per cent." How much should you pay in this case? Would you figure out what sum at 8 per cent yields $70 per year? No. You would do that only in case of stocks, in which instance the price would be $875. But in this case you would pay more than $875 because at maturity you will collect the difference between cost and par and that sum has a present value. From the tables below we learn that $900 is the correct price.

In Case of a Bond Above Par

Here we find ourselves paying more at time of purchase than we can collect at maturity; yet the bond contract provides for 5 per cent interest. Using a specific case, suppose we are purchasing a $1,000 bond bearing 5 per cent semi-annual interest, having ten years to run and for which we have agreed to pay $1,081.80. What in this case will be the "yield"? Our problem immediately becomes one of finding how much of each $50 received annually as interest must be considered as a sort of sinking fund to take care of the $81.80 premium, and how much is actual interest. By referring to the sinking fund tables below we find that $3.13 invested every six months at the same interest that the bond pays amounts to $81.80 at the end of ten years; therefore out of each annual $50 received on the bond, approximately $6.26 must be considered as the part set aside to cancel the $81.80 premium. The remainder, $43.74, is real interest on the amount invested ($1,018.80), or is in fact 4 per cent per annum. Thus a bond bought under these circumstances would be "yielding 4 per cent" or "on a 4 per cent basis."

The reverse of this case figures out the same way. Suppose a contract is made with a bond man to buy a $1,000 bond bearing 5 per cent semi-annual interest on a "4 per cent basis." What price should be paid? As shown above, the price should be one that will permit of the annual $50 return covering exactly 4 per cent on the price to be paid during every year the bond has to run and enough more to retire the premium. The reasoning is the same as in finding "yield." By referring to the tables we find that the price is $1,081.80.

Below are given the values of bonds and other securities bearing

Digitized by Google

HORNBLOWER AND WEEKS

BANKERS AND BROKERS

ESTABLISHED 1888

201 Penobscot Building, — DETROIT, MICHIGAN

Specializing in high grade railroad, municipal, public utility and industrial bonds.

We are equipped to handle market orders in unlisted stocks and are members of New York, Boston, Detroit and Chicago Stock Exchanges.

Having direct wire connections with correspondents in financial centers enables us to render a complete investment service.

Our statistical department is at your service.

NEW YORK, BOSTON, CHICAGO, PROVIDENCE, R. I., PORTLAND, Me.

THIS COMPANY is exceptionally qualified to render any form of fiduciary service.

For the Individual, it acts as
Administrator,
Executor and Trustee under Will,
Guardian,
Trustee under Voluntary Trust Indenture.

For the Corporation, it acts as
Trustee under Mortgage to secure Bond Issues,
Transfer Agent and Registrar of Capital Stock Issues.
Receiver under Federal or State Courts.

Grand Rapids Trust Company

Ottawa at Fountain

GRAND RAPIDS, - - MICHIGAN

Digitized by Google

interest at 5, 6 and 7 per cent, payable semi-annually, maturing at periods from six months to ten years, on varying bases of return on the investment. Note: For finding values or yields where lower or higher rates are given, the larger tables must be consulted. Most bond houses carry tables which give a range from 3 to 8 per cent interest and yields of similar range. These limited tables are given here largely for illustration.

SECURITIES BEARING 5% SEMI-ANNUAL INTEREST

No. of Yrs to Maturity	When Bought to Yield 4%	4½%	5%	5½%	6%	6½%	7%	8%
	Price Should Be							
½	100 49	100 24		99 76	99 51	99 27	99 03	98 56
1	100 97	100 48		99 52	99 04	98 57	98 10	97 17
1½	101 44	100 72		99 29	98 59	97 89	97 20	95 84
2	101 90	100 95		99 07	98 14	97 23	96 33	94 56
2½	102 36	101 17		98 85	97 71	96 59	95 48	93 32
3	102 80	101 39		98 63	97 29	95 97	94 67	92 14
3½	103 24	101 60		98 42	96 88	95 37	93 90	91 00
4	103 66	101 81	Price is 100 all years.	98 23	96 49	94 79	93 13	89 90
4½	104 08	102 02		98 03	96 11	94 23	92 39	88 85
5	104 49	102 22		97 84	95 73	93 68	91 68	87 83
5½	104 89	102 41		97 65	95 37	93 15	91 04	86 84
6	105 29	102 60		97 47	95 02	92 64	90 34	85 92
6½	105 67	102 79		97 30	94 68	92 15	89 70	85 02
7	106 05	102 97		97 13	94 35	91 67	89 08	84 16
7½	106 42	103 15		96 96	94 03	91 27	88 48	83 32
8	106 79	103 33		96 80	93 72	90 76	87 91	82 52
8½	107 15	103 50		96 64	93 42	90 32	87 35	81 75
9	107 50	103 67		96 49	93 12	89 90	86 81	81 01
9½	107 84	103 83		96 34	92 84	89 49	86 29	80 30
10	*108 18	103 99		96 19	92 56	89 10	85 79	79 61

SECURITIES BEARING 6% SEMI-ANNUAL INTEREST

½	100 98	100 73	100 49	100 24		99 76	99 52	99 04
1	101 94	101 45	100 96	100 48		99 52	99 05	98 11
1½	102 88	102 15	101 43	100 71		99 30	98 60	97 22
2	103 81	102 84	101 88	100 93		99 08	98 16	96 37
2½	104 71	103 51	102 32	101 13		98 86	97 74	95 55
3	105 60	104 17	102 75	101 37		98 66	97 34	94 76
3½	106 47	104 81	103 17	101 57		98 46	96 94	94 00
4	107 33	105 44	103 59	101 77		98 26	96 56	93 27
4½	108 18	106 05	103 99	101 97		98 08	96 20	92 56
5	108 98	106 65	104 38	102 16		97 89	95 84	91 89
5½	109 79	107 24	104 76	102 35		97 72	95 50	91 24
6	110 58	107 81	105 13	102 53		97 55	95 17	90 61
6½	111 35	108 37	105 49	102 70		97 38	94 85	90 01
7	112 11	108 92	105 85	102 87		97 22	94 54	89 44
7½	112 85	109 46	106 19	103 04		97 07	94 24	88 88
8	113 58	109 98	106 53	103 20		96 92	93 95	88 35
8½	114 29	110 50	106 86	103 36		96 77	93 67	87 83
9	114 99	111 00	107 18	103 51		96 63	93 41	87 34
9½	115 68	111 49	107 49	103 66		96 50	93 15	86 87
10	116 35	111 97	107 79	103 81		96 37	92 89	86 41

SECURITIES BEARING 7% SEMI-ANNUAL INTEREST

1	102 91	102 42	101 93	101 44	100 96	100 48		99 06
2	105 74	104 73	103 76	102 80	101 86	100 92		98 19
3	108 40	106 94	105 51	104 10	102 71	101 34		97 58
4	110 99	109 06	107 17	105 32	103 51	101 74		96 63
5	113 47	111 08	108 75	106 48	104 27	102 11		95 94
6	115 86	113 02	110 27	107 58	104 98	102 45		95 34
7	118 16	114 87	111 69	108 62	105 65	102 78		94 72
8	120 37	116 64	113 06	109 60	106 28	103 08		94 17
9	122 49	118 35	114 35	110 54	106 88	103 37		93 67
10	124 53	119 95	115 59	111 42	107 44	103 63		93 29
15	133 59	127 06	120 93	115 19	109 80	104 75		91 36
20	141 03	132 74	125 10	118 06	111 56	105 55		90 10
20½	141 70	133 24	125 47	118 31	111 71	105 62		*90 00

Price is 100 all years.

SINKING FUND AND PRESENT WORTH TABLES

Amount to be invested at beginning of each half year to produce $1,000.00 at end period shown on left margin at following annual rates of interest

Period (years)	4%	4½%	5%	5½%	6%	6½%	7%	8%
1	485 34	483 56	481 78	480 02	478 26		474 78	
2	237 87	236 40	234 94	233 50	232 07		229 23	
3	155 42	154 07	152 73	151 41	153 10		147 51	
4	114 23	112 94	111 68	110 42	109 18		106 74	
5	89 54	88 30	87 08	85 88	84 69		82 36	
6	73 10	71 90	70 72	69 56	68 41		66 17	
7	61 37	60 21	59 06	57 93	56 82		54 66	
8	52 60	51 46	50 34	49 24	48 17		46 07	
9	45 79	44 67	43 58	42 51	41 47		39 44	
10	40 35	39 26	38 19	37 15	36 13		34 17	

PRESENT WORTH OF $1.00 DUE SEMI-ANNUALLY AT PERIODS SHOWN

1	.96117	.95648	.95181	.94719	.94260		.93351	
2	.92385	.91484	.90595	.89717	.88849		.87144	
3	.88797	.87503	.86230	.84978	.83749		.81350	
4	.85349	.83694	.82075	.80491	.78941		.75941	
5	.82035	.80051	.78120	.76240	.74409		.70892	
6	.78849	.76567	.74356	.72213	.70138		.66178	
7	.75787	.73234	.70773	.68393	.66112		.61778	
8	.72844	.70016	.67362	.64787	.62317		.57671	
9	.70016	.66998	.64117	.61366	.58739		.53836	
10	.67297	.64082	.61027	.58125	.55368		.50257	
15	.55207	.51298	.47674	.44314	.41198		.35628	
20	.45289	.41065	.37243	.33785	.30656		.25257	
20½							.23456	

‡Multiply $38.19 by $81.80 and point off.
*The figure referred to in description.

Are Present Blue Sky Laws Accomplishing the Desired End?

IN THE DAYS before we had blue sky laws and securities commissions—and which, by the way, were days when we did not have laws governing nearly every natural human activity—it was the opinion of many legislators that if only we invented some method of looking into securities selling schemes before the public was solicited, fraud would stop. So we passed the blue sky law and we created the securities commission. And the act of the legislature in so doing was only one of many similar acts intended to legislate honesty into business. Moreover, if you take all the government employes, both state and national, who are employed by the taxpayers in one way or another in a nervous endeavor to force human beings to avoid trespassing on the rights of their neighbors and figure up what it costs in taxes, you will find no doubt that the observations of a certain Southern negro were about correct when he said: "If we keep on making laws and hiring inspectors to 'force' them laws, it won't be long until half of the people will be supporting the other half to have themselves watched."

Every time a man is drawn out of industry and taken into government service he becomes, in his relations to the producing population, a liability instead of an asset. And if the work he performs does not positively add to the well-being of the taxpayers at large, he becomes therefore a parasite on society.

But referring back to the blue sky matter. The enforcement of this law is an example of what we are talking about. We doubt if much worse swindles could have been worked had there been no law on the statute books these last few years—and this is not in disparagement of the good which has been done.

"There is no doubt that there is need of a strong official control over an element in our midst which does not hesitate to take advantage of the poorly informed portion of the public, through the medium of fraudulent and misrepresented securities, but even under state laws the difficulty of curbing the abuse is great," says Howard F. Beebe, vice-president of the Investment Bankers Association of America. "The Association, of which I am chairman of the legislative committee, has given a vast amount of thought to the subject and has been in active co-operation with the state and federal authorities, and

Digitized by Google

through its study and activities it has been led to the conclusion that the type of law which would be most effective is not that coming under the generalization of 'Blue Sky' but one which will seek out and punish fraud and misrepresentation."

Here is a most vital suggestion. And the application of the principle to stock selling is the proof of it. Were it better to set up a labyrinth of rules and regulations of conduct which an intending crook may comply with technically, yet in the end accomplish his purpose and go scot free, or rather had we not better leave the field open for men to try out their wits and at the same time provide a way to seek out and punish fraud and misrepresentation? If we must have some kind of a government agency to deal with this particular brand of misdeeds let us have federal legal machinery to act as the people's counsel—a special breed of state's attorney, as it were, which will punish counterfeit stock sellers with the same efficiency that counterfeit money makers are restrained.

Continuing, Mr. Beebe writes: "The former type of act (blue sky) through its mandatory provisions upon the administering officials has caused a great deal of expense and trouble for the legitimate interests in proportion to its effectiveness on the offending element; and with equal administrative ability and energy it is believed that much better results can be secured from the type of fraud act which is in existence in Maryland, and which has been decidedly effective in that state through the co-operation of the legitimate banking interests there. After careful thought and consideration a somewhat similar act has just been passed in the state of New York and is expected to receive the signature of the Governor. It is conceded by those who have given most careful attention to the subject that for both legal and practical reasons a federal statute would have to be of the fraud act type and would have to be designed to attain the closest co-operative relations with the various state officials. It is trite of course to say that no law is effective unless it is energetically administered, but from the very nature of the work involved with either a 'blue sky' or a 'fraudulent securities' act it is necessary to maintain an organization of highly expert people, and the costs of the operation under a federal act as distinguished from that of a state are bound to be in geometrical proportion as there are states.

"It was due consideration of the foregoing facts which led the Investment Bankers Association in previous years to advise against hasty action and not to pass laws until assurance could be had that very substantial appropriations would be forthcoming. The machinery of the Federal Reserve System reaching so promptly all sections of the country would no doubt be most effective, and it is believed that both the Federal Reserve Board and the various banks would be glad to aid in every way possible. The Investment Bankers Association can be depended upon to continue its active co-operation, and no doubt the American Bankers Association will be equally glad to lend its assistance."

(Mr. Beebe is vice-president of the Investment Bankers Association of America and has been chairman of the legislative committee of the Association three years. In this capacity he has been and continues to be in very close touch with blue sky matters both in the states and at Washington.—The Editor.)

A Word About Covert Act Road Bonds

THE INVESTING PUBLIC has heard much about road bonds since Michigan went into road building on a large scale. There are investment bankers who class these bonds among the most desirable investments and there are those also who do not as yet give them the same standing as straight municipal bonds issued against the full faith and credit of a city or other political subdivision. It may interest our readers, therefore, to go briefly into some of the peculiar features of these bonds.

Under the Covert Act a county which adopted the so-called "county road system" may, through its county road commission, issue bonds to finance the improvement of its highways, commonly known as the Covert Act bonds. When 60 per cent of the property owners along a particular stretch of road petition to the county road commission for the improvement of such road, such commission holds meetings to determine the desirability of making such improvement, the property to be contained in a district to be directly assessed for the benefit, the amount that each piece of property in the district should pay for the cost of such improvement, and the amount to be assessed by the county at large and various townships.

After hearings are held on these assessments and usually after

(Continued on Page 82)

An Efficient, Proven Service for Investors

Long Established

During a period of more than forty years this house has provided efficient service for many thousands of investors.

Private Wire System

Our offices in fifteen principal cities are all in direct charge of partners or our own managers. The close co-ordination of our facilities is fully maintained by our private wire system.

Foreign Connections

Our foreign department is in direct constant communication with our correspondents in London, Paris, Amsterdam, Antwerp, Brussels, Buenos Ayres and other foreign markets.

Investment Service

We carry a line of investment securities, carefully selected to meet the requirements of individual and institutional buyers, which includes foreign and U. S. Government, municipal, railroad, public utility and industrial issues. Our list will be sent on request.

Established 1880

Paine, Webber & Company

Bond Department

BOSTON CHICAGO NEW YORK

Digitized by Google

What Is a Legal Investment For Michigan Savings Banks?

"There Is Scarcely a State Banker Who Has Not Been Confused or Mistaken Regarding the Qualifications"

By J. M. CONWAY

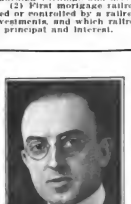
Deputy Commissioner of the Michigan Banking Department

THOSE directly connected with state banking in Michigan, either from the operating or supervisory position, are wont to laud at times the splendid provisions of the Michigan banking law which have been largely responsible for the excellent record of Michigan's state banks during the last decade. In some respects the Michigan law is unique, and it is to such characteristics, particularly, that most attention is drawn by those expounding the merits of the Michigan system. Guided by the costly experience of Michigan bankers in the early "wild-cat" days, the legislature in 1887 laid the foundation of a banking system which, in my estimation, is second to none. There is one outstanding keynote in the law from its inception, which is summed up in the one word "security." As legislatures have succeeded themselves, amendments have been added but the security and conservatism of the banking law has been strengthened rather than weakened.

One of the most important and perhaps the least understood portions of our banking law is Section 27, which, after prescribing the legal reserves to be maintained against savings deposits, clearly outlines the classes and qualifications of investments in which the remainder of the savings deposits must be invested. I dare say there is scarcely a state banker reading this article who has not been confused and mistaken regarding such qualifications. It is not improbable that he has been unceremoniously informed by the examiner that his qualifying savings investments were short of requirements, when he had been confident that this phase of his business would not be subjected to departmental criticism again at this examination. This lack of definite understanding of the qualifications of legal savings investments is not surprising. The law is rather technical in its detail, and while it is the general opinion that a legal savings investment is as safe as is humanly possible, not all secure investments qualify as legal for savings funds. An investment which will qualify in the broad sense as a legal savings investment may not qualify as a so-called "three-fifths required savings investment" in the narrower sense, as outlined in Subsections A to K inclusive of Section 27. A glance at the history of this section clearly indicates the development of the several classes of investments to that point of ultimate security which in the public mind warranted their establishment as a legal savings investment for Michigan savings banks.

THE AUTHOR of this article has had an extended connection with the banking department of Michigan, having been successively chief clerk, examiner and deputy commissioner. Owing to the fact that there has been much misunderstanding on the part of both bank men and bankers as to what investments come within the provisions of the Michigan law governing the investment of savings deposits, we believe our readers will find much of value in this article.

In addition to his experience with the state banking department, Mr. Conway was connected with the Federal Reserve Bank of Chicago in the department of examinations. It is felt that he is especially well qualified to speak on the subject he is here discussing.—The Editor.



J. M. CONWAY

The system of Michigan state bank supervision, as we now understand it, was established by Act 205 of the Public Acts of 1887. Originally, Section 27 provided that a savings bank should maintain a legal reserve of at least 15 per cent of its total deposits, and that *two-thirds* of the remainder of such savings deposits should be invested in United States government or municipal bonds, provided that such municipalities had not repudiated their debts within the ten years preceding such investment, and provided the total indebtedness of such municipalities did not exceed 5 per cent of their assessed valuation, except by a vote of two-thirds of the board of directors, when such bonds might be purchased if the total indebtedness did not exceed 10 per cent of their assessed valuation. This two-thirds of the remainder might also have been invested in negotiable paper secured by any of the above mentioned classes of security, or in notes or bonds secured by mortgage lien upon unencumbered real estate worth at least double the amount loaned. For the time being we will not concern ourselves with the manner in which the board of directors was authorized to invest the remainder of such savings deposits. The class of investment above mentioned was not optional, but it was mandatory upon the board to invest two-thirds of the savings deposits after the 15 per cent reserve was provided in securities qualifying under the above classes.

The first amendment to this section occurred in 1889, when the *two-thirds* of the remainder was changed to *three-fifths*. This fraction providing for the legal investments remains in our law today, and it is to securities qualifying as investments for three-fifths of the remainder of deposits to which reference is made in the common phrase "savings required three-fifths investments" or "savings legal investments."

The law was again amended, but this time in minor detail, in 1891, and was then allowed to rest until 1905, when to United States government, municipal bonds, first mortgages and negotiable paper secured by the above were added, under proper restrictions, the following classes of securities:

(1) First mortgage railroad bonds under proper restrictions regarding earnings and assets pledged.

(2) First mortgage railroad bonds whose lines are leased, operated or controlled by a railroad whose bonds would qualify as legal investments, and which railroad guaranteed such securities both as to principal and interest.

(3) Refunding and improvement first mortgage railroad bonds if approved by the securities commission created to act upon same.

(4) First mortgage bonds of electric railways, gas, electric light or power companies in Michigan, if approved by the securities commission.

(5) First mortgage steamship bonds under restrictions given, and provided approved by the securities commission.

It is interesting to note that although Section 27 was not amended allowing the investment of savings funds in railroad bonds until 1905, an amendment was passed to Section 52 in 1899 which removed from the limitations of this section investment in the legally authorized bonds of certain specified railroad companies. Such bonds could be carried in any amount not exceeding in the aggregate 20 per cent of total deposits, and not more than 5 per cent of such deposits could be invested in the bonds of any one railroad. It is because of this amendment that the Department does not criticise the carrying of railroad bonds as legal savings investments, which have not been approved by the securities commission, provided the bank's investment was made prior to the coming into effect of the 1905 amendments to Section 27 and the establishment of the securities commission in the same year to pass upon such investments.

Minor amendments were made in 1907 and 1913 but it was not until 1919 that public opinion and business practice had advanced sufficiently to warrant the following important changes:

The required legal reserve was reduced to 12 per cent of savings deposits, and to the class of required three-fifths legal savings invest-

Digitized by Google

MUNICIPAL BOND INVESTMENTS

Municipal Bonds are safe; principal and interest being secured by the taxing power of municipalities.

Municipal bonds are exempt from all Federal Income Taxes, including the Sur Tax. Michigan municipals enjoy as well, freedom from all local and State taxes. No ownership certificate is necessary in collecting interest on municipal bonds.

They command a ready market, are easily salable for cash, and are held in high regard by bankers as collateral for loans.

The return is generous considering safety, tax-exemption, and marketability.

We specialize in Municipal Issues which are Legal Investments for Savings Banks in Michigan.

List upon request

KEANE, HIGBIE & COMPANY

431 Griswold Street

DETROIT

Digitized by Google

ments—already established—the following were added:

(1) Legally authorized bonds of any Michigan road district organized under the provisions of Act 59 of the Public Acts of 1915 and amendments, commonly known as the "Covert Act".

(2) Mortgages which did not exceed 60 per cent of the value of improved farm property and 50 per cent of unimproved. The upper limit for a qualifying mortgage on city property remains at 50 per cent of the valuation.

(3) Accepted drafts or bills of exchange, having not more than six months to run, growing out of transactions involving foreign trade or growing out of transactions involving domestic shipments of goods, provided shipping documents are attached, or provided same are secured by warehouse receipts, or other documents securing title, covering readily marketable staples. In this connection the acceptances of any one person, firm or corporation shall not exceed at any time more than 10 per cent of the bank's paid up capital and unimpaired surplus. The aggregate amount of such acceptances cannot exceed the bank's capital and surplus.

Regarding the required three-fifths qualifying savings investments, therefore, the qualifications remain in a general sense as given. It would be of little value and a useless waste of endeavor to attempt to give in detail all of the technical provisions of the law regarding the qualifications of a security to make it a three-fifths legal investment. We have outlined the history of this section to date in an endeavor to emphasize the apparent paramount desire of the legislators to secure, as nearly as possible, absolute safety for savings funds. It should be clearly kept in mind, however, that a technicality of a certain bond issue or mortgage, while perhaps not affecting in any way the prospects for ultimate payment at maturity of both principal and interest, would disqualify it under the law as a three-fifths savings investment. Thus a municipal bond which, instead of pledging the entire faith and credit of the municipality, gives as security the assets of a publicly owned utility, such as a water plant, is not deemed as a qualifying three-fifths legal savings investment.

Further, in order that the banking department may have means of knowing of the proper execution of mortgages securing bond issues, and in order that it may have access to the documents at any time with the idea of affording most absolute protection to the mortgage bondholders, it requires that the mortgage must be trusteed by a Michigan trust company. Thus a first mortgage real estate bond trusteed by a bank or trust company outside of Michigan does not qualify as a required three-fifths savings investment unless co-trusteed by a Michigan trust company.

Up to this point we have been discussing investments of the three-fifths of the remainder of savings deposits after the legal savings reserve is taken care of. There are, however, other investments which, while not qualifying as required three-fifths investments, are nevertheless qualifying investments for the remainder of savings deposits after the reserve and required three-fifths savings investments are cared for.

A summary of the general characteristics of the several classes of savings investments follows, technical details, however, being omitted. In the event of uncertainty on the part of the banker I would suggest that reference be made to the specific provisions of Section 27 before purchasing a railroad, steamship or electric railway, gas or electric power bond to carry among his qualifying required savings investments.

(1) Twelve per cent of savings deposits must be maintained as legal reserve on hand, or with approved reserve banks or trust companies, or invested in United States bonds.

(2) Three-fifths of the remaining 88 per cent or 53 per cent of savings deposits must be invested as follows:

(a) In United States bonds; or

(b) In properly authorized municipal bonds of any municipality in the United States, provided that the total indebtedness of such municipality does not exceed 5 per cent of its assessed valuation, except by two-thirds vote of the directors, when such bonds may be purchased if the total liabilities do not exceed 15 per cent of the assessed valuation; or

(c) In legally authorized "Covert Act" road bonds; or

(d) In legally authorized first mortgage railroad bonds with certain technical provisos (see Section 27); or

(e) In the first mortgage bonds of railroads whose lines are leased or operated or controlled by any railroad company specified in the above section (d), if such bonds are guaranteed by the railroad company by whom the lines are leased or controlled; or

(f) In the legally authorized refunding and improvement railroad bonds under certain technical provisions, and provided the issue has been approved by the securities commission; or

(g) In the legally authorized first mortgage bonds of any electric railroad, street railway, gas or electric light or power company organized in Michigan, provided such bonds qualify under certain technical provisions regarding earnings and general condition of the company, and provided that said bonds have been approved by the securities commission; or

(h) In legally authorized first mortgage bonds of steamship companies, with certain provisions regarding capacity of steamboats, and provisions for security, and provided that such bonds are approved by the securities commission; or

(i) In the negotiable paper secured by any of the above named classes of securities; or

(j) In notes or bonds secured by mortgage lien, upon unincumbered real estate worth at least double the amount loaned, except on improved farm property the amount loaned shall not exceed 60 per cent of the value of the property; or

(k) In accepted drafts or bills of exchange having not more than six months to run, growing out of the importation or exportation of goods, or resulting from domestic trade, provided shipping documents or warehouse receipts securing title covering readily marketable staples accompany.

The remaining 35 per cent of savings deposits may be invested as follows:

(1) In notes or other evidences of debt, the payment of which is secured by the deposit of collateral security of known marketable value worth 10 per cent more than the amount so loaned, and interest for the time of the loan; or

(2) May be invested in notes secured by collateral deposited in a Michigan trust company; or

(3) May be deposited in any approved reserve bank; or

(4) A portion of said remainder, not exceeding twice the capital stock, may be invested in unsecured negotiable paper approved by the board.

(Wherever mention is made that investment must be approved by the "securities commission" before qualifying as savings legal investment, it refers to the "securities commission" provided by the banking law, consisting of the commissioner of banking, attorney general and state treasurer.)

The Future of Foreign Bonds in This Country

By LOUIS MERZ

Manager Foreign Department, First and Old Detroit National Bank, Detroit

THE FUTURE market for foreign bonds in this country is not easy to predict. The history of marketing foreign securities in England and Holland and some other European countries long ago proved that foreign securities find a ready market in that country only which makes investments in the debtor countries. England, with its vast insular possessions and its immense business under its control, is probably the largest investor in foreign securities. Then come France, the Netherlands, Belgium, Germany and to some extent the Scandinavian countries. Southern Europe, always capital poor, did not cut a figure in foreign investments. One of the great secrets why England succeeded in maintaining its world trade was its great investments in foreign enterprises—public utilities, such as waterworks, railroads, elevators, etc.

Before the war it was just as easy to float an issue of Brazilian railroad debentures or Australian railroad bonds in London as to sell a London & Southwestern bond. These issues were usually underwritten by one or a group of stock banks and the marketing was undertaken by one of the large investment houses of London, and the bonds usually were listed at the Exchange and could be disposed of as readily as other securities.

The Netherlands is another shining example of the value of investments. Holland with less population than the state of Pennsylvania, has investments running into the hundreds of millions of dollars in foreign securities, which is a noteworthy fact when one considers that a small agricultural country with few industries and natural produce barely able to sustain its population should have been able to direct a great amount of its resources in foreign countries. But, of course, the Hollanders have had great revenues out of their East Indian possessions. And they are frugal and saving and they could easily afford to direct a good portion of their surplus to foreign countries.

But on the other hand we are not in the same relative position to the rest of the world that England was, far instance, to the United States following the Civil war. We became a creditor nation almost over night, and in the process we did not accumulate a legion of foreign customers and the money due us is not of private individuals in these foreign countries which collectively now owe us $10,000,000,000 or thereabouts. England became a creditor nation through years of effort, and when she arrived at her goal she had in her strong box thousands of American stocks and bonds instead of a few government I. O. U's. And then add to this problem the exchange difficulties of the foreign purchaser and the foreign borrower and the unwarranted high cost of production in this country and it is not clear to me how there can be a very promising market for foreign securities until foreign trade gets back on a normal basis. In other words, we cannot hope to have much market for foreign bonds until we have a normal foreign trade.

Digitized by Google

How Long Will The Opportunity Last To Buy Bonds At Present Prices?

There are indications in plenty that it will not last long.

Conditions created by the world war and its aftermath, which resulted in lowest average bond prices in a generation, are rapidly changing.

ALREADY commodity prices,—measured by wholesale and manufacturers quotations,—have dropped on the average more than 33 1-3%. (Commodity prices and bond prices generally move in sympathy with but in the opposite direction to each other.)

ALREADY every Federal Reserve Bank in the United States has lowered its discount rates.

ALREADY the ratio of reserves to liabilities of the entire Federal Reserve Banking System have increased from about 42% about a year ago to over 57% today.

ALREADY the volume of bills under discount with the Federal Reserve Banks has decreased by about a thousand million dollars from the maximum.

ALREADY the Bank of England and other central reserve banks in foreign countries have lowered their discount rates.

The above factors are generally regarded as reliable indications that interest rates are trending downward.

Those desiring to secure bonds at present low prices and high interest rates should act promptly.

We submit for your consideration the following issues, subject to prior sale or advance in price:

	Rate	Due	Yield
Richland County, S. C. (Columbia, Capital of State, is County Seat)	6%	1922 to 1946	6%
Maricopa County, Ariz. (Phoenix, Capital of State, is County Seat)	6%	1930 to 1949	6%
Dyer County, Tenn.	6%	1951	6%
Wapakoneta, Ohio	6%	1924 to 1942	6% to 5.75%
Hickory, N. C.	6%	1924 to 1935	6¼% to 6½%
Canton, N. C.	6%	1923 to 1948	6¼% to 6½%
Orangeburg, S. C.	6%	1961	6%
Govt. of French Republic	7½%	1941	8%
Prov. of Ontario	5½%	1922	7½%
Prov. of Manitoba	5%	1923	8%
Prov. of Saskatchewan	4%	1923	8½%
Saskatchewan Guaranteed	4%	1939	7½%
Detroit Edison Co. 1st & Ref.	6%	1940	7.10%
Rivoli Realty 1st Mtg. Realty	8%	1922 & 1931	8%
Belmont Apartment 1st Mtg. Realty	6%	1922 to 1931	7%
Detroit Edison Deb.	8%	1931	(About) 7.80%
United Kingdom	5½%	1937	(About) 7%
Kingdom of Belgium	8%	1941	(About) 8.10%
Govt. of Brazil	8%	1941	8%

Descriptive circular on any of the above securities, will be mailed on request.

BREED, ELLIOTT & HARRISON

DETROIT

MAIN 189
MAIN 926

Dime Bank Building

CINCINNATI MILWAUKEE CHICAGO MINNEAPOLIS INDIANAPOLIS

Digitized by Google

The 1921 M. B. A. Convention

THE thirty-fifth annual convention of the Michigan Bankers Association will open Monday, June 6, at the Hotel Statler, Detroit. Judging from the acceptances already received it is estimated that the attendance will run upwards of 300 delegates.

President John W. Staley has some new ideas in mind about how a convention should be conducted. These, no doubt, will be an agreeable surprise to the delegates. Of late years the tendency has been to drift into an excess of entertainment as compared with the amount of time and effort devoted to the current problems of the banker. Speakers sometimes have given too much effort to subjects of sociology and political reform rather than devoting themselves more strictly to discussions of the things that bankers come into contact with every day.

And there are also those members who feel that the number of speakers has been too great. As a prominent banker from the Upper Peninsula said last summer at Ottawa Beach, "I would not care for a convention without entertainment features, but the model convention is one which gives the banker a chance to find out how the other fellow solves his troubles; and if half the time is taken up with talks on religion, politics and other subjects outside of the scope of banking, I don't get my money's worth."

It is a peculiar circumstance that this is the fourth serious business depression through which the banks have passed during the life of the Michigan Bankers Association. And bankers all over the state are going to come to this convention looking for counsel and guidance more seriously than ever before. Thus it seems certain that whatever changes may be made by President Staley in the usual program will be heartily indorsed by the delegates.

One of the problems a country banker is going to inquire about is how to keep some of his farmer customers in business when many of them already have borrowed to the limit and are going to ask the banker for permission to spend some of their crop money for new clothes and automobiles. The speakers and their topics follow:

Monday afternoon—John S. Drum, president of the American Bankers Association, "Michigan in Relation to General Conditions and World Trade."

Tuesday morning—Willis H. Booth, vice-president of the Guaranty Trust Company of New York, "Foreign Credits and Their Relation to Agriculture," and Robert B. Locke, vice-president of the American Institute of Banking, "The Present Day Banker's Responsibility to Bankers of the Future."

Tuesday afternoon—Ruston Ruston Joe, former editor, Oriental Review, Bombay, India, "New Era in India," and Prof. David Friday, University of Michigan, "The Future of Interest Rates."

The address of welcome will be delivered by Mayor James Couzens, of Detroit, and the response will be made by Gerritt J. Deikema, Holland, president of the First State Bank of Holland and former president of the bankers' association.

Mrs. H. M. Brown, secretary of the Association, is hopeful about the large attendance and says she will be surprised if the total is less than 500. She says that following each address there will be an open discussion, in which all members will be invited to participate.

The Michigan association now numbers more than 700 member banks, having grown from a nucleus of 125 member banks at the beginning of the organization in 1887 when a handful of Michigan bankers met in St. Joseph on August 11. Those present at that meeting were B. F. Parks, of the First National Bank of Paw Paw; O. O. Jordan, of the Union Banking Company of St. Joseph; C. S. Jones, of the G. W. Jones Exchange Bank of Marcellus; C. J. Monroe, of the First State Bank of South Haven, and G. W. Merriman, of the Exchange Bank of Hartford. The formal organization followed at a meeting at the old Russell House, in Detroit, October 28. Henry Hannah, Traverse City, was elected president; Albert Ives, Detroit, first vice-president; Wellington R. Burt, Saginaw, second vice-president; F. W. Hayes, Detroit, secretary, and Silas B. Coleman, treasurer.

Mr. Hayes served until 1896, when he was elected president. Austin E. Wing, of the Peoples State Bank, followed Hayes as secretary for two terms, giving way to Julius H. Haas, of the Wayne County & Home Savings Bank, who was succeeded by Col. Fred Farnsworth, who continued until 1907, when he was elected secretary of the American Bankers Association. L. H. Smith served for one year following and in 1909 Mrs. H. M. Brown, the present secretary, who had been assistant secretary for two years previous, was elected. Among those who have served as president are the following: M. W. O'Brien, Detroit; H. C. Potter, Saginaw; Peter White, Marquette; George H. Russel, Detroit; George R. Angell; H. C. Potter, Jr., Detroit; H. G. Hamm, Port Huron; S. O. Fisher, Bay City; S. M. McCutcheon, Ypsilanti; Charles J. Monroe, South Haven, and George E. Lawson, Detroit, all of whom are dead. Other leading bankers who have served the Association as president are Louis H. Withey, Clay H. Hollister and Dudley E. Waters, Grand Rapids; George S. Morely and Otto Schupp, Saginaw; James H. Seager, Lansing; L. G. Kaufmann, Marquette, now of New York city; Leon F. Chichester, Petoskey; William Livingstone, Detroit; Emory W. Clark, Detroit; B. F. Davis, Lansing; C. H. Bender, Grand Rapids; Arthur G. Bishop, Flint; William J. Gray, Detroit; Frank W. Blair, Detroit; Gerritt J. Deikema, Holland, and John W. Staley, the present incumbent of the office.

What Changes, If Any, Should Be Made in the Federal Reserve System?

By PHIL S. HANNA

WHAT CHANGES, if any, should be made in the Federal Reserve system? There is little occasion for this question. If you took half a day off to interview the bank presidents in Detroit it is doubtful whether any of them would have any material changes to suggest. In fact, one bank president to whom this question was addressed promptly replied: "Be sure to underscore the words 'if any' when you write the article." Yet political strategists have asked the question and the answer is written more to impress on our readers that it is the almost unanimous opinion among financial authorities that the Federal Reserve legislation was perhaps the most effective piece of lawmaking in the history of the country. In practical operation the results achieved seem to have followed unswervingly the intent of the framers of the act, and this is something unusual.

It is unfortunate that the par collection matter had to be made an issue, for it clouded for a long time the bigger usefulness of the system in the eyes of many small banks. And much might be said here about pursuing less of the "forced feeding" methods in the par matter, but the country has been well served notwithstanding, and we have much to be thankful for.

A very fair-minded Republican, who is president of a large bank, expressed himself in this wise: "There is no question that the credit for forming the Federal Reserve Act is due the Republican party, but we must admit that the Democrats chose the psychological moment and 'put it over,' although I am sure that they did not comprehend when they did it how good the Act was." And he thinks further that much of the talk about amendments is due to the belief of political manipulators that some effort toward amendment must be made lest a Democratic measure be given too much credit.

Frankly, we are of the opinion that the war practically eliminated all political bias when it came to matters concerning the Federal Reserve system. The war was a common enemy which made legislators and party managers realize the peril in taking any chances by "tinkering" with the banking machinery. And it will mark a new era

Digitized by Google

MEMBER FEDERAL RESERVE BANK

The American State Bank of Detroit

CAPITAL ONE MILLION DOLLARS

DEPOSITORY:

STATE OF MICHIGAN *CITY OF DETROIT*

U. S. POSTAL SAVING FUND

TWENTY-ONE BANKS IN DETROIT

Wayne County and Home Savings Bank

• *Established in 1871*

FIFTY YEARS OF SERVICE

Have you obtained the benefit of our complete banking facilities?

We invite you to try our service

Capital, Surplus and Profits Over
TEN MILLION DOLLARS

Main Office—Entire Bldg.
Michigan Ave. and Griswold St.

Branch Banking Offices
Everywhere in Detroit

SAFETY DEPOSIT
COMMERCIAL
SAVINGS



Digitized by Google

SECURITIES

Their Purchase And Their Sale

The Special Securities Department of The Continental and Commercial Banks of Chicago executes orders for sales and purchases of securities (on behalf of customers and correspondents) on all exchanges. A minimum commission on these transactions is charged by intermediaries. We make no charge for the service we render.

Securities are exchanged from temporary form into permanent form at a cost covering only transportation expenses.

Payment is made to brokers and bond houses for securities purchased direct by our customers and these securities handled in accordance with their wishes.

The department also handles on an actual cost basis the registration, transfer and conversion of Liberty issues.

You are cordially invited to utilize this department.

The CONTINENTAL *and* COMMERCIAL BANKS
CHICAGO

Complete Banking Service

Over $55,000,000 Invested Capital

in American government, now that the common enemy has disappeared for the time being, if the tinkerers will "let well enough alone."

As this is written there is a renewed effort to unbend the system in favor of the farmer, which effort is one of the first signs of "politics." Agricultural paper running six months has been eligible for rediscount for a long time, the farm loan banks have received government favor and the farmers are exempt from the anti-trust law. Any special unloosening of the credit strings in favor of a particular class of citizens is going to set a bad precedent which is sure to be followed by attempts by other classes for similar favors.

In its broad aspects the system has wrought changes in banking, proponents of which would have been summarily dismissed as foolish and impossible some years ago. Consider for a moment how easy it is now for a community down in Texas to obtain the surplus funds of New England, compared with accomplishing the same thing before we had the system. The Dallas Federal Reserve Bank borrows from the Boston and Cleveland Reserve Banks with less difficulty than one can purchase a railroad ticket in Detroit, and in less time. And when you look deeply into these transactions it really means that the surplus money of the bank depositors in New England is being lent to the farmer borrowers in Texas. Without the Federal Reserve machinery at work, this transfer of surplus funds of one community to another distant community in need of funds would be difficult of accomplishment. In fact it might be difficult to convince some of the staid Bostonese that their money would be safe in Texas.

Without doubt the currency-issuing machinery of the Reserve Banks is one of the greatest inventions of the age. It does not take a great imagination to picture what might have happened in this country during the war if there had been only the old government bond currency, with its limited flexibility, available. The gold settlement fund in Washington and the telegraphic system of transferring balances are refinements in the machinery which are most serviceable additions to our financial equipment.

And there is another service which is of no inconsiderable value —the weekly reports of condition of some 820 member banks in leading cities. We get the condition of individual banks with each bank call but there is no uniformity in reporting, so that all the banks report at the same date. In some states the state authorities wait until the Comptroller of the Currency calls for national bank statements before sending out the state call but this is not true in all states. And furthermore the comptroller's calls do not come with sufficient regularity to permit of very intelligent analysis or to allow of comptiers' showing the trend of the banks' affairs. Thus the weekly reports fill this long-felt want very nicely.

But in spite of all the many features which merit approval there is at least one activity in our opinion which could just as well be omitted. We have in mind the strictly collection business, as distinct from par matter, such as collecting bill of lading drafts, notes, acceptances, etc. It is stated that only a few of the business houses throughout the country make much use of the collection service of the Federal Reserve system and in Detroit it seems that only a few of the banks send their outgoing collection items through the Reserve Banks; but nevertheless there is a pretty well defined belief in the country that the Reserve Banks are in the collection business to force par remittance the same as for cash items. There is a recent incident in which a Federal Reserve branch sent a collection item to a non-member bank and the latter remitted at par, unaware that it was permitted to make a reasonable charge for collecting the item; but the collecting bank wrote back a sarcastic letter berating the Federal Reserve branch for not sending postage to cover returns for gratuitous services. This incident gives some idea of the conception which some of the country banks have of the Federal Reserve Banks' collection business.

On the other hand, as regards incoming collections, there is an instance in Detroit where before the Federal Reserve went into the collection business, a local bank received an average of fifty collections a day from a large eastern house selling a well-known article to the grocery trade. But since the establishment of the Federal Reserve collection system this local bank has received none of these collections, has lost an average of $12.50 a day in fees and has been put to the further trouble of certifying about an equal number of its customers' checks, for which it cannot collect any fee.

Why not leave this matter to the free play of competition between the banks? Collecting notes, drafts, etc., is one of the old functions of a commercial banks and it seems entirely wrong for the Federal Reserve to invade this field either tacitly or aggressively. Keep up the wire transfer privilege and retain the system of providing a way for a manufacturer in, for instance, Portland, Me., to receive returns on an item sent to Houston, Tex., the day the item is collected, but

Digitized by Google

let the manufacturer in Portland select his own collecting agent in Houston, which will of course be a member bank. Under this arrangement a member bank in Houston has a distinct advantage over a non-member bank, for it can offer telegraphic remittance of proceeds of collections.

And from the standpoint of making membership attractive to non-member banks, why not eliminate the collection business?

The criticism has been made that the Federal Reserve Board has been too rigid in its construction of the law and the application of its rulings. There may be something in this. John Skelton Williams says so. But a lot of unnecessary rigidity will wear off as contact becomes closer between the member bankers and the officials of the system. The division of part of Michigan into a branch district at Detroit was a step in the right direction. Country bankers who naturally make Detroit headquarters are much closer to the branch officials than they would ever become if all the officials were in Chicago, and conversely the Detroit officials get a closer view of the credit situation than would be possible under the larger unit of territory.

It has been proposed in Washington that the duties of the Comptroller's department be transferred to the Federal Reserve Banks; and there is much of merit in this proposition. At present the Comptroller's office attends to the examining of the national banks and the different state supervisory authorities look after examining the state banks which are members of the system. The Federal Reserve Banks have the right to make examinations by their own men, but if they do so the banks are subjected to double supervision. The point is advanced by proponents of the change that the authority which grants the credit should do the examining, and this is correct. By transferring the examination of national banks to the Federal Reserve Banks (his object is partly accomplished, and then some day (nothing guaranteed) the states will get together and turn over the examination of state member banks to the Reserve Banks. There would be economy in such a change and in part a removal of the bank examiner from political influence, although fortunately there has been little of politics in the appointment of national bank examiners the last decade. It was not so, some years ago.

But, after all, would not the whole country be better off if Congress went slower on amendments? Wouldn't it be better to continue the Reserve system as it stands for a while and let time and experience dictate changes more pronouncedly. It seems as if Congress is like an old woman trying to keep chickens out of her garden around which has been built a conglomeration of fences. When the chickens break through one hole she rushes over and hurriedly repairs the hole with a makeshift, and while she is doing that job another old makeshift repair job breaks down. The Federal Reserve Act has a very substantial legal wall built around it and it is serving its purpose admirably in the main; so why begin patchwork?

The Reminiscences Of a Bank Examiner

By JOHN WELTON SKILLIAMS, JR.

ACCORDING to some bankers the bank examiner is sort of a necessary evil. He comes usually just when he isn't wanted, keeps things all stirred up—often "balled up"—and the banker has to pay for the operation.

Some examiners use the direct method of stating their criticisms while on the job but others cling to the system of simply making observations which they include in their report and leave it to "the office" to do the criticising by mail. The latter method works out all right the first time around but on a return visit an examiner is apt to run into a situation like the following: Down in a town in southern Michigan there was a banker who had been in the business many years; he had lent money in the early days when banks were not so careful about air-tight security and he had also lent money freely as a private banker. So when his bank was incorporated and it was necessary for him to entertain the bank examiner he had to learn some things all over again. It wasn't easy for him to bear criticisms gracefully and the boys soon found that it was much better to "let the office apply the raspberry."

One morning two of us met the old gentleman at the station. He was leaving town by the train on which we arrived, so on seeing us he stopped to extend his usual cordial greeting. He said: "Boys, I'm powerful glad to see you. We have such nice visits when you are making the examination, everything does along so smoothly that I get to thinking I am all right; and then after you go those awful letters from Lansing come down and spoil it all."

The examiner's lot is not an easy one. There is more hard work



MICHIGAN BANKERS— WELCOME TO DETROIT

The officers and staff of the Detroit Trust Company take pleasure in welcoming Michigan Bankers to Detroit, and assure them of an earnest desire to make their stay in this city as pleasant and profitable as possible.

From our quarters, opposite the Post Office at the Southwest corner of Fort and Shelby Streets, we shall be glad to extend to them every courtesy and facility at our command, and hope that they will feel free to make this institution their headquarters while in town.

DETROIT TRUST SAFE DEPOSIT COMPANY

Opposite Post Office

Detroit, - Michigan

Digitized by Google

An Organization
you can
Recommend
and
Depend upon

As
Agent
Trustee
Receiver
Registrar
Executor
Guardian
Administrator
Transfer Agent
Property Management
And for Safe Investments

SECURITY
TRUST COMPANY
DETROIT

Capital and Surplus - $1,000,000.00

crammed into a week's assignment than most men in similar work would try in a month, yet there is a fascination about it that keeps a man going. Occasionally we were sent out alone for a week, with instructions to examine three or four small banks. This was not so attractive, because it meant traveling around alone. But speaking of the amount of work performed by examiners as compared with other auditors, there is a good sized bank up-state which normally carried about $300,000 in cash in vault, and the tellers' cages were so arranged that it was hard to get the money counted accurately before the bank opened. Usually we got started on the count about 8:30 and it was exceptional when the job was not finished by 9:30, with four or five men doing the work. The scheme usually followed was to count out enough currency and silver for the paying teller to start the day with and hand it to him, then take charge of the remainder of the money and turn it over to the other tellers when final proof had been made. The money in the vault was sealed up and counted after the desk money had been counted. It must be remembered that the operation included counting many "cash items" and making allowance for deposits and checks taken in the night before after close of business the previous day.

A short time after one of the regular state examinations this bank employed a firm of auditors to make an examination and it took these gentlemen from 8:30 a. m. until 6:30 at night to finish counting the cash, with nine men working on the count instead of four or five, the number usually used by the examiners. Of course a public accountant goes into much more detail than a state examiner; he is looking for variations as low as one cent, while the examiner is not concerned with such small differences. The latter's job is well performed if he finds there are no intentional errors in the cash account and no actual errors of any magnitude, although if the same condition is noted time after time he will begin to give that department more searching attention.

It is strange how one soon learns to recognize the difference between actual error and intended error. There are many tellers who are just naturally "sloppy" in handling their work. Their desks will look like the bottom of a chicken coop in molting season, yet the honest teller has a rule-of-thumb procedure by which he keeps himself above suspicion, for he does not make the errors which look suspicious and in the long run the total of his shortages will be almost covered by his recoveries. The writer was checking up a teller once and found him $4,500 short. The man calmly admitted it and offered no explanation. His desk looked like the waste paper basket had been dumped on it. He was a typical "sloppy" teller. After a couple of hours we thought he would show some signs of nervousness but he just kept on checking back over the previous day's work and said little except that this affair would rob him of going fishing that evening. At lunch time we mentioned something about a certain town's poor baseball team and our friend the teller hurried out of the bank without making any comment. My assistant remarked, "He is either a crook or a nut," and for a time we thought so, for he did not return promptly at 1 o'clock. But about 1:30 in he came with a depositor's pass book which had several checks inside wrapped around with a rubber band, which checks exactly totaled his shortage. He didn't go into any lengthy explanation but said simply that the depositor had come in just at closing time the night before with the deposit slip in one hand and the deposit book and checks in the other, and both being ardent baseball fans it happened in the argument which followed that the deposit slip got on to the spindle and the customer got away with the checks as well as his deposit book.

Now this was an unintentional error, and while this teller probably is still making many similar ones, there is something about the way his errors happen that allays suspicion and he is highly respected and is without doubt a scrupulously honest man. But it is a strange axiom of the examining business that crookedness most frequently is found with sloppiness. There is an opposite case which comes to mind of a banker whose cash always balanced right to the cent and yet his ledgers were never in balance. For several years the boys had spoken of this and still no one could figure out an explanation. The bank was a very small one and the town on a branch line road which had a train in in the morning about time to open the bank and out again about dinner time. There was just enough time to do the job between trains. One day one of the boys suggested driving to this village and starting the examination at closing time, which we did, and great was the cashier's surprise to see us come. He was just in the act of balancing up his cash for the day and remonstrated with us for bothering him, but after a little diplomacy we got started and discovered first thing the secret which our friend had covered up so long. We found at the end of the day's business he would simply enter up the various totals of debits and credits directly into the general ledger and then add up both sides, deducting one total from

Digitized by Google

the other and calling the remainder "cash." He would then count the actual cash and if it was greater than the cash figured on the general ledger he would put the difference into a certain safe deposit box, but if actual cash were smaller he would take the difference out of the safe deposit box.

This man, too, was scrupulously honest, and he expressed great surprise at our objection to his "system", but while it might never have led to trouble in his case, some day his employes would be sure to emulate him for other purposes. It was only after a trip of the board of directors to Lansing that he agreed to give up the practice.

The question often is asked: "What is to prevent a crook from representing himself as a bank examiner and thus gaining access to the bank's money and securities?" Fact is that there is nothing to prevent his trying it but he wouldn't get very far, for even theft of an examiner's certificate of office wouldn't help him much if he didn't know the men on the force. About the first question a banker asks, when a strange examiner presents himself, is about the last examiner who visited him. Or he may ask about some development at the office in Lansing, and there are very few crooks who could post themselves fully enough to withstand such questioning without alarming the banker by unfamiliarity with the personnel of the department. But there was a man up in Gratiot county who knew how to make an examiner identify himself. He didn't believe in taking any chances, and even though a man had been there before he went through the same formality of looking over credentials carefully before he opened the iron gate. On my second trip I had come away from home without my certificate of appointment and it was only by the pleadings of the assistant cashier that I got in, for the latter remembered the first visit. But the funny part about the old man was his remark that he didn't care if I had examined his bank before and he explained with the further remark: "How do I know you haven't quit your job with the state and are not out using this as a bluff to get your fingers on my money?"

As I look back there is one incident which always stands out as particularly amusing, although the man who was inconvenienced thereby did not think so at the time. Down in the Holland and Zeeland district in Michigan the Dutch are wonderful savers. I do not believe there is a single man, woman or child above the age of four or five who has not from one to ten certificates of deposit in the banks. It doesn't seem to make any difference how small the amount is, it goes immediately into the bank, and custom has built up the plan of issuing certificates of deposit for each deposit, rather than issue savings pass books. The Hollanders like the certificates, presumably because they look like and can be used like money and because they draw interest; two features of investment which we are all striving for.

In the banks they keep in a register a record of each certificate, devoting a line to each one issued. When the certificate is paid and cancelled the date when paid is stamped in a column for that purpose on the register, so that by adding up the amounts against which no paid date has been stamped, the examiner obtains a trial balance of the certificate account. And of course the reader will readily realize that in a place like Zeeland the number of outstanding certificates runs up into the thousands. So an examiner when he starts to add up 5,000 or 6,000 different amounts appearing hop, skip and jump throughout five or six books, must have much patience and know that his adding machine is working properly and that there is plenty of paper supply.

Now it does not often happen that the total as found by the examiner balances exactly with the general ledger control, and in cases where there is a difference it is necessary to check back the items appearing on the adding machine tape with the items as they appear on the books.

One day a green examiner started running up the certificates of deposit in a large bank. He labored patiently for over two hours and finally came to the last book and then the last item, but when he had pulled the lever the last time and had taken off his total he found a big difference which must be checked back. Great was his dismay, therefore, to find that someone had placed a shiny, brass spittoon right behind the adding machine and that all the time he worked he had been feeding the tape right into the spittoon. Needless to say that it was necessary to do the work over again.

Contrary to the opinion many persons hold, the examiner is not a detective. It is true that he is supposed to detect dishonesty, but his duties have been so multiplied of late years that catching crooks is only part of the job. His chief function, according to general understanding nowdays of those in the calling, is to determine solvency. That is paramount. Banks have not only grown in size but have added many new activities, such as trust departments and foreign exchange departments, each a highly technical business in itself.

From the President's Desk—Talk No. 51

The Men Who Are "Making Good" Today

are those men who are working the hardest. They're not waiting for business to "pick-up"—they're helping to pick it up.

I know a salesman—a depositor of this bank. I stopped him the other day to ask him how he found things. "Fine," said he—then, as an after-thought, he explained—"I'm making money, but I'm working five times harder than I did last year for it."

That's the solution of the business problem of today. Last year business was coming to you—this year you must go after it. You'll find it if you go after it hard enough. Soon, you'll find you have no time for worry. Try it.

Gordon Kirchner
President

FIRST
STATE BANK
OF DETROIT

Digitized by Google

Foreign Trade and Prosperity

The Relation of Edge Law Corporation Activities To the Future Well Being of Business in America

By EDMUND D. FISHER

THE READER who is familiar with the novels of Sir Walter Scott knows that this distinguished author had a broad knowledge of the social and economic conditions of the period in which his story was placed. In Rob Roy, for example, the hero in approaching Glasgow spoke of the place as a growing center and stated: "An extensive and increasing trade with the West Indies and American colonies has, if I am rightly informed, laid the foundation of wealth and prosperity, which, if carefully strengthened and built upon, may one day support an immense fabric (of trade)."

Foreign trade, then, is presumed to be the basis of wealth and prosperity. The experience of the city of Glasgow, as well as that of most of the cities of Great Britain, proves this statement to be true. English experience in commerce dates back several centuries. Most of the larger enterprises of exploration, settlement and trade in the New World were supported by the merchants of England and Scotland, who, with far-sighted vision, realized the wealth that would come from both trade and investments beyond the seas. Sir Walter used two words that have a special significance at the present time if considered in relation to our own export problems—"carefully strengthened." The world demand for American goods during the war period developed a "seller's market." Price, packing, terms of payment and in a measure quality of goods, became secondary considerations. Now conditions have changed. World competition is being gradually re-established and we must begin to "carefully strengthen" our position by studying the requirements of importing countries and developing trade through the extensions of reasonable, long-time credits.

The United States has now reached a point in her economic development when the increase, or at least the maintenance of her export trade, is necessary. Imports have been materially reduced. War conditions both speeded up her ability to manufacture for export and to be in a measure independent of imported goods. The volume of business thus created gave full employment, good wages to labor and made for general prosperity except to the extent that exports were destroyed in the flames of war, diverting effort to non-productive enterprise. Now, however, the reverse tendency has set in. Demand for our surplus goods has fallen off. Prices have declined and unemployment has been severe.

It must be evident that if we could quickly develop a demand for our surplus, even if not immediately paid for in cash or in offsetting imports, unemployment would disappear, prices would be stabilized and normal conditions again prevail. There is also, in part, the problem of domestic interrelation and organization.

War has taught us that world adversity must ultimately affect each individual nation. A recent report on the economic situation in Paraguay states: "As a result of the high prices paid during the war for cattle, hides and tobacco, this country lived through a period of the most flourishing prosperity. In the early part of 1920 the meat packing plants here suspended operations and the interest in cattle lessened, until now, when cattle cannot even be sold at the lowest price. * * * thousands of hides and tons of tobacco are stored in warehouses in Buenos Aires and in European ports that cannot be sold." Yet the European and Eastern world is underfed, under-clothed and in sore need of the surplus of both the Americas.

We must help to restore world prosperity in order to have both present and future domestic prosperity. Under present conditions we desire a maximum export trade and a minimum import trade. We cannot expect and do not desire gold in payment for the difference. There is thus no other way to help both the world and ourselves but to import securities to balance the account. Specifically, we must grant long-time credits. A balanced trade, imports practically equaling exports, is, of course, the ultimate ideal. Each nation would then produce and export that for which it has a special aptitude. This, however, will take years of readjustment and the use of much new capital to restore the basis of industry in many nations. Much of the commercial, industrial and farming activity in our country depends on the ability to export. A large industry in one of our important cities has a normal export trade of 30 per cent. Full activity in this industry means a normal spending power, normal business in many lines—in general, it means prosperity. What is true in the center to which reference has been made is equally true to a lesser or greater degree in all sections of the United States.

The farmers, holding a large surplus of cattle, grain and cotton, need cash to plant new crops and to pay bank loans. Investors from month to month need new securities. There is a foreign demand if short time credits can be granted for consumable goods and long time credits for machinery and supplies for productive enterprise. This present fixed triangle of relation must be rounded into a circle and made to revolve.

Business of the nature outlined is, of course, always moving in more or less volume. The trouble is that it is not now moving in sufficient volume and needs stimulation and guidance so far as foreign trade is concerned. Movement needs freight cars but rates are too high. Movement needs ships but many are tied up at the docks. Movement needs men and many are idle. Movement needs credit and finance is the rub." This dislocation of domestic transportation, labor and financial relations is quite evident to the business man. He does not, however, fully realize the international relation and its effect upon his individual problem. Just as there is a connection between the trade of cities and states, so there is a connection between the trade of nations. The influence of the latter is somewhat confused at times by tariffs, by distance and by transactions through agents and intermediaries; but it is an influence that bears a direct relation to the volume of such trade. Prosperity is thus inevitably linked both to domestic trade and foreign commerce. A falling off in export trade immediately curtails the output of the manufacturer, reduces the sales of the farmer and has a similar influence on all lines of business.

Now we have the goods or are able to make the goods to satisfy a large foreign demand. We see that the manufacture and movement of goods bring normal trade relations. We know that the dollar and credit are very potent as directing forces. We have seen how they were used by the Government during the war and their effect on industry and export trade. We know, however, that the export trade thus developed was partly on an unsound basis and was largely our contribution to a world loss. Yet we had what we called prosperity. We were busy.

During the war the basic problem was credit. Now during the period of readjustment credit must become the factor to bring back prosperity. But it must be a new type of credit and one whose use



E. D. FISHER

EDMUND D. FISHER needs little introduction to readers of this paper, having been often a contributor of articles on banking and foreign trade. He has a long list of achievements to his credit, the most outstanding of which, perhaps, is the service he rendered to the monetary commission by his testimony when the Federal Reserve Act was in process of formation. He is now in Washington conducting investigations for the Chamber of Commerce of the United States into the proposed metric system and is acting as chairman of the metric committee of that body. Until recently Mr. Fisher was vice-president and manager of the Bank of Detroit, and he continues to make this city his home—The Editor.

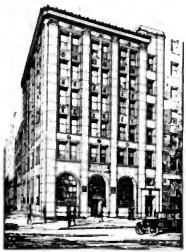
Digitized by Google

THE UNITED SAVINGS BANK

OF DETROIT

4% paid on all Deposits

Strictly a Savings Bank



BANK BUILDING
now being erected
Griswold St. between State St. and Michigan Ave.

Capital Stock	$500,000.00
Surplus	250,000.00
Reserved for Taxes, etc.	100,000.00

The resources of this bank consist entirely of U. S. Government and Municipal Bonds, Real Estate Mortgages and Cash on hand and in banks. In this bank safety and profit are assured depositors.

THE ONLY STRICTLY SAVINGS BANK IN DETROIT

Open Monday Evenings from 6 to 8 o'clock

Send for Booklet, "Banking by Mail"

OFFICERS

FRANK B. LELAND, President
FRED. M. WARNER, Vice Pres
HENRY M. ZIMMERMAN, Vice-Pres.
CHAS. B CRAMER, Cashier
LAVERNE BASSETT, Attorney

DIRECTORS

FRANK B LELAND
ALBERT F. PECK
HENRY W. STANDART
FRED. M WARNER
HENRY M. ZIMMERMAN
LAVERNE BASSETT
WILLIAM H. HOYT
CLINTON W. WILBER
JOSEPH G. STANDART

1248-50 Griswold Street

MEMBER FEDERAL RESERVE SYSTEM

Jackson City Bank

JACKSON, MICHIGAN

Founded 1848

73 Years of Satisfactory Service

— OFFICERS —

N. S. POTTER, President
W. M. THOMPSON, Vice President
P. B. LOOMIS, Vice President
B. R. LARAWAY, Vice President
K. L. POTTER, Vice President
R. B. WALKER, Cashier
A. D. LATHROP, Asst. Cashier
W. D. THOMPSON, Asst. Cashier

— DIRECTORS —

W. M. THOMPSON
N. S. POTTER
P. B. LOOMIS
W. M. EATON
B. J. GLASGOW
J. W. MINER
M. C. TOWNLEY
K. L. POTTER
P. L. CARTER
B. R. LARAWAY
W. A. BUNTING
D. G. KIMBALL

Digitized by Google



Mr. Visiting Banker:

Your visit will not be complete without getting acquainted with Detroit's newest and fast growing bank.

The location is unique—Broadway at Gratiot—and a most cordial invitation is extended to you to call. We are in the market for desirable business.

Walter G. Toepel, President
Henry J. Guthard, Vice-President
Chas. W. Burton, Vice-President
Wm. J. Schechter, Cashier
Sidney H. Zinkann, Ass't Cashier

"Make the Continental your headquarters while in Detroit."

7% **SEVEN PER CENT INTEREST** 7%

SAFE and SURE

GUARANTY TRUST COMPANY GOLD BONDS SECURED BY CLOSED FIRST MORTGAGE ON DETROIT IMPROVED REAL ESTATE

LEGAL INVESTMENT

FOR *MICHIGAN SAVINGS BANKS TRUST FUNDS*

TAX EXEMPT IN MICHIGAN

NOW SOLD TO NET SEVEN PER CENT

OUR TRUST DEPARTMENT SERVICE

ADMINISTRATOR OF ESTATES
GUARDIAN OF MINORS
EXECUTOR UNDER WILLS
TRUSTEE FOR BOND ISSUES
REGISTRAR & TRANSFER AGENT
RECEIVER OR ASSIGNEE

7% **GUARANTY TRUST COMPANY** 7%
OF DETROIT
432 Griswold St. at Larned Main 1847

will be of more economic value to the country than the use of Liberty bonds.

In order to sell our surplus and promote our export trade it will be necessary either to lend to the exporter until he can be paid in the normal course of business or lend to the buyer, who may be able to give good security but who is unable to pay in cash. The latter type of loan is quite likely to take the form of serial bonds which will be paid from year to year from the earning power of the enterprise involved or from the revenues of the city or state to which such loan might be made. Loans may not always be made to finance the direct purchase of goods but under the stipulation that the money be expended in the United States. Thus funds advanced will not leave the country, although a corresponding amount of goods would ultimately be exported. The tendency of all such loans would be to stabilize prices, promote business activity and develop a savings fund in the form of securities for the future. When the war broke out England had foreign investments amounting to $21,000,000,000. This great savings fund proved her salvation. The investors of the United States had foreign investments at that time of but $500,000,000 and we were a debtor nation. Although we are now a creditor nation the debt owing us is largely based upon advances for war purposes which have no quality of self liquidation. We need a new type of foreign investment based upon loans granted to develop real productive enterprise with the inherent ability of earning enough easily to pay interest and the proportional parts of the debt as they fall due.

It is not the habit of banks to grant the type of long-time credit necessary to promote our export trade and to meet the requirements of importing countries under present conditions. For this reason a measure known as the Edge Bill was passed by Congress as an amendment to the Federal Reserve Act, providing for the incorporation of finance companies authorized to raise capital for the purpose of buying foreign securities and issuing debentures to the investing public. As the business of such corporations will be under the supervision and regulation of the Federal Reserve Board, the character of the investment made will be unquestioned. The most important corporation organized under this Act is known as the Foreign Trade Financing Corporation. Its authorized capital is $100,000,000 and it may issue debentures to the extent of $1,000,000,000. Its activities in connection with similar organizations will have an important bearing on the future development of our export trade not alone from the volume of its business but also from its power to standardize general practice in relation to foreign investments and to educate the investing public on the value of such investments in promoting domestic prosperity through foreign trade.

Bank Costs Today

THE QUESTION sometimes is asked but not often clearly explained why banks are still able to do business and make profits with expenses so much greater than they were some years ago. Putting the question the other way around, why is it that the banks which have been collecting only 15 per cent more interest on loans these last two or three years, have been able to pay the costs of running a bank, which are twice as great as formerly? Every banker knows the answer. He knows that it has been a problem to pay double wages and double costs for everything that goes into a bank, and he knows that the only thing that has saved him is the has been the unprecedented volume of business. It is true that profits have been large of late. 1919 and 1920 were banner years for national banks, according to the Comptroller of the Currency, but the story will not be completely told until we learn about 1921 and 1922, for it is one thing to make big profits on increasing deposits and decidedly another job to keep up the same rate of profit on declining deposits.

In Detroit, for example, the clearing house banks have about $50,000,000 less invested in earning assets now than they had at the high peak of 1920. It is true that the interest bill for deposits is less but nowhere near the same decline. On April 2, 1920, total savings deposits were $209,800,000, which were all drawing interest. Commercial deposits were $243,700,000, the great bulk of which was not drawing interest, but by May 5, 1921, the tables had turned face about and the banks had lost the use of about $62,000,000 commercial deposits and were paying interest on $194,000,000 savings deposits—a drop in the latter of about $15,000,000; so that the free capital so to speak, went off against capital on which interest is paid in the ratio of 62 to 15. And practically the entire income was lost on an amount of pledged assets equal to the amount of borrowed money obligations. So the upshot of it all is that the banks are carrying a relative higher expense load than they did when commercial deposits were higher than savings deposits and when borrowed money obligations were at a minimum.

Digitized by Google

Large enough to accommodate you but not too large to appreciate your business. Pontiac is a Reserve City. Accounts of Banks and Bankers are solicited.

PONTIAC COMMERCIAL AND SAVINGS BANK

PONTIAC, MICHIGAN

Capital and Surplus $1,500,000.00
Resources over $16,000,000.00

Officers:

JOHN H. PATTERSON, Chairman of the Board
CRAMER SMITH, President

O. J. BEAUDETTE, Vice President
A. A. CORWIN, Vice President
C. E. WALDO, Vice President
C. J. MERZ, Vice President
F. L. PERRY, Vice President
F. A. VAN WAGONER, Cashier
B. J. GREER, Asst. Cashier
A. G. NICHOLIE, Asst. Cashier
E. F. SCHULZ, Auditor

E. R. WEBSTER, Attorney
JOHN H. PATTERSON, Attorney

THE LARGEST BANK IN OAKLAND COUNTY

PROMPT ATTENTION

Given to all Lansing Business entrusted to us. : : : :

American State Savings Bank

LANSING, MICHIGAN

BRANCHES:
North Lansing South Lansing

Capital and Surplus, $750,000.00 : : : : : Deposits, $7,000,000.00

Digitized by Google

The "Why" of the A.I.B.

What a Few Years' Experience With This School For Coming Executives Has Taught the Doubters

By R. B. LOCKE

Manager and Director, Detroit Branch, Federal Reserve Bank

AS LONG AGO AS 1909 the foremost bankers of the country realized that if the maximum of efficiency were to be reached in the matter of service performed by bank clerks, some method must be sought through which bank clerks could learn more of their chosen line of work than through the experience of their daily routine. It was also realized that the officers of the banks must for the most part be chosen from their own employes, which only emphasized the need of some method of systematic education for these men who were destined to be the bank executives of the future.

The result was that at the annual meeting of the American Bankers Association held at Richmond, Va., in the fall of 1900 the committee on education reported its belief that the formation of a chain of bank clerk associations throughout the country was perfectly feasible, and that, conducted on proper lines, it would do a vast amount of good. The report of the committee was received with cordial approval and a resolution was adopted appropriating the necessary funds for organization and preliminary work.

These are the reasons and the circumstances attending the birth of the American Institute of Banking, an organization which today numbers more than 42,000 members in all the larger cities of the United States. In its membership are found bank employes ranging in rank from messenger boy to president, the one realizing the need of education if he will succeed and the other determined to lend his support to the organization which is doing more than any other agency to increase the efficiency of his organization and which is developing men within his organization who are fitted to assume the responsibilities of executive positions.

For twenty years the American Institute of Banking has been turning out men who have given concrete evidence of their realization of the seriousness with which they regard their employment. These men realize that while experience is necessary to continued advancement, the very nature of the banking profession calls for more than experience. It calls for a knowledge of economics, banking and commercial law, accounting and many other subjects, necessary because the banking profession necessitates a knowledge to some extent of every business with which the bank comes in contact—which means all business.

It is therefore true that today and in the future bank executives are being chosen very largely from the ranks of the American Institute of Banking, not because they are members of the Institute but because the men with the ability and seriousness of purpose naturally find their way into the Institute.

At the time the Institute was organized there were many skeptics. These men threw up their hands in horror and predicted that there was being organized the nucleus of the most powerful union history had ever known. They predicted that the bankers in sanctioning the organization of the Institute were inviting strikes for higher salaries and were in fact virtually committing suicide. But those who have had in charge the administration of the affairs of the Institute have never lost sight of the fact that the primary principle of the American Institute of Banking is education and the resolution adopted at the annual convention of the Institute at New Orleans in 1919 is really the creed of the Institute. The Institute is proud of it and the bankers are proud of it. It reads as follows:

"Ours is an educational association organized for the benefit of the banking fraternity of the country and within our membership may be found on an equal basis both employes and employers, and in full appreciation of the opportunities which our country and its establishments afford, and especially in appreciation of the fact that the profession of banking affords to its diligent and loyal members especial opportunities for promotion to official and managerial positions, and as a result of the establishment and maintenance of the merit system in most banks a large number of Institute members have through individual application achieved marked professional success; we at all times and under all circumstances stand for the merit system and for the paying of salaries according to the value of the service rendered.

"We believe in the equitable co-operation of employes and employers and are opposed to all attempts to limit individual initiative and curtail production, and, insofar as our profession is concerned, are unalterably opposed to any plan purporting to promote the material welfare of our members, individually or collectively, on any other basis than that of efficiency, loyalty and unadulterated Americanism."

Even with this splendid record of loyalty and achievement it is a regrettable fact that there are still some banks whose executives are opposed to the Institute, for reasons better known to themselves than to anyone else. Within the last year there was attempted the organization of a bank clerks' union in one of our larger cities. The union representatives had planned the matter carefully and felt that the time was ripe when the cost of living was at its highest, to organize the bank clerks. When the smoke cleared away and a count of members of the proposed union was taken it was found that they had fifty-five members and all but sixteen—which included all the officers of the proposed union—were men employed in a bank which was opposed to the Institute.

Some bankers have felt that too much education was detrimental to the interests of the banks inasmuch as the number of executive positions and higher salaried positions was limited. It is true that every member of the Institute cannot hope to become a bank executive, that some are destined to always be a bookkeeper, but it is also true that any man with ambition and ability and knowledge who for any reason sees his future in the banking profession limited will seek other fields of endeavor. There are many men who have been Institute members and who have completed its educational work who now hold responsible positions in other lines of business and because of this fact the benefits of the American Institute of Banking are not limited to the banks. Our whole business fabric shares in the benefits.



R. B. LOCKE

ROBERT B. LOCKE is well qualified to write about the laurels won by the American Institute of Banking. He was president of the Boston chapter of the Institute before coming to Detroit and was president of the Detroit chapter until the May 21 election, at which time he declined to be again a candidate. The local chapter has gone on record supporting Mr. Locke for president of the national organization, of which he is now vice-president, the election to take place in July at the annual convention at Minneapolis.

Before coming to Detroit Mr. Locke was for several years manager of the credit department of the Old Colony Trust Company. In 1916 he was brought here as manager of the Detroit Clearing House, and in 1918 became manager of the Detroit branch of the Federal Reserve Bank. He has since been elected a director of the branch.—The Editor.

President Beckley, of the Institute, hit the nail on the head when he said at the recent meeting of the Executive Council of the American Bankers Association. "While it may be true that bankers are born and not made, it is also true that they are not being born fast enough; and it is therefore necessary to find some substitute. The American Institute of Banking is that substitute."

Frank A. Vanderlip has referred to this country as a nation of economic illiterates. In the Detroit Chapter of the Institute this year, David Friday, the eminent economist of the University of Michigan, conducted our class in economics. His course consisted of a series

Digitized by Google

of twenty lectures of two hour each, supplemented by assigned reading. These lectures were held in the evening and the attendance averaged about 200 young bank men. What better proof of the work the Institute is doing can be asked than this? Classes also were held in elementary banking for the younger boys, a class for the men employed by trust companies and two classes in public speaking. In the class in economics 79 of the students took the final examination and 71 of them passed Prof. Friday's standard. The examination questions give some idea of the scope of his course and are printed at the conclusion of this article. How many bankers are there who feel that they could successfully pass this examination and how many are there who are not proud of the fact that there are some of the 71 connected with their institution?

Next year the Detroit Chapter will have a much more comprehensive educational program and negotiations are under way with the University of Michigan which we hope will result in close co-operation with the University, to the end that our educational work may be of the highest possible standard.

Detroit is the only city in Michigan which has an organized chapter of the Institute. There are undoubtedly other cities which should organize chapters; but the benefits of the Institute are available to all banks whether they are located in chapter cities or not. The Institute for the benefit of students living outside chapter cities maintains a correspondence chapter. The correspondence chapter has more than 5,000 students. As implied, these students conduct their studies by correspondence, the work being directed from the headquarters of the Institute in New York. The work is comprehensive and is continually revised by eminent educators in order that the highest standard may be maintained. Where there are a number of correspondence students living in the same locality, it is customary for them to meet at stated intervals and discuss the problems in connection with their educational work.

No history of the Institute is complete without some words about George E. Allen, or "Uncle George," as he is affectionately called by all who know him. "Uncle George" has been our educational director ever since the birth of the Institute, and his has been, more than that of any other man, the dominant personality that from the beginning has carried the Institute safely through all its periods both perilous and promising. The American Institute of Banking, while being a monument to the foresight of certain leaders in the American Bankers Association, and a credit to those young men who have benefited by it and helped in its management, is a vigorous adult now, mostly by reason of the faith "Uncle George" has always had in the young American banker.

EXAMINATION QUESTIONS

Detroit Chapter A. I. B., 1921

1. How do you explain the fact that the rate of interest rose rapidly from 1902 to 1912?

2. Do you believe the rate of interest will rise or fall in the next two years? Why?

3. What would be the effect of an increase in demand upon the price of the following articles: (a) copper? (b) land? (c) automobiles? (d) wooden chairs?

4. How would you levy a tax upon a monopoly? Why?

5. "The imposition of a protective tariff against European goods is an obstacle to the repayment by Europe of the principal and interest of her debts to us." Explain this statement.

6. The country bank in Rockford, Ill., is refused further loans and rediscounts by the Federal Reserve Bank of Chicago. It carries a balance of $150,000 with a New York bank, and has $100,000 loaned out at call on the N. Y. money market. To what extent can this bank expand its loans in spite of the refusal of the Federal Reserve Bank to extend it additional facilities?

7. "In spite of the constant assumption of liquidity in banking assets by banking writers, the fact is that the bank credit of the country as a whole is liquid only within very narrow limits." Explain.

8. "As long as the stock exchange call loans retain their prominence as secondary reserves of too many banks, . . . we shall not enjoy a complete and perfect banking system." Explain what the writer means by referring to call loans as secondary reserves.

9. "The bank statement was criticised because of the enormous increase of $44,000,000 in loans. As deposits increased $33,000,000 the banks were certainly entitled to place 80 per cent of this increase among the borrowers if the demand existed." Point out a common error implied in the second statement.

11. The statistics below are for a group of national country banks and a group of national city banks. (a) Judging from the nature of their assets which would you say were the country group, and why? (b) Explain the difference in the size of the resources of the two groups by reference to the differences in their liabilities.

(In thousands of dollars)

Resources	Group A	Group B	Liabilities	Group A	Group B
Loans and discounts	$ 68,672	$ 64,362	Capital stock	$ 8,325	$ 7,000
			Surplus	8,172	3,750
U. S. bonds and certificates	23,015	8,607	Und. profits	2,543	1,697
			Circulation	6,710	4,711
Other securities	21,310	10,292	Due to banks	3,061	14,578
Banking house, etc.	3,976	825	Demand deposits	45,513	63,806
			Time deposits	70,546	8,439
Cash, reserves, and due from banks	21,025	24,688	Bills payable with Fed. Res. Bk.	4,014	5,250
			Other liabilities	3,715	6,826
Other assets	2,231	4,623			
Total	$150,229	$113,497	Total	$150,229	$113,497

City National Bank

LANSING, MICHIGAN

Capital, Surplus and Undivided Profits over

$600,000.00

B. F. DAVIS, President
E. F. COOLEY, Vice-President
J. W. HAARER, Vice-President & Cashier
H. S. TERWILLIGER, Assistant Cashier
H. J. DIETZ, Assistant Cashier

OLDEST BANK IN LANSING

Our B/L and collection service is good.

Announcement

Our increasing business in this vicinity necessitated moving our Head Offices from Grand Rapids to Detroit, and we will be pleased to see our friends and clients at Suite 204 Murphy Building.

The Grand Rapids Office will be maintained as a Branch Office, and under the management of Mr. W. S. Jackson. The Lansing Office, as heretofore, will be managed by Mr. Fred R. Barney, and the Jackson Office under the management of Mr. F. C. Brown.

As Fiscal Agents for COMMERCIAL FINANCE CORPORATION of Grand Rapids, we are authorized to receive applications from persons desiring to sell all forms of commercial paper, trade acceptances and land contracts.

The John H. Davis Company

Suite 204 Murphy Bldg.,

Detroit

"The House with Ideals"

Digitized by Google

OTIS & CO.

(In the Investment Business Since 1899)

Members

New York, Chicago, Detroit, Boston and Cleveland Stock Exchanges

Chicago Board of Trade New York Cotton Exchange

Offices

New York Detroit Boston Cleveland Cincinnati Columbus

Toledo Akron Youngstown Dayton Denver Colorado Springs

Complete, Rapid, Accurate Brokerage

Service in All Markets

Special Facilities for Transactions in

Ohio Rubber and Steel Securities

and Detroit Motor Stocks

Private Wire Connections With All Principal Markets.

200 Majestic Bldg.

Phone: Cadillac 6500

DETROIT

Digitized by Google

OTIS & CO.

(In the Investment Banking Business Since 1899)

Unexcelled Service in Investment

Dealers in

United States and Foreign Government Bonds; State,
County and Municipal Obligations; Railroad,
Public Utility and Industrial Bonds,
Preferred and Common Stocks
Foreign Exchange
Bank and Trade Acceptances

Twenty years of successful operation in the purchase and sale of sound securities have put us in a position to be of equal service to individuals having funds for investment or requiring advice and to corporate or other organizations requiring financing.

An Opportunity to Demonstrate Our Service will be Welcomed.

200 Majestic Bldg.

Phone: Cadillac 6500

DETROIT

Digitized by Google

Trust Powers For State and National Banks

Some Policy Considerations to Which Legislation Proposed This Year in Michigan Has Given Rise

By RALPH STONE

THE WRITER accepts with pleasure the invitation of Ye Editor to discuss the legislation enacted at the recent session of the legislature of Michigan granting trust company powers to state banks and, likewise, the provisions of the Federal Reserve Act granting similar powers to national banks.

As the laws of Michigan and the United States now stand, power to act in trust capacities is granted to trust companies, state banks and national banks. It will be instructive as well as interesting to note in what respects these several laws differ, not only as to powers which are granted but as to the limitations placed thereon and the responsibilities and liabilities assumed thereunder. Naturally, more extensive trust powers are granted to trust companies, under the Trust Company Act of Michigan, than are granted to banks under their enabling acts. Trust companies are empowered to transact practically every kind of trust and fiduciary business but on the other hand, they are placed under stricter requirements than seems to be the case with either state banks, under the law enacted by the recent legislature, or national banks under the terms of the Federal Reserve Act and the regulations of the Federal Reserve Board issued in compliance therewith.

The Trust Company Law was enacted in 1889 and it has served its purpose unusually well without amendment since its enactment. The minimum capital of a trust company in Michigan is $150,000, and graded according to population to a maximum of $5,000,000. Not less than 50 per cent of its capital, nor more than $200,000 in specified securities must be deposited with the state treasurer as security for the depositors and creditors of the company. The trust company cannot issue bills to circulate as money, buy or sell bank exchange or do a general banking business. It is obliged to keep on hand funds in an amount equal to at least 20 per cent of its matured obligations, three-fourths of which may be kept in any bank or trust company approved by the banking commissioner.

The state bank, under the Act passed by the recent Legislature, may, when authorized to do so by the state banking commissioner, act only as executor and administrator of estates of deceased persons and guardian of estates of minors. Unlike the Trust Company Law there is no requirement or limitation as to its capital, although the banking commissioner may take into consideration whether the capital and surplus of the bank is sufficient in the circumstances of each case. The state bank of course is entitled to do a banking business as well, whereas the trust company is prohibited from so doing. The state bank is required by the new law to segregate its trust assets from the general assets of the bank and keep a separate set of books and records of the trust business. The state bank is not required to deposit securities with the state treasurer as security for the trust depositors and creditors, as is the case with the trust company.

The Federal Reserve Act as amended on September 26, 1918, gives the Federal Reserve Board authority to grant special permits to national banks to act as trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, committee of estates of lunatics, or in any other fiduciary capacity in which state banks or trust companies are permitted to act under the laws of the state in which the national bank is located. It will thus be seen that the national bank has power to act in substantially all the trust or fiduciary capacities in which the trust company may act, provided the Federal Reserve Board deems it best to grant them. In some cases the national bank has asked for only a part of these powers, and the permits issued by the Federal Reserve Board place a corresponding limit upon the capacities in which it can act. It appears, therefore, that subject to this control of the Federal Reserve Board, the national bank in Michigan is in a position to act in a greater variety of trust capacities than the state bank.

Prior to the enactment of the Michigan law at the recent session of the legislature giving the state bank certain trust powers, the national bank by the terms of the Federal Reserve Act was required to have a capital and surplus not less than that required by state law for the trust companies and state banks, and it was likewise required to deposit securities with the state treasurer in the same amount as the trust company. There is also a provision of the Federal Reserve Act which authorizes the Federal Reserve Board to grant by permit to the national bank the right to act in any fiduciary capacity in which the state bank or the trust company may act, if they come into competition with the national bank. It is apparently the purpose of this provision to place the national bank, coming into competition with the state bank or the trust company in the same state, upon an equality in respect to trust capacities in which it may act, with the state bank and the trust company. Whether it is likewise the intent of the Act to place the national bank upon an equality with the state bank as to capitalization and deposit of securities with the state treasurer (that is, freeing it from any requirement with reference thereto except as some discretion is apparently granted to the state banking commissioner) depends upon the construction placed thereon by the Federal Reserve Board and, perhaps, by the courts. Is the national bank free from any requirements as to capitalization because the state bank is subject to none, other than the discretion lodged in the state banking commissioner; or is it subject to the minimum requirement of $150,000 and the maximum of $5,000,000 prescribed by the trust company act? Is the national bank required to deposit securities with the state treasurer because the trust company is so required; or is it free from that requirement because the state bank is not subjectedthereto? Likewise, to what extent is the national bank in Michigan freed from the other provisions, restrictions and limitations of the Federal Reserve Act and the regulations adopted by the Federal Reserve Board, if the state bank in Michigan is not subjected to similar provisions, restrictions and limitations? These are questions which the writer will not attempt to answer because he would be indulging in speculation as to decisions which may be made by the Federal Reserve Board and the courts.

It would have been better if the legislature had more closely harmonized the new state law with the Federal Reserve Act, because both national and state banks are owned by Michigan stockholders,



RALPH STONE

MR. STONE, in this article, writes from an experience of upwards of a quarter of a century—six years as trust officer of the Michigan Trust Company, Grand Rapids, and twenty years (the entire corporate existence) with the Detroit Trust Company, successively as assistant secretary, secretary, vice-president and president. Every phase of the trust company business, as it is operated in Michigan, has come under his observation and he is accordingly well qualified to speak with the authority of tested experience.

His discussion of the subject of this article is broad-gaged, impartial and considerate of the interests of the three forms of financial institutions—trust companies, national banks and state banks.—The Editor.

Digitized by Google

WHICH DO YOU NEED—

High Income or Appreciation in Capital?

If you must have high income—the highest income compatible with safety—you should invest in bonds of a conservative character paying from 7% to 8% and selling around par.

Many Corporations of the highest credit have of late been forced to issue securities paying these rates, owing to conditions prevailing in the money market.

If, on the other hand, you are more concerned with an ultimate increase in your capital, you should invest in conservative bonds paying from 4% to 6% and selling at a material discount.

There are available in these unusual times many bonds paying from 4% to 6% and selling anywhere from 10 to 30 points below their par value.

Bonds such as these have the double advantage of yielding a liberal current income and of offering every reasonable promise of a very considerable advance in price.

If you will let us know in which class you feel you must invest, we shall be glad to submit a special list of bonds to meet your requirements.

Permit us to point out that we have excellent investment facilities; consequently our service should be very helpful to you in making suitable selections.

MERRILL,
LYNCH
& CO.

Investment Dept.
1050 Penobscot Building, Detroit
Members New York Stock Exchange

located within Michigan and with Michigan depositors and clients, so that their interests are identical.

Other differences in the provisions and requirements of the Federal Reserve Act and the regulations of the Federal Reserve Board, on the one hand, and the new state law on the other hand, are as follows:

The national bank, the same as the state bank, is obliged to segregate assets held in a fiduciary capacity and keep a separate set of books and records, which are open to inspection by the banking commissioner. The national bank, under the regulations of the Federal Reserve Board, cannot carry in its trust departments current funds subject to check or receive deposits of checks, drafts, bills of exchange or other items for collection or exchange purposes. There is no such prohibition in the new state law relating to the state bank.

The national bank is required to set aside in the trust department United States bonds or other securities approved by the Federal Reserve Board for funds received in trust awaiting investment before it can use such funds in the conduct of its business; and if the bank fails, the owners of those funds have a lien on the bonds or other securities so set apart, in addition to their claim against the bank. There is no requirement of this kind in the new state law applying to the state bank. Inasmuch as the latter is not obliged to make a deposit with the state treasurer, there is therefore no specific fund or securities for the protection of its trust depositors and creditors, although it is probable that the capital, surplus and undivided profits of the bank would be liable for the claims of trust creditors.

The regulations of the Federal Reserve Board oblige the national bank to establish a separate trust department and place it under the management of officers whose duties shall be prescribed by the board of directors of the bank. There is no such requirement in the new state law applying to the state bank, except as it may possibly be implied in the direction that the trust assets shall be segregated and a separate set of books and records kept. The federal regulations also require that trust securities must be placed in the joint custody of two or more bonded officers, or other employees designated by the directors of the bank, but there is no provision of this kind in the state law for the state bank. The federal regulations also prescribe the manner in which trust funds of the national bank shall be invested and investment approved; but no requirements of this kind are made in the new state law for the state bank. The Federal Reserve Board reserves the right to revoke permits issued to a national bank to exercise trust powers, but the state banking commissioner under the new law is not expressly given that power, having once granted the permit.

The foregoing covers the main points of agreement and difference between the trust company act, the new state law and the Federal Reserve Act and regulations issued thereunder. It will be seen that the three laws are far from uniform in their provisions and that Congress and the two Michigan legislatures apparently had quite different notions as to the manner in which the exercise of trust business should be authorized and safeguarded, and the public—which entrusts its business to trust companies, national banks and state banks—protected in its dealings with them. However, perhaps this is not of such vital importance because, as a matter of fact, the safety and skill with which this kind of business is handled and transacted depends more largely upon the character, ability and experience of the officers and employes of these financial institutions than it does upon the precise nature of the laws which regulate the trust companies and the banks.

The risks and liabilities incident to the transaction of trust business are quite numerous and varied in character. A trustee is held to strict liability. The ancient legal maxim, "Ignorance of the law excuses no one," applies with greater force to the trustee than it does to the individual, and quite naturally it will apply more strictly to an incorporated trustee like a trust company or a bank, either national or state, because it is supposed to have so equipped itself that it is more expert than an individual in the discharge of the duties of a trusteeship, whether it is executor, administrator, guardian or any other trust capacity. It will probably be found also that the trust clients of a state or national bank are more likely to hold the bank to a stricter accountability and liability than if the same work were performed by an officer of the bank in his individual capacity—that is, not as an officer (as has been the case in most of the smaller communities in the state heretofore). This is particularly true for the reason that the bank official in his individual capacity has in many cases acted without compensation, whereas under the new law the bank of course will receive the legal fee.

If therefore behooves the bank, whether state or national, in establishing the trust department to make sure that its management is put in competent, careful and cautious hands. The limits of an

Digitized by Google

article of this character forbid even attempting to enumerate the great variety of liabilities to which a trustee is subject. The bank should therefore take no important step without competent legal advice; and this brings us to a consideration of the relations of the bank and its trust department with attorneys.

The attitude of the bank, so far as its relations with the legal profession are concerned, is important. A considerable proportion of the business of its trust department will come either directly or indirectly through attorneys. The policy of trust companies in Michigan is one of co-operation with lawyers. Their practice is to retain the services of the attorneys of the deceased persons whose estates are being administered, or of the persons who create living trusts with them, and of lawyers who bring business to them. The trust company is essentially a business and investment institution, and as such serves the lawyer in many ways, so that the business of the one and the profession of the other are in reality co-operative and mutually helpful. Banks with trust departments will find it profitable as well as right to follow this policy.

A few words as to the position of trust companies in Michigan (at least of those which the writer is justified in discussing), with respect to the granting of trust company powers to state banks, may not be out of place in this article. This position has been publicly stated by representatives of some of the companies at two hearings before the Michigan legislature—one at the session of 1919 and the other at the session of 1921. Briefly, it is that inasmuch as the Federal Reserve Act grants trust company powers to national banks, it is only fair and proper that similar powers be given to state banks, but that the granting of these powers should be surrounded by safeguards which will insure as safe and reliable a service in the business as has been the case with trust companies throughout their history in Michigan. The purpose of the trust companies in so doing has been to protect the good reputation which they have established for the corporate organization and management of trusts of all kinds. This attitude therefore has been in the public interest as well as for the protection of the value of the good name which trust companies have established in this state during the thirty-two years of their existence. Whether that value will be impaired or enhanced as a result of the participation of state and national banks in the trust business naturally will depend upon how well their trust departments are organized and operated and how efficiently the Banking Department or the state banking commissioner exercise their discretion in the supervision of trust departments.

The writer believes that officers of state and national banks will handle trust business in a creditable manner so long as they are able to give it their personal attention. They have been doing so as individuals in their respective communities and there is no reason to suppose that they will not continue to do so. Bankers are by habit and training naturally conservative in making their decisions upon business and investment questions, and to that extent they are well qualified to perform the most important functions of trust officers. Therefore they are not likely to make serious errors of judgment particularly if they take competent legal advice upon doubtful questions.

If, however, the volume of trust business grows to such an extent that bank officers find that the work of the trust department which devolves upon them takes so much of their time that they are unable to give efficient supervision to the banking part of their business, then naturally the interests of the bank as a whole will suffer. It is at this point that the temptation to leave the decision of important trust questions to minor officials and employes may result in loss which will subject the bank to liability and jeopardize what time, money and the most anxious to protect, i.e., the good name and reputation of corporate management of trusts. Hence the safeguards which trust company officials have recommended to the legislature as important features of a proper law. These safeguards are adequate capital, a deposit with the state treasurer for the protection of trust creditors, and other requirements, some of which are in the new state law and some of which were not included.

If the business grows to sufficient volume the bank should have additional capital, sufficient to support a trust department manned by experienced trust officers and experts in the various lines of trust business, and to protect the public which deals with it. It has been the experience of trust companies in Michigan that the trust business has not been profitable but, in fact, has been operated at a loss over a term of years, even in the larger cities, until its volume has reached the point where the gross income from fees has been sufficient to take care not only of expenses but of the trust department's share of the overhead expense. In other words, the same principle is involved herein as in the operation of a manufacturing or mercantile business — the essential element of sufficient volume to carry "overhead" and to produce profit. It is important therefore for the directors and officers of a state or national bank to determine whether there is likely to be sufficient business in the community in which the bank is located to support a safely organized trust department and to realize a profit in addition thereto, particularly if that business is to be divided between a number of banks with trust departments in the same community.

The opinion of the writer as to the advisability of establishing trust departments has been requested from time to time in the recent past by officers of state and national banks, and his reply has been to the foregoing effect. Advice and assistance in the work of establishing the machinery for the operation of such a department has been freely offered and furnished, in the belief that if the bank has determined that there is sufficient business in the community and that it can be handled profitably, it is to the interest of trust companies to render every assistance in their power to the end that the bank shall operate its trust department successfully and without mistakes, the knowledge of which mistakes spread in a community would endanger the good reputation for corporate management of trusts which trust companies have established.

There are only eleven trust companies in Michigan, with a total capital at this time of $6,337,020; a total capital, surplus and undivided profits of about $12,800,000, and total resources of $40,000,000. Up to within a very recent date permits had been granted by the Federal Reserve Board to twenty-seven national banks in Michigan, the capital of which aggregates $8,355,000; capital, surplus and undivided profits $17,000,000, and total resources (all of which, however, is employed in the banking department) about $162,000,000. There are more authorized trust departments of national banks, therefore, than trust companies within the state; but as a matter of fact very few national banks have started operation of their trust departments. Apparently the reasons for this are that it takes time to organize such a department and to find suitable men of experience to manage it; that the directorates of banks hesitate to place an additional burden of management upon the officers and to subject the bank to the infinite variety of liability involved in the relation of trustee; and that they are not entirely satisfied that trust business in smaller communities will yield revenue sufficient to make trust department operation profitable.

EDITOR'S NOTE—After this article was received for publication, announcement was made that the Governor had vetoed the MacDonald bill, giving authority to state banks to receive certain trust powers. In his veto message the Governor stated in substance that his veto was not based upon the provision of the bill. It is his contention that the bill would have permitted state banks to establish branches in foreign countries and that he was advised by the Attorney General that this would open the way to a situation under which the Banking Commissioner's power to inspect state banks could be curtailed through the difficulty of determining the condition of the branches that would be out of his jurisdiction. The provisions giving state banks trust powers were added to the MacDonald bill shortly before the adjournment of the Legislature. The situation now is, therefore, that state banks have not authority to exercise trust powers.

Mr. Stone's article, however, contains so much of interest and value to both state and national banks that it is nevertheless worthy of publication. It points out clearly the difference between the Federal Reserve Act and the Trust Company Act of Michigan. It also contains useful observations respecting liability of trustees, profits from the operation of trust departments, et cetera, which will be of value to national banks which have received permits, or are considering making application for permits, to exercise trust powers. If the granting of trust powers to state banks is to be made a subject of legislation next winter in Michigan, the article contains information respecting safeguards for the protection of stockholders, depositors, trust clients and the public which will be of value to the law-making powers.

New York Savings Banks Gain

Under date of May 27 the Savings Banks Association of the State of New York states that savings bank deposits in New York State are still increasing. One hundred per cent return to a questionnaire recently sent out to all banks in the state indicate that the total amount due depositors on April 1 was $2,574,560,350, compared with $2,532,652,511 on January 1, 1921, an increase of $41,907,839 or 1.6 per cent for the three-month period. Reports by groups show that in the industrial sections of the state deposits have fallen off somewhat, following are the comparative figures by groups: I comprises Erie, Monroe, Niagara, Ontario and Seneca counties; II Broome, Cayuga, Chemung, Cortland, Jefferson, Madison, Oneida, Onondaga, Oswego, St. Lawrence and Tompkins; III Albany, Columbia, Dutchess, Greene, Montgomery, Orange, Putnam, Rensselaer, Schenectady and Ulster; IV Bronx, New York and Westchester; V Kings, Queens, Nassau, Richmond and Suffolk.

Group	Deposits 3-1-21	Deposits 4-1-21	Increase	%	Decrease	%
I	$ 236,932,509	$ 237,068,284	$ 135,875	.05	.....	..
II	114,994,536	114,177,942	.....	..	$816,594	.56
III	231,795,670	231,802,309	.....	..	493,361	.21
IV	1,367,729,129	1,376,874,404	9,225,275	.67	.....	..
V	567,974,168	585,037,349	17,163,180	2.01	.....	..

The actual amount deposited during the first quarter of the year was $279,461,256 against $238,103,460 withdrawn, leaving an excess of deposits over withdrawals for the State of $41,357,796, according to the questionnaire returns.

Digitized by Google

One year ago on the occasion of this Convention, we ran the following ad:

"For a period of eight years we have retailed bonds and performed other services incident to an Investment Banking business for the Banks of Michigan.

"During that period we have built up what we believe to be the largest Investment Banking business in Michigan today.

"During that period the salesmen and executives of this institution, with whom the bankers in Michigan have dealt, have remained practically the same.

"Our responsibility is definite, our market is fixed.

"Just so long as we continue to comprehend the fact that the interests of the banks in Michigan are identical with our own, our business will continue to grow.

"We fully intend that the rather remarkable growth that we have enjoyed during the past eight years shall continue in the future."

One year ago we had 8 salesmen. Since then we have increased our sales organization to 30—an increase of almost 300%.

During the same twelve months we have opened and built up a *Liberty Bond Department*, more as a matter of service than for profit. This Department is now acting as a clearing house in Liberty Bonds for the majority of the banks in Michigan.

In the spring of 1920 we organized a *Stock Department*, to render to those of our customers who place a portion of their funds in stocks and to that class of investors who buy only stocks, a high-grade investment service in stocks.

During this same year we have materially enlarged our *Municipal Bond Department*, specializing in Michigan Municipals.

The Detroit office, to which 9 salesmen are reporting at the present time, was opened during the year 1920 under the management of Mr. Charles S. Lee, with offices at 872 Penobscot Bldg. This office was made necessary by our growing business in Detroit and the eastern side of the state.

Our growth is only in line with the growth of this wonderful state and it is our hope that at the end of the next twelve months we shall all be able to look back on a period of marked progress and accomplishment.

HOWE, SNOW, CORRIGAN & BERTLES

INVESTMENT BANKERS

Grand Rapids Savings Bldg.
GRAND RAPIDS, MICH.

872 Penobscot Bldg.
DETROIT, MICH.

Digitized by Google

The 57 Varieties Of Financial Institutions

A Tabulated List of a Few Titles Commonly Employed And a Definition of the Functions of Each of Them

THE WORD "banker" is made to cover a multitude of financial activities, these days. The man who sells you a draft on Prague or Stockholm is sometimes called an international banker with the same readiness that J. P. Morgan & Company are described in the same terms. Likewise the man who opens an office on the "ith" floor of one of our office buildings and prints "Investment Banker" over his door in gold letters is often credited with the same standing that is given a dealer in high grade bonds. But it has been deemed that a code should be adopted whereby the public may be informed accurately of what financial titles are most generally supposed to mean, and also what misnomers the various titles may be. Therefore there is given below in tabular form a few titles of financial institutions, with a definition of the kind of business each title is supposed to represent, and occasionally a definition of some kinds of business that are often carried on under the same title.

Title	*Business Generally Conducted Under This Title*
Commercial Bank	Takes in deposits of merchant, manufacturer, municipality, club, individual, estate, etc., and lends the money to same class of borrowers for short terms. Makes collections; sells drafts, both foreign and domestic; issues letters of credit, travelers' checks, etc.
Savings Bank	Takes in deposits of funds intended as an accumulation toward an investment or intended as a reserve against contingencies. Bears the same relation to a commercial bank that a family hotel bears to a transient hotel. Because deposits do not fluctuate so violently, can make loans for longer periods and on less readily convertible security.
Trust Company	In Michigan the law confines a trust company very largely to a strictly trust business, such as acting as administrator, executor, receiver, and in similar trust capacities. The laws throw special safeguards around the investment of trust funds but there are no restrictions as to the investments of the company's own corporate funds. It may hold real estate in trust but is not permitted to do a general banking business. In many other states the title "trust company" is a misnomer. Trust companies in Ohio and Illinois may do nearly everything in the banking line that national and state banks may do, in Texas and some other western and southern states their powers are even broader. Thus a person should not be misled into thinking that the term "trust company" means in all cases the same kind and high character of business conducted by trust companies in Michigan. There are instances of record where trust companies have been formed which are merely adjuncts to fraudulent schemes. The legislature of Michigan is very jealous of the use of the terms "bank" and "trust company" and there are special statutes governing this subject.
Trust & Savings Bank	In states where separate incorporation is not provided for, this title is often adopted because of the peculiar business-getting force it has developed in certain communities. It means literally that the bank is doing a trust business in connection with a savings bank business; but the instances are rare where this is strictly adhered to. For example, the Illinois Trust & Savings Bank, Chicago, engage in the bond business and many other activities not strictly either savings or trust activities. On the other hand, the Central Trust Company, Chicago, engages in nearly every form of banking and bond business, besides conducting trust activities. Likewise with the Northern Trust Company, Indiana and Ohio are conspicuous in this respect.
Morris Plan Bank	Also known as the industrial bank. Chief function is making loans to wage earner on bank's indorsed note, to avoid evils of salary assignments and other abuses common in small loan business. Small loans are also made for purchase price of household articles. The bank retains a lien. Rate are midway between ordinary bank rate and "loan shark" rate and are so permitted by statute to cover extra cost in handling large number of small loans.
National Bank	By incorporating under the national law a bank elects to be governed in its loans and activities by the charter rights granted by Congress and to be supervised by Congressional authorities, although such banks are amenable to state law in all civil contracts. A national bank may use United States bonds of certain issues as security for its own circulating currency notes [first to the war and before the creation of the Federal Reserve Banks the national bank currency formed about 40 per cent of our paper money. On January 1, 1920, the total paper money outstanding was as follows:

United States Notes	$ 346,681,016
Federal Reserve Notes (all)	2,561,811,842
National Bank Notes	724,338,892
	$3,635,931,653

It is not mandatory any longer for a national bank to issue circulating notes. The Federal Reserve Banks are buying up the government issues which have heretofore formed the basis of national bank currency.

National banks are not divided into commercial and savings banks in their articles of incorporation, the charter rights carrying both privileges regardless of the name adopted. Until recently, savings departments were not conspicuous in national banks. National banks also have trust powers by a recent amendment to the Act.

State Bank

By incorporating under a state charter a bank elects to be limited by the charter provisions of the legislature of the state in which it is organized. In Michigan the state banks may incorporate as "commercial banks" or as "savings banks," or as combined commercial and savings banks, but if both kinds of business are conducted, the books and accounts of each department must be kept separate and the assets of each must be marked so that each may be identified. To all intents of the law, such an institution is really two banks operating under one roof. Michigan has an unusually rigid law covering the investment of savings deposits, which is pointed to by many observers as a reason for the absence of state bank failures in recent years.

Savings banks are required to invest about one-half of their deposits in high grade bonds—government, municipal, first mortgage, railroad—and first mortgages on real estate. There is another provision requiring about one-third of the deposits to be invested in loans collateraled by readily marketable securities having a safe margin over the amount of the loan. State banks have no currency-issuing powers but such state banks as belong to the Federal Reserve system may obtain federal reserve currency directly from the latter.

Federal Reserve Bank

A bank which does business with banks. It is a bankers' bank. It takes in the bankers' money and it lends money to the depositing bankers. Its other functions are (1) to provide a medium, or the machinery, whereby member banks may keep readily available reserves and (2) wherefrom they may obtain currency or credit in times of emergency.

Under the old system the actual available "reserve" of an ordinary bank, beyond money in its vault, was hard to ascertain. The Michigan country bank, for example, kept 20 per cent of its deposits in a Detroit bank. The latter kept 25 per cent of this sum in New York, and New York kept 20 per cent on hand in real money. Tracing it back, the Detroit bank kept in real money $2,000 of the $10,000 belonging to the country bank and the New York bank kept $400 of the real money left of the $2,000; so that in the final analysis there was only $400 in real cash behind the $10,000 reserve shown on the books of the country bank.

Now under the Federal Reserve law, each Federal Reserve Bank keeps in gold or lawful money 35 per cent to 40 per cent of the deposits made with it by member banks, so that the same country bank, carrying the forwarding paragraph, if it now belongs to the system, has actually available $4,000 in gold; and the Federal Reserve Banks have behind the remaining $6,000 in currency, if needed. The contrast is very striking.

Under the old system the only currency of the land was government notes and national bank notes. And neither could be issued fast enough in times of emergency to be of much use.

The Federal Reserve Bank, in contrast, can now issue currency in short order to its member banks upon approval of certain high grade paper offered to it by the members of the system. Thus a state bank, which is an "orphan" insofar as currency-issuing power is concerned under state charters, obtains a privilege held only by national banks prior to the creation of the Federal Reserve.

Incorporated banks are eligible for membership. They must subscribe for stock of the Federal Reserve Bank of their district to an amount equal to 6 per cent of their capital and surplus, only one-half of the subscription has been called for payment to date.

Federal Land Banks

A system of regional banks patterned somewhat after the Federal Reserve system and intended to enable farmers to obtain long-term loans at minimum interest rates. Under the act a certain number of farmers may get together and form a local association for the purpose of making loans to them. Late in 1920 there were 3,386 farm loan associations in the system, with total mortgage loans of $75,890,204 made by Federal Land Banks through these associations to about 13,000 farmer borrowers.

The Federal Land Banks have had a hard row to hoe right from the beginning in 1916. In spite of the fact that Congress provided that the U. S. Government furnish formal approval of all the capital the farmers did not supply and should buy about half the outstanding bonds to keep the system in operation.

The Farm Mortgage Bankers' Association attacked the validity of the tax exemption feature of the bonds and has opposed the farm loan banks as being an encroachment on the private farm loan business. But on February 28 this year the Supreme Court of the United States upheld the constitutionality of the tax exemption feature of farm loan bonds. It is interesting to note that of the $5,000,000 capital provided, the Government had to take $4,881,270 and that it also was obliged to buy $183,000,000 of the bonds. It was intended by the framers of the act that the farmers would supply the capital and that the public would buy

Digitized by Google

the bonds. "The loss to the government by reason of the tax exemption feature of these and other tax exempt bonds is running close to $800,000,000 annually," says the Wall Street Journal.

This species of legislation is a splendid example of the trend toward socialism and the political dangers of tax-exemption. Money raised by federal taxes is used to make loans to a class of citizens; then the burden is further unevenly distributed by making provision so that the wealthy bond purchaser can escape his share of the tax burden by buying these securities which are tax exempt.

Private Bank

An institution owned and operated by an individual or a firm and which conducts usually all kinds of banking business without supervision of state or federal authority. Illinois recently passed a law requiring private banks to submit to state examinations. A private bank can invest its depositors' money in the same manner as any individual. There is no protection except the honesty and prudence of the private banker. Up to a short time ago there were about 250 private banks in Michigan outside of Detroit. The Ellis private bank at Grand Rapids, which closed recently, was said to be the largest in the United States outside of New York, having deposits of more than $4,000,000.

When the owner of a private bank dies, the debts or liabilities of the bank are settled in the same manner as the personal debts of the owner. Grand Rapids has been given a good example of this weakness in the death of George E. Ellis, the depositors having waited about three months for their money, and with little prospect, as yet, of a 100 cent payment. Private bank losses in a private bank are usually disastrous to depositors as compared with incorporated banks. There in Michigan has been examples of this side by side. In a certain private bank which lost about $100,000 through depleted assets, the depositors have waited many weeks for settlement, while the close-by incorporated bank, which had a loss of several hundreds of thousands of dollars at about the same time, has more than or has been abut a day. It is said there are only three states in which private banks may operate.

Foreign Trade Bank

Under an amendment to the Federal Reserve Act known as the Edge law, incorporated banks may take stock in a bank organized for the promote foreign trade by handling exports and importing. There are two main kinds of Edge law banks—first those which make a specialty of purchasing acceptances and short-term paper arising out of export or import business and, second, those which make a specialty of granting long-term credits to foreign purchasers and who finance these investments by issuing debentures secured by a pool of foreign paper so acquired. There are some 40 banks in this country now in operation. The principal example of the latter, the proposed "Foreign Trade Financing Corporation," with $100,000,000 capital, is now in process of organization. The intention is to provide by various titles but the general purpose of their organization is to get together large accounts which the individual banks of cities of business which ordinary commercial banks are not equipped to accommodate.

Investment Banker

An individual, firm or corporation that makes a business of buying large blocks of high-grade bonds, notes, stocks or other securities and sells them at a profit to individuals, estates and banks. The real investment banker handles his securities in much the same way as any high-grade merchant. He buys in quantities at one price and sells in small lots at a higher price. After a new issue has been entirely disposed of to investors it often happens that some of the purchasers wish to sell their securities, and in this situation he acts either as broker, by finding a buyer and charging a commission for making the sale of services, or he re-purchases the investment himself in the expectation of selling later on. When new issues have been entirely sold to parties who hold them for investment purposes, it is then said that the issue has been "digested."

When the issue is large there may be several "wholesalers" between first purchaser and ultimate investor. This is necessary because no one firm can have command of a sufficient number of customers to sell all the bonds direct. In this event the process of distribution is much like the handling of any commodity between manufacturer and retailer. The underwriting syndicate of which contracts in the first place to buy the issue is the wholesaler; next come a number of sub-agents, corresponding to the jobber; and each sub-agent has a number of connections which do the retailing.

The title "investment banker" is often corrupted by persons who deal in highly speculative stocks or promotion schemes, and it behooves an investor to make careful inquiry.

The class of securities handled by bankers in this classification may vary in each concern. Some make a specialty of real estate bonds, others municipal bonds and still others in public utility bonds. But in all of these the true "investment banker" endeavors to sell only such securities that by reason of past performance are entitled to the term "investment."

Land Credit Bank

A term borrowed from Europe. There is a strong similarity between our Federal Land Banks and the land credit banks of Europe. In both the borrower becomes a depositor as well. After a borrower has received his loan he continues to be a depositor and the gathering together of large numbers of small deposits furnishes a fund which members in turn may borrow. Ordinarily the form of organization is mutual.

Mutual Savings Bank

These institutions are not organized for profit to stockholders. The depositors are the owners and the business is managed by trustees, who are paid nothing beyond salaries. The profits that ordinarily would go to stockholders become available for distribution in the form of higher interest rates on deposit than privately owned banks pay, or are used to build up a reserve against losses. New York has several large savings banks of this type. Deposits of the Bowery Savings Bank, New York, for example, are about $100,000,000, and of the Seamen's Bank for Savings, about $80,000,000. There is another prominent example in Minneapolis.

Discount Corporation

Organized to purchase commercial paper given in payment or part payment for goods and chattels. Persons buying stock in such concerns become partners in the enterprises and share profits and losses in accordance with the rise and fall of the prosperity of the business. Of late years partial payment notes given for automobiles and pianos have formed the major portion of the business of discount companies.

Finance Company

Objects are much the same as those of the discount corporation, although the scope of the finance company undertakings is often much broader and includes discounting land contracts, buying second mortgages, etc., in addition to automobile discounts. In fact, the charter rights of some finance companies are so broad that almost any financial undertaking short of a general banking business or a trust business may be conducted.

Bond and Mortgage Company

The general run such concerns handle real estate bonds, although there are many that do not so confine themselves. Owners of real estate requiring larger loans than any bank or single investor is apt to make mortgage their property to a trustee, who holds title and collects in addition to standard denomination which in the aggregate equal the face of the mortgage. Thus a small investor enjoys the same degree of safety as one who might lend the whole sum.

Stock Broker

An individual, firm or corporation whose principal function is to act as go-between for buyers and sellers of stocks. He also raises capital for new enterprises. Those who are members of recognised exchanges must abide by rules of trading, commissions, etc., and the standing of the exchange to which they belong is often a good measure of the integrity of the individual brokers.

Clearing House

A voluntary association of banks which performs at one place and at one time the exchanging of checks between its members. In this respect it is a labor-saving device. The members agree mutually to certain regulations also to rates and charges in order to promote safe banking conditions. Before the Federal Reserve Banks were organized, the clearing house associations in time of panic issued clearing house certificates which passed as currency.

Foreign Exchange Banker

An individual whose principal business is selling drafts on foreign points and transmitting money. Some have their own funds deposited in foreign banks, against which they issue their own drafts or checks; others simply work on commission. In Michigan dealers in foreign exchange must obtain a license from the banking department of the state and are subject to periodical examination by state authorities.

Building & Loan Associations

According to Chas. D. Hanchett, secretary of the Detroit and Northern Michigan Building and Loan Association, Michigan is very backward in the matter of investments in co-operative building associations as compared with other states. He states that Dayton, Ohio, has $55,000,000 in assets, Columbus, Ohio, $55,000,000, Cincinnati, Ohio, $46,000,000, Cleveland, Ohio, $60,000,000, with a grand total for the state of Ohio of $525,000,000 against a total for Michigan of about $50,000,000. Pennsylvania has $475,000,000, New Jersey, $238,000,000. Comparing individual associations he states that Columbus has one with $21,000,000 of assets and Youngstown has one with $14,000,000 of assets, while in Michigan the largest has only $7,000,000 of assets. Pennsylvania heads the list as to members, having 2,785 associations with more than 1,000,000 members who in 1920 built 42,000 homes. Ohio follows with 777 associations having 972,000 members. Michigan comes ninth with 75 associations having 99,000 members. It is proposed to exempt income from stock in these associations up to $500 in order to stimulate investment therein.

It should be borne in mind that with 48 different state laws there is bound to be conflict in some of the above statements. These titles have been described from the Michigan standpoint.

MERCANTILE FAILURES IN THE UNITED STATES

(R. G. Dun & Co.)

Year	Number	Liabilities
1921, 1st. Q.	4,573	$130,387,959
1920, 1st. Q.	1,927	29,702,489
1919, 1st. Q.	1,904	28,823,052
1918, 1st. Q.	3,200	49,780,300
1919	9,451	113,393,227
1918	9,982	163,019,179
1917	12,955	192,444,371
1916	11,652	166,212,934
1915	22,156	303,286,148
1914	18,280	227,909,264
1913	16,037	272,622,569
1912	15,452	203,137,391
1911	13,441	191,061,855
1910	12,652	201,757,097
1909	12,924	154,092,465
1908	15,990	222,215,684
1907	11,725	197,283,225
1906	10,982	139,201,515
1905	11,520	102,676,172
1904	12,199	144,202,314
1903	12,068	155,444,155
1902	11,615	117,474,769
1901	11,002	113,092,376
1900	10,774	138,495,573

Digitized by Google

The Modern Bank Building as a Civic Asset

What It Means to the Institution Which Erects It, And Its Influence As Well Upon the Community

By NOBLE FOSTER HOGGSON
President, Hoggson Brothers, Builders, New York

IT IS CONSIDERED a perfectly natural thing for the stranger coming into a community to place his money in the care of that institution which by its exterior aspects convinces him of its dependability. Although it is perhaps only the effect of imposing columns and dignified architecture, subconsciously the stranger's mind is put at ease and he leaves the bank of his choice satisfied that his money or securities are safe. And rightly so, for was that not the purpose of those who decided to erect such a building—to construct a home which would reflect correctly the good faith and stability of the business men who controlled the institution? Furthermore, was not the decision of these bankers in keeping with their civic responsibilities?

The man who is charged with caring for the funds of his fellow citizens must have a lively sense of his obligations to the community over and above finances or he is failing short of what his patrons and the public at large have a right to expect of him. He must be a civic leader.

Civic spirit in the banker may be most readily and signally exemplified by the building in which he transacts his business. It often happens that the best index to the progress and prosperity of a community lies in the outward aspect of its bank buildings.

In these days of strenuous advertising, when banks spend large sums to keep their names persistently before the public, an impressive building is at once the best investment and the best advertisement a bank can have. The building stands, day in and day out, consistently advertising the institution it houses. The city claims it for its own, as a civic improvement, a thing of beauty and worth; each depositor has a real joy in the consciousness of part ownership and every resident in the community refers to it with pride.

The value of this perception on the part of the public is peculiarly effective. One who has contemplated the "psychology of increased deposits" can readily comprehend the effect that a dignified and substantial bank building has on the public mind, and the confidence it begets. The building typifies the institution and both become capitalized in the minds of the public. The investment of capital in an edifice for a banking institution for the carrying on of its principal business inspires the public with a sense of faith and security in the stability and prosperity of the institution. Increase in confidence brings about increase in deposits; thus the money invested in the new building becomes a paying investment and an asset.

Unconsciously, other people look to the banker to set the pace. Let the bank take the lead in an architecturally ambitious building and the next project in a community is either a new post office, new school building or a public library. As his initiative in building may make over a small community, so in the larger cities the banker may make over his district, increase real estate values and bring about an acceleration of enterprise that returns his investment four-fold. The banker who takes stock of the community's needs in the way of building and deliberately sets about to give his town or his neighborhood the proper turn in its building operations, at once puts himself in the position of dominating the more potent features of the civic life of those with whom he comes in contact. He has acquired a new leverage on prestige and on patronage. Incidentally he has chosen while it is yet to choose what shall be the architectural setting of his financial life. That setting does not end with his own building but extends to his block, his street and his district, if not the entire municipality.

There are bankers who can trace their greatest success back to the day when they realized that the town or the district needed more than anything else a modern office building. Others are happily reminiscent of the time when they decided to displace the antiquated home of the bank with one of imposing beauty and utmost convenience. There is no better, more practicable application of the civic spirit, no better advertisement, no better civic investment for a bank than to create a home for itself that shall raise the tone of building operations in the community.

Similarly there is no aim more worthy of attainment than that of becoming an expert in the planning and erection of bank buildings. For no bank building is built unto itself; it is, in the very nature of things, the heart of that body which is its sphere of influence. He who creates homes for banks must have the vision to see the buildings that are to follow. Personally I should not care, if I were a banker, to engage an expert who could not, in his mind's eye, see not only my own building but the other buildings which must, because mine is erected, occupy the sites nearby. And I should much prefer one whom I could commend to my neighbors even before he had completed the task I had set him. I would not want my Roman-Doric example of civic pride to be placed on the wrong side of the site—a site upon which its influence would be lost. I would want his advice upon that subject, after a survey of the environs. Neither would I wish to erect a more obviously utilitarian building—a skyscraper, let us say—among surroundings the changing exterior of which might defeat my highest hopes.

Civic examples are not confined to exteriors, however. Interiors which show taste and convenience are business producers and waste savers, and as such are the best possible civic criteria. One banker of my acquaintance turned the tide which had set against his institution and came within a very few years to dominate the finances of a city of 500,000 by building a skyscraper and attracting a host of small depositors to his institution by the happy arrangement of a hopeless looking basement room. The impressive first floor was devoted to the counting-rooms of his bank, but for his struggling trust company, which was to feed the bank, he took the basement or half-basement.

Into that basement was put, in compact shape, every modern convenience for trust company banking. No minor official or attache of that institution suffered from overstrained nerves, tried eyes or a hopeless rush of work. What machinery could do, machinery did, and the lighting and ventilation were perfect. From behind the harmonious screen of marble and bronze grille peered no tired faces. The working force was alive to its possibilities and banking was apparently the joy of its collective life.

Just as harmonious and modestly impressive were the railed off but otherwise entirely open offices of the officials of the institution, bringing them in close personal contact with the patrons. Best of all, there was a generous lobby, there was no pushing or crushing in the rush hours, and the lines were under the constant eye of some solicitous official.

At bottom it was a building problem solved by a bank planning expert that brought the head of this group the financial domination of this city. No less important than the towering skyscraper was the half-basement, which was so well utilized that it carried at once to the attache, the official and the patron a sense of virile confidence that literally made millions for the bankers who constituted the group under the leadership of the far-seeing president.

While no two banks need be alike, all banks should know about and take advantage of the many new ideas in construction and improvements in equipment which have been tested and found to be essential and economical for conducting modern banking.

There are special conditions affecting the lines of activity of different banking institutions which require individual study. One bank conducting a strictly commercial business discovers that the new arrangement of the officials' desks has the effect of pleasing its customers, who see in the new layout a compliment to themselves. The practical working of the "open door" policy has untold value.

Another bank in its new building finds not only that the business is carried on much more easily and effectively, by reason of the increased public and working spaces, but that by the scientific arrangement of the working space the employes are able to get the greatest amount of competent usefulness with the least amount of effort.

In other banks the problems presented by narrow lots are overcome, the very obstacles lending a zest and presenting a challenge that brings into play the best resources of the designers, affording happy and skilful results.

Digitized by Google

"Oldest Safe Manufacturers in America"

Established 1851

Fire and Burglar Proof, Safes



Burglar Proof Safes and Bank Vaults

Manganese Safe

Bankers' are invited to call at our salesrooms

Detroit Safe Co. - Diebold Safe & Lock Co.

25-27 West Jefferson Avenue, Detroit

Your Bank Account is Open to Attack Every Time You Write a Check

WE INSURE THE DRAWER

As well as Your Bank

Rate: $5.00 per $1,000.00 per Annum

(*No Check Writers Required*)

Detroit Insurance Agency

Eleventh Floor Dime Bank Building

PHONE MAIN 3200 DETROIT, MICHIGAN

GEORGE J. GNAU LOUIS J. LEPPER GEORGE W. CARTER HENRY L. NEWMAN

Digitized by Google

A Stock Exchange

Its Functions, Operations, Rules and Its Place In the Financial Machinery of the City and Nation

By JACOB NATHAN
Secretary of the Detroit Stock Exchange

A STOCK EXCHANGE is the common meeting ground of the owners of corporation securities; that is to say, the exchange is the central point of clearing house through which one may enter either buying or selling orders. And inasmuch, of course, as it would be physically impossible and otherwise undesirable to have all of the owners meeting together to transact their business, their orders to buy or to sell are executed by brokers banded together in the form of an organized stock exchange. Thus likewise does a commodity exchange serve those who buy and sell those commodities for which such exchanges are organized. Therefore we have coffee exchanges and cotton, grain and other organized centers or markets of distribution.

It must be borne in mind that notwithstanding that a stock exchange merely clears or performs transactions in scraps of paper, each piece of paper represents a definite ownership in the property and earnings of a corporation. The exchange, then, is neither a buyer nor a seller of either securities or commodities; it is merely the meeting place of those who hold commitments for the actual owners of the securties or the commodities. Without such institutions as stock exchanges there could be not great body of security holders because there would be no convenient or ready or stabilized market in the event holders wished either to buy or to sell.

The owner of a security demands that he be able to buy additional securities or sell what he already possesses immediately he determines to do so. The holder of a security must be in position to convert his holdings into cash without delay, as business interests may demand. The general trend of the market may make it imperative; at any rate the ready convertibility of a security into cash is what makes this form of investment desirable; consequently the stock exchange facilitates these transactions in that there is ever ready a group of brokers any one of whom will promptly negotiate the transaction desired.

Of paramount importance also is the maintenance of uniform prices for securities. Let us assume that there were no stock exchange in existence and the securities of a certain corporation were in the hands of 5,000 owners distributed in various cities. What would be the ruling price of that stock in any certain period? Admittedly there could be no uniform price because while one person was offering to sell at a certain price in one community others might be offering to sell at greatly varying prices in other communities. But with the bulk of the orders in those securities going through an exchange as a common market place the price is stabilized and the holders of that security, no matter where they may be located, know at all times and under all circumstances, the value of their securities.

The stock exchange is one of the most important cogs in the wheels of finance and industry. It has its definite place in the country's great financial and industrial structure. Industry cannot expand and grow without capital. When a corporation issues securities to make such expansion possible it merely invites an added number of partners in that particular business. On the other hand, individuals invest in the securities of industrial corporations because as a rule those securities sooner or later are listed on a stock exchange and the market value is thus established uniformly.

Were there no stock exchanges and were it thus impossible to main a stabilized market value for securities, corporations would find it difficult if not quite impossible to obtain distribution of such securities as would make it possible to expand their business. True, banks and other financial organizations do underwrite or buy the issues of securities of such corporations; but do not lose sight of the fact that the banks and other organizations who perform this function are merely wholesalers. That is, they take the securities in wholesale lots, apportion them among brokers or selling agencies and the latter in turn become retailers. The public in all events must be the ultimate consumer.

This does not mean that banks and other financial institutions do not buy corporation securities for investment. Their principal function, however, is to act in the capacity of wholesale distributors. They would find their task, however, a difficult if not an impossible one, if as already indicated there were no stock exchanges through which the ultimate consumers could eventually find a protected and a stabilized market.

When I say a protected market I incidentally touch upon another very important function of a stock exchange. When a security is listed upon the exchange a searching investigation as to the corporation's financial standing is made. It is then required that such corporation at all times keep the exchange fully informed as to its progress, such information including statements of earnings at frequent intervals, of details of dividend declarations and all other matters as pertain to the general progress and development of the corporation whose securities are thus listed. This information immediately is given to the public. The owners of a corporation's securities are kept advised as to what progress their business is making. When a corporation refuses thus to take its stockholders into its confidence an exchange will throw such listing off its board. When it comes to pass that an exchange can no longer adequately protect the market in any of the securities listed with it, then such listings are removed and the responsibility placed squarely upon the shoulders of the corporation. It is because of this that the bulk of the vast amount of securities transactions in the United States consists of securities listed on the various stock exchanges.

Publication daily of quotations of the various exchanges is another expedient by which a stock exchange aims to protect the stockholders of corporations and the market in general. The daily stock exchange quotation list is the barometer by which the holder of securities may determine his course. Without such publication of quotations there could be no uniform or protected market and there can be no such fair and impartial list unless it comes directly from a stock exchange.

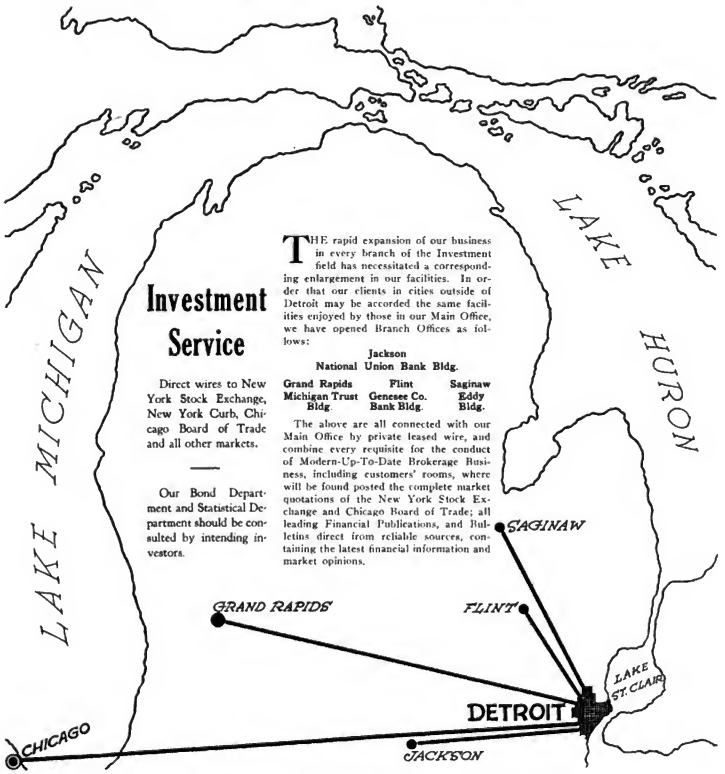
What Are the Advantages, Both to Corporation and Stockholder, Of Having Stock Listed on a Recognized Exchange?

THE STOCKHOLDER PUBLIC has become so accustomed to the benefits of the stock exchanges of the country that there has grown up a "take it for granted" attitude toward listing stock. In some respects the situation is much like that of many good men who fail to appreciate their wives until death comes along and suddenly wakes them up to a realization of what the wife means.

Organized market institutions are not new. By looking back a few hundred years we can trace the growth of many cities to their prominence as reliable market places. The Forum of Rome was without doubt the most famous market institution of that age, and it is said that long before the organization of the Roman empire the forum was a market place for cattle. Strangely enough, even now the Italian peasants still drive their cattle to the market place. In our own stretch of history the Chicago grain market exerted a powerful influence over the destinies of Chicago as a business center long before it became a great city because of other factors which we now commonly point to.

Underneath it all the thing that brings a buyer to an organized market of any kind is confidence. It is a confidence that buyer and seller will meet on a basis of fair play and a confidence that the man appointed as agent will deal fairly. In handling commodities business men are all in agreement as to the benefits to be derived from having

Digitized by Google



Investment Service

Direct wires to New York Stock Exchange, New York Curb, Chicago Board of Trade and all other markets.

Our Bond Department and Statistical Department should be consulted by intending investors.

THE rapid expansion of our business in every branch of the Investment field has necessitated a corresponding enlargement in our facilities. In order that our clients in cities outside of Detroit may be accorded the same facilities enjoyed by those in our Main Office, we have opened Branch Offices as follows:

Jackson
National Union Bank Bldg.

Grand Rapids	Flint	Saginaw
Michigan Trust Bldg.	Genesee Co. Bank Bldg.	Eddy Bldg.

The above are all connected with our Main Office by private leased wire, and combine every requisite for the conduct of Modern-Up-To-Date Brokerage Business, including customers' rooms, where will be found posted the complete market quotations of the New York Stock Exchange and Chicago Board of Trade; all leading Financial Publications, and Bulletins direct from reliable sources, containing the latest financial information and market opinions.

Orders executed in any market in the country. All listed and curb stocks bought or sold for cash or carried on conservative margins.

Monthly Payment Plan: Stocks or Bonds may be purchased for investment by paying a small percentage down and the balance monthly. Write for our booklet, "Savings Opportunities." It explains this plan fully.

WEBB, LEE & COMPANY

Members Detroit Stock Exchange — Chicago Board of Trade

Penobscot Building **DETROIT** **Phone Cherry 6305**

Digitized by Google

George M. West & Co.

INVESTMENT BANKERS

Established 1893

GOVERNMENT BONDS
MUNICIPAL BONDS
CORPORATION BONDS
PREFERRED STOCKS
INDUSTRIAL SECURITIES

TENTH FLOOR, UNION TRUST BUILDING

Telephone, Main 1118 DETROIT, MICHIGAN

Members Detroit Stock Exchange

BENJAMIN DANSARD & CO.

Investments

360 Penobscot Building

Phone Main 6844 Detroit, Mich.

Listed and Unlisted Stocks

Government - Municipal - Corporation Bonds

an established market place, yet when it comes to securities many of the same men disagree. Why this should be can be explained only by the apparent fact that business men are not as familiar with stock markets as they are with cattle markets or grain markets or perhaps automobile markets.

For an illustration of the advantage of having a stock listed let us take a particular case which came to the writer's attention recently. There was a physician who was possessed of 100 shares of a certain truck company's stock and who was very anxious to sell the same. He noticed in the daily papers that Broker & Company "specialized" in his particular stock, so he called them up and asked for a quotation. The ensuing conversation was something like this:

Doctor—"What can I get for 100 shares of ———— stock?"

Broker—"That's hard to say. It was selling around $10 a share, but there haven't been any bids recently. What is the least you would take for your stock?"

Doctor—"Why, I want par of course. That's what they told me I could get if I wished to sell at any time. Anyhow, the company is making lots of money and will soon pay a dividend."

Broker—"Who told you about the large profits of the company, and did you ask them to buy your stock?"

Doctor—"I asked the company to buy my stock and they said they were perfectly willing, but at present they had all they wanted in the treasury. They said they were making good profits and I would be foolish to sell now."

Broker—"If you will give us exclusive sale of your stock for a few days we will try and find you a buyer, but so little is known about the affairs of this company that investors are all in the dark as to its real value. You know this is an unlisted stock and no one outside of the company is given any authentic information."

The physician agreed that the broker should have a ten-day option on the stock at $10 a share and the broker spent several days trying to find a buyer, but every investor approached shied for the same reason—that there was nothing definite on which to base the purchase. Finally the broker found a man who was willing to give $5 a share for the stock. He called up the physician, who promptly refused to consider such an offer and furthermore roundly abused the broker for "trying to swindle me."

As often happens, the physician called up another broker. This time he received similar advice but was told further that if he did not accept $4 or $5 a share now he might not be able to get very much, if anything, later on. He was dealing now with a broker who did not belong to the stock exchange and who was entirely out of sympathy with the idea of getting his customer "the market value" for his stock. The broker promptly got into touch with some unsuspecting parties and told them he could sell 100 shares of the stock at $12 a share, which was readily accepted, for the parties had been led to believe the company was in good condition and about to declare a big dividend. He then went back to the doctor and bought the stock for $5 a share. Doctor lost $500; broker made $700.

Now if this had been a listed stock the story might have been wholly different. The doctor's first broker would have had on file periodical financial statements of the company, which would have enabled him to arrive at a fairly accurate value of the stock, and the record which the stock exchange would have kept of sales would have given a good idea of market value, in addition to which there would probably have been a recorded bid as a current indication of the "market value" of the stock.

Here, then, is an example of manipulation, and it is the confusing of deals of this nature with the popular notion of "stock exchange manipulation" that gives rise to the latter. A stock exchange, rather than being an aid to manipulation, if properly conducted, is more a defense against it. People will speculate as long as there are seasons of weather, changes in the yield of grains and as long as the tide ebbs and flows, and no law or set of laws will ever prevent it. But the stock exchange tends to discourage dishonest speculation in requiring persons who wish to buy stocks to back up their bids with cold cash when the seller accepts, and vice versa.

Once in a while there is some attempt to do away with speculation. We learn from J. Edward Meeker, writing in the Magazine of Wall Street, that "the only man who has ever seriously attempted permanently to close the organized speculative markets is Nicolai Lenine, the Bolshevik autocrat of Russia, and that as a result of his efforts, speculation has grown in every commodity, even though he has forbidden it under penalty of death; and that the net result of his attempted improvements has been the economic prostration and ruin of industrial Russia."

For another example of the value of having stock listed we have fresh in our minds the action of Sears, Roebuck & Company common stock early this year at the time it was believed the dividend rate was going to be cut. It had become common knowledge before Christmas that the business of the mail order houses had suffered severely by

Digitized by Google

reason of the business depression, and as a result the stock began to drop down a few points each day; but there was scarcely a day when it did not regain two or three points of its loss, due to what? To the fact that there were speculators who had faith in the company and believed in the eventual recovery of the stock. This steady day-by-day drop in price of the stock was a forerunner of the dividend action which followed in February, and it was the signal to the man who wanted to raise money that he had better sell while the selling was good. Many people did sell; but the point is, had there been no speculators the stock would have toboggoned swiftly and investors would have been obliged to take one-half of the price which speculators offered, and had there been no organized exchange, the stock might have sold for $95 in Chicago, while it was selling for $65 in New York, or vice versa.

It is perfectly conceivable that a close corporation with only a few stockholders might reasonably decide that listing its stock had no advantages for its particular case. But every so often something happens to demonstrate how listing its stock and making periodical reports could be of value to most any corporation dealing with the public. Recently a man walked into this office and asked what we knew about the ———— Motor Company. The stock not being listed, the public had never been given much information about the finances of the company, and this party, having in mind the purchase of one of the company's automobiles, was anxious to find out whether the company was in good enough financial shape to withstand the continued business depression. For as the intending purchaser expressed himself, "I do not want to buy a car that will be an orphan six months from now." Inquiry was made direct to the company, which replied that it was not its custom to make its affairs public. Putting it in the words of the treasurer, "we do not believe in advertising it every time we make a dime or lose one." Result in this case was that the inquirer bought a car of another make which had listed its stock on an exchange and had made it a policy to keep its customers posted as to its finances.

STATISTICAL RECORD OF SOME REPRESENTATIVE MICHIGAN STOCKS, LAST THREE FISCAL YEARS

(Data Furnished by Detroit Stock Exchange.)

Name of Stock.	Dividends Paid % 1920	1919	1918	High, Low, 1920	Price Range High, Low, 1919	High, Low, 1918
Amer. Light & Traction	18¾	16 — 10C	—	204—104	277½—175	———
Bower Roller Bearing	15	51.6	5	29—16	32½—23	25⅝—16
Commerce Motor	9	8	—	18½—15½	18— 10½	———
Continental Motors	—	6½	8	14⅝—5⅝	14½—7⅝	9—5⅝
Detroit Brass (Formerly Detroit Valve & Fittings)	6	6	18	96—92	———	125—100
Det. & Clev. Nav.	20S	8	8	100—67	90½—75	74¼—64⅝
Detroit Creamery	17	14	—	28⅝—16	36¼—29¼	25⅝—15½
Detroit Edison	8	8	8	111—92⅜	132½—109⅝	119½—92
Edmunds & Jones	$2	$1	$.50	34—14½	40⅝—19⅝	20⅝—17
Federal Truck	100S	29	24	82—16	72—32	———
Ford of Canada	45	35	6	460—210	600—320	252—146
Gen. Alum. & Brass	5S	14	9	28—11	21—21	24—24
Hall Lamp	20	20	15	32½—16	31—24	16⅜—12⅜
Hayes Mfg. Co.	15	6	12	8¾—2⅝	10⅝—8	———
S. S. Kresge Co.	3	6	5	151—120	160—159	102¼—80⅜
Lincoln Motor	$2.50	—	—	50⅜—13½	———	———
Mich. Drop Forge	$4	$2	$1.80	50—38⅜	42—14⅜	15—14⅜
Michigan Stamping	6⅜	15	12	30—16⅛	25—12⅜	14⅜—12⅜
Michigan Sugar	7	5½	10	13⅛— 7¼	14— 8⅜	9⅛— 7
Miles Detroit Theater	42	45	10	21—15¼	14⅜— 9⅜	8⅜— 7⅛
Motor Products	—	—	—	60⅜— 47	66— 51	———
National Grocer	6	11	11	156—156	125—125	104—97
Packard Motor Car	10 30C	13	6	28¼— 9½	27½— 26	125—92½
Paige-Detroit	32 1-3S	29	17	45¼—12⅜	46½—23¾	24—12⅜
Parke, Davis	20	20	20	117½— 95	129—110	115⅝—85½
Reo Motor Car	10	10	10	29¾—16⅜	38— 20	31—12⅜
Scotten-Dillon	8	8	18	39—25¼	42—28⅜	42¼—26¼
Timken Detroit Axle	24	12	24	63¾— 26	———	———
Trucon Steel (Com.)	16	16	16	29½— 10	———	———
White Star	3½	7	3	50⅛—50½	50½—29½	50—38

TOTAL NUMBER SHARES SOLD, DETROIT STOCK EXCHANGE

*1914	78,142	*1918	430,022½
*1915	339,817	*1919	1,175,963
**1916	1,485,067	*1920	2,416,911
*1917	447,676	1921 to May 15	2,836,509

*Unlisted securities not included in any year's total until in 1921.
**1916 was a year of unusual activity in Chevrolet Iron, Continental Motors and Reo Motor Car.

THE OLDEST HOUSE IN MICHIGAN

SAFETY INCOME PROFIT MARKETABILITY

These four fundamentals should be chiefly considered in choosing the investment best suited to your individual needs. Secure all of the information available on your prospective investment and test it as regards these qualities.

This house has been continuously in business longer than any other investment house in the State of Michigan. For more than a quarter of a century it has endeavored to place with its customers securities of merit suited to their particular requirements. It offers its statistical records and complete security information to assist you in selecting wise investments.

H. W. Noble & Company

Dime Bank Building

DETROIT

Digitized by Google

CARLYLE & POVAH

INVESTMENT SECURITIES

Members Detroit Stock Exchange

LISTED AND UNLISTED STOCKS AND BONDS BOUGHT AND SOLD IN ALL MARKETS ON COMMISSION.

FOREIGN BONDS, EXCHANGE AND CURRENCY BOUGHT, SOLD AND QUOTED.

Direct private wire to New York Curb and connections with principal cities keep us constantly in touch with all available markets.

YOUR INQUIRIES ARE SOLICITED

Telephone MAIN 4800

604-608 PENOBSCOT BLDG.

Lee, Gustin & Company

Members Detroit Stock Exchange

STOCKS and BONDS

420 Dime Bank Building

DETROIT

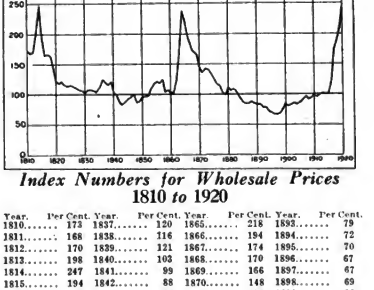
Arthur V. Lee, Jr.

William M. Lee — Nelson S. Gustin

Cherry 7210

Two Major Cycles of Wholesale Prices 1810 to 1920

[From the Annalist.]



Index Numbers for Wholesale Prices 1810 to 1920

Year.	Per Cent.	Year.	Per Cent.	Year.	Per Cent.	Year.	Per Cent.
1810.....	173	1837.....	120	1865.....	218	1893.....	79
1811.....	168	1838.....	116	1866.....	194	1894.....	72
1812.....	170	1839.....	121	1867.....	174	1895.....	70
1813.....	198	1840.....	103	1868.....	170	1896.....	67
1814.....	247	1841.....	99	1869.....	166	1897.....	67
1815.....	194	1842.....	88	1870.....	148	1898.....	69
1816.....	165	1843.....	84	1871.....	137	1899.....	76
1817.....	167	1844.....	88	1872.....	142	1900.....	83
1818.....	163	1845.....	93	1873.....	141	1901.....	81
1819.....	141	1846.....	95	1874.....	134	1902.....	84
1820.....	123	1847.....	100	1875.....	126	1903.....	85
1821.....	118	1848.....	87	1876.....	117	1904.....	84
1822.....	121	1849.....	89	1877.....	114	1905.....	87
1823.....	115	1850.....	95	1878.....	103	1906.....	92
1824.....	114	1851.....	97	1879.....	99	1907.....	97
1825.....	115	1852.....	98	1880.....	110	1908.....	92
1826.....	113	1853.....	109	1881.....	107	1909.....	95
1827.....	111	1854.....	118	1882.....	109	1910.....	99
1828.....	108	1855.....	121	1883.....	103	1911.....	96
1829.....	107	1856.....	119	1884.....	93	1912.....	100
1830.....	103	1857.....	125	1885.....	87	1913.....	101
1831.....	107	1858.....	106	1886.....	85	1914.....	100
1832.....	108	1859.....	107	1887.....	85	1915.....	101
1833.....	107	1860.....	105	1888.....	88	1916.....	124
1834.....	104	1861.....	103	1889.....	85	1917.....	176
1835.....	111	1862.....	122	1890.....	84	1918.....	196
1836.....	125	1863.....	168	1891.....	84	1919.....	212
		1864.....	237	1892.....	79	1920.....	244

GROWTH OF STATE BANKS IN MICHIGAN

RESOURCES

	*Jan. 7, 1889	†Nov. 18, 1919	‡Sept. 8, 1920
Loans	$20,815,697	$783,483,137	$ 888,420,083
Banking house, furniture and unpaid profits	524,411	18,242,950	20,908,947
Cash on hand and in banks	7,560,661	171,152,184	176,800,270
Total	$28,900,770	$942,883,311	$1,086,139,310

LIABILITIES

Capital stock paid in	$ 5,519,425	$ 46,008,270	$ 58,937,560
Surplus fund and undivided profits	1,819,835	45,058,213	82,835,122
Deposits	21,284,124	827,162,867	924,271,684
Bills payable and rediscount	278,385	24,653,960	52,194,943
Total	$28,900,770	$942,883,311	$1,086,139,310

*26 banks.
†518 state banks, 16 trust companies, 2 industrial banks.
‡536 state banks, 16 trust companies, 2 industrial banks.

NUMBER OF COMMERCIAL AND SAVINGS DEPOSITORS, AGGREGATE DEPOSITS AND PER CAPITA DEPOSITS IN ALL MICHIGAN BANKS.

Banks	Class of Deposits	Number of Depositors	Amount of Deposits	Average to Each Depositor
540 State Banks	Commercial	553,720	$ 371,750,184	$ 671
11 Trust Companies	Savings	1,575,419	323,085,683	332
114 National Banks	Demand	140,456	170,590,000	1,214
	Time	363,141	121,692,000	335
Totals		2,632,786	$1,187,027,868	$ 450

Digitized by Google

UNITED STATES IMPORTS AND EXPORTS BY GROUPS
CALENDAR YEARS
IMPORTS

Groups	1920	1919	1918	1917	1916
Crude materials for use in manufacturing	$1,782,870,382	$1,674,255,094	$1,220,285,963	$1,268,181,293	$1,060,581,027
Foodstuffs in crude condition, and food animals	577,626,024	515,267,772	346,653,677	305,724,574	260,172,629
Foodstuffs partly or wholly manufactured	1,258,152,111	860,491,255	397,170,129	253,446,380	239,706,207
Manufactures for further use in manufacturing	902,924,195	610,222,973	649,544,630	541,192,701	417,840,566
Manufactures ready for consumption	877,372,747	492,835,664	404,906,155	307,194,695	245,577,697
Miscellaneous	31,583,948	26,515,374	13,611,977	11,716,802	10,773,663
Total imports	$5,270,398,221	$4,004,106,327	$3,031,212,716	$2,562,467,965	$2,234,651,335

EXPORTS

Groups	1920	1919	1918	1917	1916
Crude materials for use in manufacturing	$1,870,837,423	$1,030,112,063	$ 953,182,130	$ 780,713,902	$ 721,415,446
Foodstuffs in crude condition, and food animals	917,974,265	674,470,920	547,485,367	508,782,531	421,283,031
Foodstuffs partly or wholly manufactured	1,116,960,879	1,062,720,053	1,045,919,955	906,940,040	614,604,833
Manufactures for further use in manufacturing	868,940,770	922,467,607	1,062,220,139	1,016,692,291	912,741,973
Manufactures ready for consumption	2,304,982,199	2,564,999,165	2,980,242,256	2,704,305,969	2,026,564,370
Miscellaneous	11,242,129	12,599,274	19,324,496	12,114,157	14,246,042
Total domestic exports	$8,090,918,665	$7,756,781,182	$6,647,374,437	$6,189,431,225	$5,122,841,905
Foreign merchandise exported	147,941,283	171,809,450	101,712,108	63,950,272	64,996,534
Total exports	$8,238,759,748	$7,928,590,632	$6,749,086,545	$6,253,381,497	$5,187,838,439

AMERICAN EXPORTS AND IMPORTS
First Four Months, 1921-1919
EXPORTS

Months	1921	1920	1919
January	$ 654,740,158	$ 722,063,790	$ 622,036,726
February	493,287,067	645,145,225	545,097,012
March	243,811,124	819,856,037	603,141,648
April	*240,000,000	654,319,392	714,800,137
Total	$1,870,838,363	$2,871,084,444	$2,525,075,523
IMPORTS			
January	$ 208,814,382	$ 472,823,869	$ 212,992,644
February	214,525,137	467,492,820	225,124,374
March	201,988,741	523,232,256	267,856,289
April	*205,000,000	495,738,571	272,956,949
Total	$ 930,328,260	$1,960,887,996	$ 988,670,156
Total Exports	$1,940,838,363	$2,871,084,444	$2,525,075,523
Total Imports	930,328,260	1,960,887,996	988,670,156
Balance excess Exports	$ 940,520,103	$ 910,196,448	$1,536,405,367

*Estimate.

EXPORTS OF LEADING PRODUCTS FOR SIX CALENDAR YEARS

Year.	Cotton	Breadstuffs	Prov., etc.	Petrol & Oil	Cottonseed Oil.
1920	$1,136,486,816	$1,073,085,878	$ 514,071,460	$ 549,248,846	$ 54,874,790
1919	1,327,571,253	930,304,127	1,109,647,110	345,473,482	40,190,264
1918	774,192,780	641,897,276	944,279,374	311,291,369	23,184,328
1917	477,907,787	428,548,519	457,449,373	252,877,458	12,902,286
1916	545,225,684	471,939,190	315,569,172	204,721,291	19,190,455
1915	417,012,908	527,812,289	277,690,278	142,972,272	20,273,150
Total	$5,668,398,232	$4,632,671,530	$3,618,611,683	$1,811,958,801	$ 660,978,423

UNITED STATES MERCHANDISE EXPORTS AND IMPORTS,
CALENDAR YEARS

Year	Exports	Imports	Total Trade	Excess Exports
1920	$8,228,758,748	$5,270,398,211	$13,508,157,959	$2,949,361,537
1919	7,972,150,032	3,904,406,327	11,876,556,919	4,067,743,705
1918	6,149,087,545	2,061,212,710	9,180,300,255	3,117,874,835
1917	6,233,512,257	2,562,467,965	8,795,980,222	3,781,044,642
1916	5,482,641,161	2,391,635,335	7,874,276,496	3,091,005,766
1915	3,554,670,847	1,778,194,695	5,332,865,542	1,776,476,152
1914	2,113,674,050	1,789,276,601	3,902,950,651	324,348,049
1913	2,484,918,292	1,792,596,480	4,276,514,772	692,421,812
1912	2,399,217,303	1,849,056,955	4,217,291,048	550,144,348
1911	2,092,356,546	1,532,389,160	3,624,885,906	560,167,386
1910	1,946,258,904	1,562,204,151	3,508,463,055	384,054,753
1909	1,728,189,645	1,475,529,774	3,203,719,369	252,659,871
1908	1,275,355,447	1,116,374,647	2,391,730,094	158,980,800
1907	1,923,426,206	1,423,169,850	3,346,596,056	500,256,356
1906	1,798,243,434	1,320,501,522	3,118,745,006	477,741,865
1905	1,676,890,795	1,179,144,550	2,856,035,345	497,746,245
1904	1,451,218,740	1,025,909,190	2,477,127,930	415,409,550
1903	1,454,753,083	930,191,227	2,384,944,310	524,561,856
1902	1,360,685,532	969,316,870	2,330,002,402	391,369,062

THE BANKS IN THE UNITED STATES AS OF JUNE 30, 1920
(Compilations prepared by R. N. Sims, Secretary-Treasurer, National Association of Supervisors of State Banks)

Banks.	No.	Capital, Surp. and Undiv. Profits.	Deposits.	Loans and Discounts	Bonds, Stocks, Securities, etc.	Total Resources
State	21,528	$7,341,027,552	$23,556,400,631	$15,314,616,994	$ 8,753,427,456	$29,130,455,644
National	8,061	7,422,075,040	17,115,121,000	12,296,966,900	6,478,771,000	27,195,122,000
Total	30,216	$14,763,102,592	$41,186,257,631	$27,721,516,894	$15,732,198,456	$56,765,122,644

WHY ARE THE DETROIT MOTOR STOCKS SO LOW?

Why are Ford, Reo, Paige, Continental Motor, Timken Axle, as low as they have ever been?

What is the best buy?

Information supplied without obligation.

Send for it today.

Backus, Fordon & Company

Members Detr it Stock Exchange

312 Murphy Bldg. Main 1487

Detroit, Mich.

FORD MOTOR OF CANADA

STUDEBAKER

CENTRAL LEATHER

VA. CAROLINA CHEMICAL

SINCLAIR OIL

Representative Stocks in their respective industries which will sell considerably higher in the coming bull market.

Our statistical department will gladly furnish you with any information you may desire. If in doubt regarding your present holdings, consult us.

Regular Semi-Monthly "All Market Digest" Furnished on Request

PRATT-FEYS & COMPANY

MEMBERS DETROIT STOCK EXCHANGE

Murphy Bldg. Main 7766

DETROIT

Digitized by Google

Charcoal Iron Supply Vital to Industry

Every Economy of Production Utilized by Michigan Corporation; Best Working Conditions Provided for Employees in All Departments of This Great Organization

BY-PRODUCTS PLAY BIG PART IN OUR EXPORT TRADE



Ashland, Wisconsin, Plant of Charcoal Iron Company of America

WE AMERICANS like to think in superlatives. We admire the thing that is the largest of its kind, the thing which excels all others of its class. And, because we think in superlatives, our national achievements have been superlative ones. The spirit of emulation produces accomplishment and American greatness is founded on accomplishment.

On the immensity of its iron and steel industry the industrial prosperity of the United States has been built. Because we have the biggest resources of iron ores and have developed the most complete method of handling them, from the mine to the finished steel product, our nation holds its high place among the peoples of the world.

But quality as well as quantity of steel production is necessary and the aristocrat among the materials of the American iron industry is charcoal iron. It is natural that the leading charcoal iron company of the United States should also be the greatest company of its kind in the world.

The Charcoal Iron Company of America, which has its offices in Detroit and its lumber tracts, mine, mills, chemical plants and blast furnaces in the upper peninsula, is typical of American methods, in that it comprehends within its organization all of the component parts and processes to produce a high-grade product with every economy and in a constant and dependable volume. It is a self-contained organization, the amalgamation of various units which have a natural relation to each other and its management has been progressive in installing every new and better kind of equipment and has also been conservative in upholding a uniform and high standard for its output.

To say that the Charcoal Iron Company of America produces annually 120,000 tons of charcoal pig iron, 1,500,000 gallons of wood alcohol and 25,000,000 pounds of acetate of lime is but to give a glimpse at its real meaning as an institution.

To understand what that statement of output means, we

Digitized by Google

must know the means by which it is created and also the uses of the product itself. As to the latter, charcoal iron is recognized as the ideal material for high-grade castings. It has a low phosphorus and sulphur content, and from it are made castings which are strong, tough and yet easily machined and which are capable of receiving the highest polish. The cylinders of motor cars require just this sort of castings and it is a great advantage to the American automobile industry that there is a dependable supply of this valuable material right at hand and always available.

Now that our manufacturers are competing in the markets of the world on a quality basis to a greater degree than ever before, charcoal iron is a national asset in our foreign trade because of the great variety of uses to which it can be put in our factories.

As to direct export of charcoal iron, the standpoint of the Charcoal Iron Company of America is now, as it has been in the past, that our American industries had first call upon its product and that its iron could best find its way into world-wide use through incorporation in articles made in this country.

About 5,000 persons are in the company's employ, and its policy has been to maintain the best working conditions in all of its branches. Its properties include the Yale mine at Bessemer, with an annual output of 500,000 tons of hematite ore, four blast furnaces and three chemical plants. In addition, there are its lumber camps and saw mills.

Long before the use of coal for making iron and steel was thought of, men smelted the iron ores in furnaces where wood was employed. They discovered that the hard woods produced the finest iron, and no method has ever been discovered to improve upon the quality of hardwood charcoal as an ore smelting agency.

NOT SO long ago, as the life of a nation is considered, the iron furnaces of western Pennsylvania depended upon charcoal for their fuel. Then, as the forests vanished—to be replaced by the great agricultural and manufacturing districts of the present—the use of "stone coal" in the furnaces was begun and the fact that vast stores of coal were available in the mountains of Pennsylvania determined the future of the iron industry in that section.

But in the great upper peninsula of Michigan, close to the



Newberry, Michigan, Plant of Charcoal Iron Company of America

There is a more direct export use for the other articles of manufacture of this company. Its chemicals are used in making formaldehyde, in the solvents needed in the rubber trade in Africa, South America and elsewhere, for the manufacture of cordite in Great Britain and France, for the making of aniline dyes. Every civilized country—even as far away as China and Japan—requires these chemicals and they form a notable item in our exports.

Just how vast an organization is involved in the manufacture of charcoal iron by this company is evidenced by the fact that it owns 200,000 acres of land in the upper peninsula. It has its own railroads, with a trackage of approximately 100 miles, connecting with two transcontinental lines, its own locomotives and cars. Even roundhouses and repair shops for its rolling stock are required.

Gogebic, Marquette and Mesaba ranges, there was a wealth of virgin timber and the opportunity to begin anew the production of this higher-grade iron. From comparatively modest beginnings, the Charcoal Iron Company of America has come into being and now holds its position of pre-eminence in its branch of the industry.

There is a rich source of incident in all of the operations of such a company. First, there are the "timber cruisers," who locate the desirable tracts of hardwood timber. Each stand of timber must be judged as to accessibility, contour of the land, density and amount of the timber, adaptability for felling the trees and getting out the logs, and from many other angles.

Likewise, in the lumbering operations, there is need for the utmost efficiency in locating the camps, opening up the logging

Digitized by Google

roads and carrying out the work itself. The life of the north woods has been a rich theme for novelist and story-writer. It is a primeval, natural, healthful existence in the open air and to it come men of the sort who prefer to earn their living by their muscle in the big out-of-doors.

Let it not be thought that all of the hardwood which is cut by this company is destined to be used as fuel for the making of pig iron. Hardly that. Hardwood is too valuable to be so used in its entirety and the saw mills turn out a great store of finished lumber each year for the building trade, while the smaller pieces and cuttings go to the blast furnaces.

EVEN then, the purpose of the company to utilize every natural resource is not exhausted. Instead of abandoning the land which has been cut over, it is now used for grazing stock and cattle and sheep ranches are replacing the forest lands. Thus, the land itself is improved and the food supply of the nation increased.

As the lumbering camps and saw mills are the source of one part of the company's raw material supply, so the Yale mine at Bessemer, one which produces an exceptionally high-grade ore, is the other source. Iron ore and hardwood for charcoal are brought together at the four blast furnaces of the company. These are located at Newberry, Manistique and Boyne City, Michigan, and Ashland, Wisconsin. From them the completed pig iron is distributed by vessel and railroad to the foundries of the country.

The chemical plants complete the chain of economy of production and conservation of materials. They dispose of the by-products and wastes of the various processes and make them available for use. It would require long technical descriptions to tell of the modern equipment of the various plants and the labor-saving and safety devices adopted. The Yale mine is reputed to be the finest equipped of any on the Gogebic range. But the same pride in providing equipment extends to all other activities of the company.

As a result of its broad-scale operations and its plan of organization, the Charcoal Iron Company of America has been enabled to furnish each year a uniform quantity of its products. True, it might have made its production figures larger—by rushing operations here and going after quantity output there—but this has not been deemed the best manner of conducting the business in the long run. There would always be the danger of impaired quality of product if rush methods were used and a conservative policy has, therefore, prevailed.

At the present time, with the United States increasingly dependent upon its industries and ever a greater factor in the markets of the world, the fact of the assured supply of this high-grade material for machinery and for other uses requiring the best pig iron for a base is a stabilizing one in its effect upon the country's trade and prosperity.



Manistique, Michigan, Plant of Charcoal Iron Company of America

The Charcoal Iron Company of America

PRODUCERS OF

Charcoal Iron—Acetate of Lime
Hardwood Lumber—Wood Alcohol

General Offices:
Union Trust Building,
Detroit, Mich.

Plants at
Newberry, Manistique and Boyne City,
Michigan and Ashland, Wisconsin

Digitized by Google

How the Wire System Facilitates Securities Trading

WHEN we drop into our favorite broker's office and tell him, for an example, to buy 1,000 shares of General Motors or sell ten shares of something else we do not often realize the speed and the size of the machinery which is set in motion to carry out our wishes. Most of the work is carried on behind closed doors but the instant the order is placed in the hands of the telegraph operator there begins one of the prettiest little races against time known to American genius.

The telegraph operator "shoots" the order to the New York office of the same brokerage concern or to the New York correspondent of the Detroit broker, who telephones the order to the floor of the stock exchange, where it is delivered to the floor trader. It is stated that Post & Flagg have an unique device for handling a large volume of incoming orders to the New York exchange which consists of a long bench running lengthwise of a large room around which are seated thirty or forty telegraph operators who receive buying and selling orders from out-of-town offices and correspondents. Running lengthwise along the top of this bench is a swiftly moving leather belt and at the end of the table are several boys who have telephone receivers and transmitters strapped to their bodies. These telephones lead to the floor of the exchange, where another set of boys similarly equipped transmit orders to a number of "runners," who carry the messages to the different posts on the floor of the exchange, where the representatives of the brokerage house actually do the buying and selling.

The handling and execution of orders has become such a fine science with this organization that instances have been known where an order sent in from Detroit was executed and the confirmation wired back within the space of one minute. The telegraph operators sitting around the long bench throw the order slips on to the moving belt, which carries the slips to the boys at the end of the table, who phone the orders to the floor of the exchange where the boys there transmit the orders to the floor traders. By the use of a set of code words for the different stocks and bonds and another code for instructions, the operation is speeded up to a point hardly capable of comprehension. In fact a Detroit brokerage house which does an unusually large amount of business claims in one instance to have sold and received confirmation for the sale of 100 shares of Studebaker recently in the record time of forty seconds.

But this feature of the wire service is only part of the whole. Brokers often have a second or third wire over which the trading operations in unlisted stocks or curb stocks are carried on and over which they often learn of differences in quotations between two markets for the same stock. For example, a Detroit broker is likely to have an operator fitted up with three telephones and two tickers, one from the Detroit Stock Exchange and one from the New York Exchange, and he has his wire key before him over which he is constantly feeling out New York. He will keep advising New York that some stock, for instance Burroughs Adding Machine, is 150 bid 152 asked in Detroit. New York will reply with similar quotations, but occasionally it will happen that New York will come back with a lower ask price than Detroit, which is the opportunity for Detroit to snatch up the stock at New York and dispose of it here at the higher price. The margin may be very small, but the turnover is almost instantaneous and it doesn't take very many turns of this kind to show a profit. This kind of trading is known as "arbitrage."

A ticker service is operated by the Western Union Telegraph Company to all the principal cities in the country. Over the wires come reports of sales on the exchange to the telegraph company's own distributing agency, which in turn redistributes the information to the local subscribers over the well known "tape" nicely housed in a glass case. And the board boys transfer the sales from the tape to the blackboard. Cities in which the Western Union does not distribute the sales through the tickers are supplied with information about sales over the private wires leading from correspondents in the large cities to brokers in the small cities. In cases of this kind the complete information received from New York is not forwarded but only reports on stocks in which the broker in the smaller city is known to be interested.

A private wire from New York may serve four or five brokers, but beyond this number the capacity of one circuit is limited. The business of some houses is so voluminous that several private exclusive circuits are maintained between their principal offices. One Detroit house maintains three exclusive circuits to New York and five to Chicago which are leased from the American Telephone & Telegraph Company, besides having connections with Lansing and Grand Rapids which "tap in" on the Chicago wires. There are several

E. W. Wagner & Company

Established 1887

AS members of the principal Stock and Commodity Exchanges, with direct leased wires between market centers and our various offices, we are exceptionally well equipped to handle orders in both active and inactive securities as well as commodities.

MEMBERS

NEW YORK STOCK EXCHANGE
NEW YORK COTTON EXCHANGE
NEW YORK PRODUCE EXCHANGE
N. Y. COFFEE AND SUGAR EXCHANGE
NEW ORLEANS COTTON EXCHANGE
CHICAGO BOARD OF TRADE
CHICAGO STOCK EXCHANGE
CLEVELAND STOCK EXCHANGE
MINNEAPOLIS CHAMBER OF COMMERCE
ST. LOUIS MERCHANTS EXCHANGE
MILWAUKEE CHAMBER OF COMMERCE
KANSAS CITY BOARD OF TRADE
OMAHA GRAIN EXCHANGE
WINNIPEG GRAIN EXCHANGE
TOLEDO PRODUCE EXCHANGE

320 Penobscot Building
DETROIT, MICHIGAN

Telephone
Cherry 3196

Digitized by Google

Quixotic Doctrines Imperil the Grain Industry

What Is Behind the Proposed Legislation Against The Exchanges and What Would Be Its Effect?

By JOSEPH P. GRIFFIN

President of the Chicago Board of Trade

WHEN PRICE DEFLATION swept the world last autumn there was an uproar against the nation's grain exchanges unprecedented in American history.

War time bubbles began to burst. Deflation hit one commodity after another. Some were hit harder than others. Farm commodities were not exempt. But they suffered less proportionately than did many other articles.

Suddenly agricultural America found itself face to face with the puzzling problem of oversupply and under-demand—the reverse of conditions of the war years. Grain prices began tumbling. The inexorable law of supply and demand would not give way. Wheat continued a steady decline from about $2.75 in mid July, 1920, to a low level commensurate with industrial readjustment.

It was the heyday of the organizer, the agitator, the unthinking and ambitious. Over night they began springing up in various parts of the country. They clamored for organization among the farmers. Their loudest shout was against the grain exchanges. These agencies, they declared with great heat, were responsible for price deflation. Louder and louder they shouted their doctrines and daily their army of listeners increased.

They cried for legislation destroying the exchanges. They formed many societies to market grain and took other steps which they claimed would solve the question brought about by world readjustment of commodity prices. They urged farmers to hold their wheat for unreasonably high prices—and brought ruin to many farmers by so doing.

Congress was deluged with bills, some of which, it was admitted during the lengthy public hearings in January and again late in April, would absolutely put an end to existing marketing machinery.

The measure on which serious attention centered was the so-called Capper-Tincher bill. When it was brought up for public consideration in January, the writer and Leslie F. Gates, his predecessor, and numerous others in the grain, banking, milling, elevator and kindred trades appeared before Congress.

Solemnly they outlined the functions of the grain exchanges. They produced expert testimony—from representatives of all phases of the grain trade—proving absolutely that the grain exchanges handle grain with less margin between producer and consumer than is true of any other staple commodity. They proved by the presentation of such evidence that the exchanges were in no way responsible for the slump in grain prices which was world-wide; that "corners" were absolutely impossible under existing conditions; that competent, restricted speculation was necessary in order to provide a futures market, and that without a futures market there could be no hedging, or price insurance facilities for the farmer's grain.

The effect of this testimony later became apparent. The original bill would have abolished the futures market and hence eliminated the economic functions of the exchanges. The last Congress ended before the bill with its vicious provisions could be made a law.

Then the new Congress convened and the entire subject was again up for consideration. But there was an entirely new attitude on the part of the House agricultural committee led by Congressman Tincher, co-author of the bill.

"We are frank to say," declared Mr. Tincher after a presentation of the case of the grain exchanges by the writer, "that in the months of study following January 1 we learned many, many things about grain marketing. That is the reason we are willing to amend this bill. That is the reason that we wish to permit the futures market with its hedging facilities to continue. Grain marketing is a highly technical, scientific subject that requires great thought, and certainly we did not want to destroy the exchanges without even providing a substitute."

It was the first light on the murky horizon. The writer, as official spokesman of the exchanges, thereupon outlined amendments necessary to permit continued existence of the exchanges. Most of these amendments were adopted. But just before the committee reported out the bill Secretary of Agriculture Wallace attached two amendments which, according to the grain trade, would give him almost unlimited power.

The measure besides eliminating so-called indemnity contracts, or "puts" and "calls" (a step which the exchanges had themselves previously taken), throws the exchanges open to co-operative associations, which are permitted to pro-rate their dividends back, in violation of exchange rules; provides a record of each individual trade made by all commission houses, available at all times to the Secretary of Agriculture and gives the Secretary of Agriculture authority to close the exchanges in event a member does not comply with all of the various other provisions of the proposed new law. Despite the restrictions, the grain trade was prepared to try to meet all provisions in event the law was enacted.



JOSEPH P. GRIFFIN

IN VIEW of the agitation in and out of Congress against trading in grain and provisions on the established exchanges, it was felt that an issue of this nature, being for the information of investors, bankers and brokers especially, would not be complete without a discussion of the grain exchange question. In order that the article would bear the stamp of authority, the editors asked Joseph P. Griffin, president of the Chicago Board of Trade and recognized the last several years as spokesman for the grain industry, to write it. Mr. Griffin has very obligingly complied.—The Editor.

Meantime proposed state legislation even more severe assailed the exchanges. In Illinois, for instance, two bills which would entirely eliminate the Chicago Board of Trade, the hub of the world grain business, were introduced. A volley of protest was heard from banks and a dozen other businesses allied with the grain trade. Even agricultural leaders themselves protested against enactment of these bills, on the ground that they would merely drive the Board of Trade out of Chicago and make Milwaukee the world center of the industry. They also took the stand that federal legislation should guide the industry, inasmuch as Congress had spent months studying the entire subject with the best available experts.

The writer in a statement to Congress summarized in a few words a subject upon which volumes have been written when he declared:

"Speculation in grain cannot be abolished so long as the price of grain is subject to fluctuation.

"Hedging is highly beneficial not only to grain dealers but also to all grain producers and consumers.

"There can be no hedging by grain dealers unless persons other than grain dealers are permitted to speculate. To prohibit competent speculation by persons other than grain dealers is merely to compel grain dealers to become speculators.

"Speculation in grain by persons other than grain dealers is useful and beneficial and should not be abolished.

"The evils incident to speculation are largely exaggerted. While

Digitized by Google

H. C. Carson & Company

Grain Merchants

Members - Grain Dealers National Association

OFFICES: 1548 PENOBSCOT BUILDING

Telephones Main 7190, Cherry 5280, Cadillac 5501

Detroit, Michigan

the system may not be perfect, its advantages so far outweigh its deficiencies that attempted prohibition would result in little economic benefit and great economic harm.

"Legislative attempts to suppress speculation have uniformly proved unsuccessful."

The writer and scores of others have pointed to the fact that the real speculator is the man who carries unhedged grain, for a sudden downward price swing brings ruin. The competent bank invariably inquires of a prospective farmer borrower whether his grain is hedged.

In the Chicago market the volume of business is so great that an offer in the pit of a million bushels of grain would cause little fluctuation. But were it not for the Chicago market, such an offer of that amount of grain in, say, the Kansas City market would cause a considerable downward fluctuation. A great volume of business passes through the Chicago exchange. For instance, when a grain merchant in Liverpool buys a cargo of wheat in Australia for shipment to England he immediately sells short an equal amount of grain on the Chicago Board of Trade. This is to insure him against loss in case wheat should decline in price during the months of the voyage. Similarly, when a central west miller buys a few thousand bushels from farmers he sells an equal amount short to insure against a slump in the market before he can make the wheat into flour and sell it. Neither the merchant nor the miller could conduct his business safely without the possibility of "short selling."

Without the exchanges, it has been pointed out before Congress, a few big concerns might soon control prices. Also, without hedging facilities the margin between producer and consumer would greatly increase, for the simple reason that the man carrying the grain would also carry a tremendous risk and would need a larger profit to protect against losses in price swings.

What is the answer to the entire problem? There is a great difference of opinion but the leading authorities appearing at the Congressional hearing late in April said it was education of the farmers as to the true functions of the grain exchanges.

"Not long ago," observed Congressman Tincher in this connection, "a man speaking for the farmers said 'We don't mind reasonable speculation but what we want to get rid of is that miserable hedge.' Which, of course was exactly the opposite of what he meant."

Others declared that when the farmer became familiar with the economic service of the grain exchange he realized that the grain exchange was the best friend he ever had.

Meanwhile organization of the new machinery of the American Farm Bureau Federation, intended to market the grain products of the nation's farmers, goes merrily on. There is a vast difference of opinion as to its merit. On this subject leading grain exchange men have offered no criticism or opposition.

If a better system of marketing grain can be devised we will welcome it. Our objection has been to the proposed destruction of the present machinery, which has been in process of building for 70 years, without even providing a substitute.

Many leading newspapers who are outspoken in their views have charged that the numerous new farmer movements that have sprung up are sponsored by professional organizers whose first acts are to place themselves at the top of a substantial payroll.

A typical editorial from a leading industrial and financial newspaper, under the heading "Lightning Rod Contracts in the Grain Trade" discussed as follows the situation as it existed in May:

"One week ago today it was suggested in this column that the farmers and legislators who are supporting the Lantz bills in the Illinois general assembly make sure they have a workable and efficient substitute for the Chicago Board of Trade, which they seek to destroy. There now appears evidence to indicate that the structure being built to supplement the Board of Trade is quite similar to those foisted upon gullible farmers by professional organizers who have flicked from the farmers of Iowa millions of dollars in the last few years.

"A group of professional exploiters has organized a giant corporation, which is taking advantage of the obvious distress of the farmer to bind him under five-year contract to sell his grain to the corporation and to none other, this corporation reserving the right to sell the grain as it pleases and at whatever price it may. The farmer binds himself to surrender all rights he has to the control of his grain and to pay to the selling corporation commissions set at any figure the corporation desires, and costs not specifically defined, but described as 'running expense.'

"This does not suggest that there is anything reprehensible in the attitude of the farmer or the legislator toward the Board of Trade. Both have been misled by the professional agitator. The farmer forgets what the Board of Trade has done for him in the past, forgets the inordinate profits he made out of grain when it was on the way up, and can remember only his present evil fortune and the losses he sees in the future. He is the natural reaction of desperation, and desperate men usually follow false leaders."

Digitized by Google

The Best Way to "Dress Up" A Financial Statement for Credit Purposes

The Best Way—the Only Way—Is to Prepare It In Such Manner That It Shows All the Facts Clearly

By GEORGE D. BAILEY
Detroit Manager, Ernst & Ernst

CLOTHES may make the man—but it is a mistake to believe that a financial statement submitted for the purpose of obtaining credit may be materially aided by its outward appearance. The only way to dress up a financial statement is to prepare it in such a manner that it shows all of the facts clearly.

Careful granting of credit requires a complete confidence in the borrower and a complete knowledge of his affairs. As a matter of fact, complete confidence is possible only where there can be a feeling of complete knowledge. The facts disclosed by financial statements are of course only one phase of the granting of credits but each year the importance of financial statements is increasing.

It was not so very long ago that credit was extended almost entirely on the basis of the personal reputation of the borrower; statements occasionally were submitted to banks but other creditors seldom expected to receive them. Gradually, however, credit ceased to be largely between two individuals well known to one another and came to be founded upon facts and upon conditions. The credit man wanted information with which to form his own opinion as to the ability of the borrower to pay. Financial statements were found to give a great deal of this necessary information, and at the present time it is undoubtedly true that credit is more largely influenced by the facts presented in the borrower's financial statement than by any other factor. Perhaps in no other way has the science of credit been developed as rapidly as in the use to which financial statements are put.

Bankers, being the largest dealers in credit, have developed the use of financial statements to the greatest extent. With the growth of the larger banking centers, such as New York and Chicago, financial statements have taken the place of intimate personal contact. The credit files of the larger banks are surprisingly complete and several men are constantly busy keeping these files up to date. There is a financial statement of every borrower and in practically all cases at least one statement each year. Every balance sheet as it comes in is very carefully analyzed. Each new statement is compared with the previous one and with those of other companies in the same line of business. These comparisons are very valuable and often disclose with surprising sharpness dangerous tendencies or weaknesses of organization.

The Federal Reserve Banking system with its power to rediscount the paper of its member banks has injected into the field a creditor who has no direct contact with any of its borrowers. It depends very largely upon financial statements. Member banks therefore are anxious to have available complete financial statements and other financial information to submit to the Federal Reserve Banks.

The year 1920 presented problems in credit which the country had almost forgotten. Every borrower has been asked to furnish information which was never requested before and the country has seen a concerted effort on the part of all creditors actually to force liquidation of loans. Creditors in many cases have brought a pressure to bear upon their customers that in former days would have been very much resented. In such cases financial statements have been of outstanding importance. It is possible of course for many business men to borrow money on statements which contain only the most condensed information. On the other hand the customer who receives the greatest consideration is the one who has built up for many years a complete confidence based upon full disclosure of all conditions. It is a fact that a business man becomes a more desirable customer of a bank the moment he begins the policy of submitting complete and detailed financial statements. If the important facts are presented in the beginning it is oftentimes possible to save a great deal of deliberation and discussion regarding the granting of credit.

The real question in the preparation of a financial statement, therefore, becomes that of determining the facts that are of interest to the creditor and in so presenting those facts that they are easily grasped and not confused by meaningless or irrelevant detail.

In unusual times such as the country is now going through there are many important financial facts which are not necessarily reflected by the trial balance taken from the books of account. They are not definite assets or liabilities but because of their very uncertainty are perhaps of even greater importance than the known items shown on the balance sheet.

The federal government is expecting to collect many hundreds of millions of dollars of additional income and excess profits taxes for the years 1917, 1918, 1919 and 1920. Many concerns have already been called upon to pay large additional assessments and there is at least one case where the Government has taken over the business of the taxpayer in an endeavor to collect a back assessment. At the time of filing the tax returns for the high tax years, businesses very naturally took advantage of any possible favorable construction of the statutes and regulations. Credit men are of course familiar with this general situation and know that many companies are facing large additional assessments which may seriously cripple their finances. The technicalities of the tax law are so numerous that in many cases it is practically impossible to tell what will be the final tax liability of the company. For instance, inventories must be valued on the basis of the lower of cost or market prices. Market is defined in the regulations as being the fair market price prevailing at the close of the fiscal year. The determination of the "fair market price" is oftentimes a matter of judgment and in large companies very small differences of opinion on values might cause large additional tax assessments. A difference of two or three cents a pound on metals or a few cents a yard on textiles may make a difference of hundreds of thousands of dollars in taxes. Companies are being carefully checked up by representatives of the Internal Revenue Bureau, who are recommending the assessment of enormous amounts, the full payment of which is in many cases a physical impossibility. Fortunately many of these recommendations are ridiculous. Nevertheless the creditor is entitled to know as much as possible about the tax situation and some banks are already asking whether or not their customers have been examined by revenue agents, and if so, what additional assessment the agent has recommended. If this amount is large it usually leads to a full discussion of the probable final liability.

Business conditions during the summer of 1920 developed another situation which has a very important bearing upon the financial posi-

SOME of our banker friends have often remarked that it would be a great boon to business if borrowers would only make out financial statements in such form as to show accurately their true condition. Applicants for credit have been known to "dress up" statements through ignorance so as to create either an unwarrantedly favorable or unfavorable picture of their finances. It is our opinion, therefore, that a word on this subject from an authority in the matter of making correct statements will prove of interest to both borrower and credit grantor.—The Editor.



GEORGE D. BAILEY

Digitized by Google

The House of a Thousand BANKS

Erected upon an unshakeable foundation of business integrity, the Bank Equipment and Supply Service of Gregory, Mayer & Thom Company has steadily expanded until it now includes in its clientele one thousand of the leading financial institutions of the middle west.

The Bank Outfitting Division of this service offers the best in Fireproof Safes, Shelving, Filing Cases and Office Furniture. The Supply Service draws upon the extensive facilities of our Printing, Lithographing, Ruling, Loose Leaf and Binding Departments.

The expert advice of our representatives in planning installations of equipment and systems is always at the disposal of our banking clientele. It entails no obligation.



GF Allsteel

The atmosphere of permanence and dignity found in every sound and successful banking institution is supplemented and emphasized by ALLSTEEL Equipment.

Every ALLSTEEL product is absolutely fireproof. It is more economical of space, more attractive and more suggestive of the proper atmosphere than any other type of bank and office equipment.

ALLSTEEL Furniture, Safes, Shelving and Filing Cases come in green, oak and mahogany finishes.

America's Greatest Office Outfitters

GREGORY MAYER & THOM CO.

Printers, Engravers, Lithographers
Loose Leaf Devices, Blank Books
Stationery, and Office Furniture

39-43 CADILLAC SQUARE PHONE MAIN 5350
DETROIT

Digitized by Google

We are equipped to handle your inquiries concerning—

Constructive Investment Stocks

Semi-Speculative Investment Stocks

Speculative Investment Stocks

Let us be of service to you.

Richard Brand Co.

Members Detroit Stock Exchange

1721-2-3 Dime Bank Bldg. Telephone Cadillac 1390

Short Term Financing

FOR

Merchants and Manufacturers

Accounts Receivable — Notes Receivable

Trade Acceptances — Bill of Lading Drafts

Representing bona-fide sales

Purchased and Discounted

Commercial Paper — *Collateral Loans*

JOSEPH M. DODGE

310 Madison Theater Bldg.

DETROIT

tion of a company. Businesses generally were going at very high speed during the early summer and were being pressed by their customers to increase deliveries. The demand was so insistent that manufacturers, wholesalers and retailers were ordering large quantities of material. Buying ceased almost over night. Deliveries were suspended, although the liability on the purchase contracts still existed. Companies were committed to large purchases which they were unable to accept. To make matters worse, the market prices on basic materials began to fall rapidly. The sale of goods had to be made upon the basis of the new prices. Thus, undelivered purchase contracts had to be liquidated at prices higher than those which could be realized by the buyer in selling to his customers under the new market conditions. During the last twelve months some of the largest corporations in the country have encountered very serious financial difficulty because of their inability to care for their purchase commitments. The creditor therefore is naturally anxious about this situation. He wants to know two things: first, how much of the total amount of purchase contracts must be accepted during the near future, and second, on the basis of present market prices, what is the total loss which the company must take between its contract price and the present market. In asking for additional credit it is important to summarize the commitment situation and to show the result, favorable or otherwise, on the financial statement.

Owing to the uncertainty of present conditions creditors are not only analyzing the present status of the borrower but are also seeking the information which is shown by the company's operating statement. It is important to know whether the company has been making money and, if during the year 1920 it did show a profit, how such profit was determined. If the company showed a loss, perhaps such loss has been due entirely to the shrinkage between the cost of materials and the current market prices. It is many times of interest to know how the company operated, apart from such loss, as in this way the creditor can oftentimes judge as to whether the company is in a position to go ahead making money. The company's overhead expense is also being subjected to scrutiny, and particularly will this be true in statements for 1921, when it will be important to know whether a borrower can make money on a reduced volume of sales. The operating statement will show whether the company is going forward or going backward. It is possible to show this in summarized form directly on the balance sheet of the company by listing the changes in the surplus account through dividends and net earnings or net losses. Such a summary gives much information and saves the creditor considerable speculation, oftentimes erroneous, as to what has happened to the surplus account.

In the actual preparation of the balance sheet the first general principle to be borne in mind is that it is really better to show a conservative, reliable statement, which may show an unfavorable ratio, than to submit a statement apparently better which under the searching tests of the creditor is found to contain items which are unreliable or which do not reflect proper shrinkages. A careful granting of credit demands accurate knowledge and if the creditor must speculate as to further losses he is likely to protect himself by making larger deductions than are nesessary.

Generally speaking, loans are not made to furnish additional permanent capital but are made to finance temporary situations. The creditor expects to be repaid for his loans in the ordinary course of the company's business and does not contemplate liquidating the business and being repaid through the sale of the plant. He therefore gives his first attention to the so-called current assets and current liabilities of the borrower because it is the current assets to which he looks for the repayment of his loan. This general classification should include only those assets which in the ordinary course of business can be liquidated within a reasonable time to care for the liabilities, and usually includes cash, notes and bills receivable due within the year, collectible customers' accounts due currently, and the inventory.

'Cash should include the actual cash on hand and on deposit at the date of the balance sheet. Many concerns have a practice of holding open their cash book for several days after the close of their year, in order to pay all of their liabilities and to show no accounts payable on their balance sheet. This of course is erroneous, as every creditor knows that at the close of the month there are many liabilities which cannot be paid until later. He can assume, therefore, either that all of the liabilities are not on the books or that the cash book has been held open; and if the cash book has been held open he might question as to whether or not any cash received after the close of the year had not also been included. The banker oftentimes compares the cash balance as shown by his records with the amount shown on the company's statement. The cash balance as shown by the bank's records naturally would be larger than that shown by the company records.

Digitized by Google

and if the reverse is found to be true it may create a doubt in the mind of the banker.

Accounts and notes receivable should be segregated to show the amounts actually due from customers and those which may be due from miscellaneous sources. Under the ordinary conditions the customers' accounts can be expected to be liquidated in due course. Special accounts, particularly personal accounts of officers, may be extremely difficult of collection and it may even be that there is no intention to repay these accounts except through dividends. This is particularly true of notes or accounts for capital stock sold to officers and employes. Ample allowance should be made for possible loss in collection of customers' accounts, and under present foreign exchange conditions it is advisable to separate the foreign from the domestic accounts.

The valuation of the merchandise inventory is extremely important in a period of falling commodity prices. The rule which is being generally followed is that each item on the inventory should be valued on the basis of cost or market price, whichever is lower. It is not advisable for articles to be valued at higher than market, on the assumption that market will increase, as it opens up the large question of the fairness of the higher value. It is a primary rule of accounting that all losses shall be taken as soon as known but that profits should never be shown until they have been actually realized by the sale of product. The business man who can answer questions regarding his inventory with the statement that he has priced it on the basis of the best obtainable market price, which may eventually be found too low or too high, has shown himself to be conservative also. With changing market conditions, the question of the salability of the product looms large. All obsolete stock and unsalable goods should be carefully eliminated. Overhead rates are apt to be much higher in periods of low production than can be recovered from the customer and wages may come down to such an extent that adjustment of sales prices must be made. These two factors should be reflected in the inventory valuation, so that the conditions under which the goods must be sold will be reflected in the inventory value. If possible, the merchandise inventory should be classified on the balance sheet to show raw materials, work in process and finished product. Many manufacturers today are holding materials or partly finished work which can be sold only to one customer and the financial situation of the customer becomes of real importance in fixing the inventory valuation. Even if the borrower has on hand sufficient orders for the disposal of all of its inventory, it is advisable to follow the rule of cost or market, whichever is lower, as this gives some margin for the inability of some customers to take their orders and allows for possible adjustments in price. Manufacturing supplies, if included in the inventory, should always be shown separately and should include only those direct supplies which are necessary for the manufacture and disposal of the product. Machine and repair supplies and special equipment should not ordinarily be included in the inventory.

Quickly marketable securities can properly be included in current assets but should be valued on the basis of current market quotations.

Oftentimes a company has other assets which could be converted into cash, if necessary, without detriment to the business but which in the ordinary course of operations would not be so converted. It is becoming more and more customary to classify these assets under a separate heading, the important thing being to show sufficient detail of classification to bring out the kind of assets included. Under this head naturally would follow such items as securities owned on which there is not a ready market or which the company does not intend to sell, personal and officers' accounts, notes for capital stock, etc.

While the valuation of the permanent or plant assets is of secondary interest on a balance sheet for credit purposes, when a statement is used for comparison this item becomes of real importance. The creditor is interested in knowing to what extent the company has acquired new equipment and many creditors carefully compare the plant values of competitive concerns because in reality the value of a plant is based upon the profit that can be made from operating it, and a very costly plant which is unable to make money is oftentimes of comparatively little value.

It is therefore important to give some attention to the manner in which the valuation of permanent assets is presented on the balance sheet. What is the basis of valuation? If it is based upon an appraisal, what is the basis of that appraisal? If such value was establishing during the period of the abnormally high building and machine costs which prevailed during the war period, this fact should be made known by mentioning the date that the appraisal was made. If the balances have been appreciated during the year in accordance with appraisals, the amount of such appreciation should be shown. It is advisable also to separate the permanent assets into the main classifications of land, buildings, machinery, equipment, special tools, special equipment, etc., and if possible, in order to make easy a com-

Investors Will Want This Book



IT covers the birth and the development of the Electric Light and Power Industry

It shows the constant rapid increase in the number of consumers served.

It graphically portrays the growing output and the steadily increasing net revenues of the industry.

It pictures present day uses and points out the broad field still to be occupied.

It shows a ratio of earnings from present business which justifies the purchase of well selected public utility issues by the most conservative investor.

In writing kindly ask for booklet DF. 394

Our June Offering Sheet, just off the press, will also be sent upon request.

The National City Company

National City Bank Building, New York

Detroit—743 Griswold Street

Telephone - 2832 Cherry

IF YOU WISH PERSONAL PRESENTATION OF YOUR DRAFTS,

send them to

THE

FARMERS & MECHANICS BANK

Ann Arbor, - - Michigan

Member of Federal Reserve

Digitized by Google

parison with previous years, the amount of the depreciation reserve should also be shown. Such items of intangible value as good will, patents, copyrights, etc., should not be classified as permanent assets but should be shown separately. The valuation of good will, for instance, has a distinct bearing upon the amount of the surplus of the company and the basis of that value should be clearly shown, as at best it is only an estimate.

Deferred assets are really only deferred expenses and should appear on the balance sheet only when it is the company's practice to keep its accounts in detail. As a matter of fact, for credit purposes the deferred expenses might almost as well be eliminated from the balance sheet except for the fact that, where it has been customary to include them, their elimination would have an important bearing upon the operations of the company and give misleading information as to the progress of the business.

Perhaps the first thing that a creditor looks at on a borrower's statement is the amount of the current liabilities. He is interested in the money borrowed from banks, notes given to purchasers and the notes given to individuals. He is also vitally interested in whether or not a real attempt has been made to show on the balance sheet all of the liabilities of the company. The accounts payable for purchases and expenses should include all the money owed by the company for current purchases, including goods in transit. In no case should liabilities be deducted from assets and thus apparently reduce the amount owing by the company. Provision should always be made for the accruing federal tax liability on the earnings of the company to the date of the balance sheet, even though the money does not have to be paid out until later. As previously stated, information as to the possible additional liability of the company for federal taxes should be given in connection with the financial statement.

After all, the one thought to bear in mind in preparing a statement for credit purposes is that the creditor is really, if only temporarily, a partner in the business and as such is entitled to complete information.

There is of course the story of the manufacturer who, on his death bed, called in his son and requested that his pallbearers be selected from the bankers of the city in which he lived.

"All bankers, Father?"

"All bankers," answered Father. "They have carried me most of my life and are entitled to carry me after I am gone."

Where Have the Liberty Bonds Gone?

(*Continued from Page 8*)

1888	1,063,004,895	1899	1,155,320,235
1889	975,939,760	1900	1,107,711,257
1890	899,784,371	1901	1,044,739,120
1891	851,912,751	1902	969,457,241
1892	851,426,463	1903	925,011,637
1893	838,969,476	1904	967,231,774
1894	899,313,380	1905	989,866,772
1895	932,830,667	1906	964,435,687
1896	955,297,254	1907	878,586,755
1897	986,656,086	1908	938,132,409
1898	1,052,085,492		

It is manifest that there was no free supply of investment money lying around of such size that a billion dollars of government bonds a month could be absorbed without the pinch being felt in some direction, and it was well for the country that we had the Federal Reserve machinery which could expand money and credit with the increase in government indebtedness. From 1890 to 1920 the total loans and investments of all reporting banks in the United States grew from $3,592,000,000 to $30,892,000,000—about eight-fold in thirty years. Unfortunately, figures on total deposits for the period 1913 to 1920 are not obtainable, but it is clear beyond doubt that there was not the same increase in deposits that there was in government indebtedness during this period.

But what we started out to show was some evidence of holders of Liberty bonds passing them on to that much misunderstood and invisible "market." Because there is a place where one can always get cash, many people have assumed that there is something wrong because they are unable to get as much now as the bonds call for at maturity. And many writers having an eye to popular applause have capitalized this widespread misunderstanding. Not long ago Dr. Frank Crane proposed that the United States issue money secured by real estate. Recently a New York engineer offered a plan to stabilize the market value of Liberty bonds by adjusting the interest each six months according to the market value of money. And Prof. Irving Fisher, of Yale, would "stabilize" the gold dollar by a patent process. All of which are schemes to short-cut economic laws. A Liberty bond is a contract to pay a certain sum of money at maturity with interest each six months before due date, and when a man purchased his Liberty bond back in 1917 and 1918 he became bound by that contract. When the Government fails to carry out its end of the agreement it is time to criticize, but we have not heard of any interest payments defaulting as yet. Therefore if I wish to sell my bond I am bound to take for it what my neighbor wishes to pay. Put the question to yourself. If your money is making you 10 per cent in your business, what would you offer for a bond paying 4 per cent?

It is unfortunate in a discussion of this nature that figures showing the extent to which bonds have passed from the original holders to large investors are not available. We know the movement has been heavy, but as an indication of what has been going on there is presented herewith a table showing the total bonds held by different Michigan manufacturing companies at the end of their 1919 fiscal year and at the end of their 1920 fiscal year.

Name of Company.	Holdings at end 1920 Fiscal Year.	Holdings at end 1919 Fiscal Year.
Reo Motor Car Co.	$ 197,796	$ 270,705
Michigan Sugar Co.	892,583	735,083
D. U. R.	215,000	280,000
Packard Motor Car Co.	207,535	19,583,667
Republic Motor Truck Co.	8,714	247,450
Truscon Steel Co.	127,321	294,061
Citizens Phone Co., Grand Rapids	12,795	15,000
Studebaker Corporation	8,936	3,020,000
Charcoal Iron Co.	.....	6,786
S. S. Kresge Co.	588,100	1,306,250
National Auto. Music Co.	30,150	30,150
Motor Wheel Corp.	54,114	55,564
Wolverine Portland Cement Co.	40,250	40,250
Auto Body Co.	130,750	238,250
Atlas Drop Forge Co.	20,000	170,000
C. M. Hall Lamp Co.	.....	2,000
Gen. Aluminum & Brass Co.	186,000	201,194
American Chicle Co.	85,071	100,548
Peninsular Paper Co.	.....	26,550
Hayes Wheel Co.	56,333	158,192
Hoover Steel Ball Co.	1,150	1,150
Federal Motor Truck Co.	192,505	268,155
Napoleon Motors Co.	3,114	26,207
Edmunds & Jones Corp.	15,066	23,900
McCord Mfg. Co.	.....	21,000
U. S. Pressed Steel Co.	1,954	1,954
Parke, Davis & Co.	285,632	835,632
Kawneer Mfg. Co.	.....	7,129
Bower Roller Bearing Co.	.....	58,450
Continental Motors Corp.	.....	1,856,070
General Motors Corp.	41,262	213,218
	$3,252,131	$30,092,965
Difference		$26,840,834

Here is a decrease of $26,840,834 within the space of one year. And the chances are that this is fairly representative of what has been going on in other centers.

Now it is pretty well agreed that large investors desiring tax free securities have bought up a considerable part of the Liberty bonds which have been passing on to the market the last three years, but there is no accurate way to measure the volume of such sales. But the amount of bonds purchased by the Government is a matter of record and the volume of bonds redeemed through purchase is no

(*Continued on Page 83*)

Digitized by Google



Built by Service—for Service

About a score of years ago the Detroit Creamery Company was organized by the consolidation of a few independent milk dealers.

Original capitalization was $125,000 and the first year's sales of all products totaled $200,000. Increasing demands upon the company compelled it to increase its capital to $1,600,000 until in 1920, when Towar's Wayne County Creamery was absorbed and the capital increased to $6,000,000 of which $3,200,000 is now outstanding.

AGGREGATE SALES OF ALL PRODUCTS IN 1920 TOTALED THIRTEEN AND ONE HALF MILLIONS. THIS YEAR'S BUSINESS IS EXPECTED TO REACH TWENTY MILLION DOLLARS.

In serving 150,000 families and 2,000 ice cream dealers, Detroit Creamery Company is the largest institution of its kind in Michigan and the second largest manufacturer of ice cream in the world.

Nine hundred head of fine cattle provide milk for Detroit homes. They are cared for on the company's farm near Mt. Clemens, a farm that grew in ten years from 165 acres to 1,800 acres.

An entire city block is required as a site for the company's main plant, in the heart of Detroit. The newest unit is a six-story building for offices and sales. In addition there are three branches over the city. A large building at Fifth and Pine streets cares for hundreds of horses and the company's fleet of motor trucks.

Thirty-five receiving stations in Michigan are used daily for bringing milk supply from the farms to Detroit. Three plants in Michigan are required for making powdered and condensed milk.

With the addition of the Towar Creamery plant in 1920, there was added to the company's business 150 milk routes, 15 receiving stations, the Towar plant on Henry street, two distributing stations and a large amount of equipment, necessary for a business aggregating $4,000,000 annually.

Detroit Creamery Company is exclusive distributor of the Famous Walker-Gordon Certified milk, produced under the supervision of the Medical Milk Commission of Wayne county. A special laboratory for the testing and preparation of this product is maintained at the main plant.

The refrigeration unit has a capacity of 555 tons for freezing ice cream. It also produces 300 tons of ice daily, which is used for packing ice cream.

OFFICERS AND DIRECTORS

President and Gen'l Manager, Jerome H. Remick
Vice President, A. A. Schantz
Vice President, F. P. Byrne
Secretary and Treasurer, F. W. Ulrich
Vice Pres. In charge of Gen'l Operation, Nelson J. Dessert
Vice Pres. In charge of Milk Distribution, William J. Kennedy

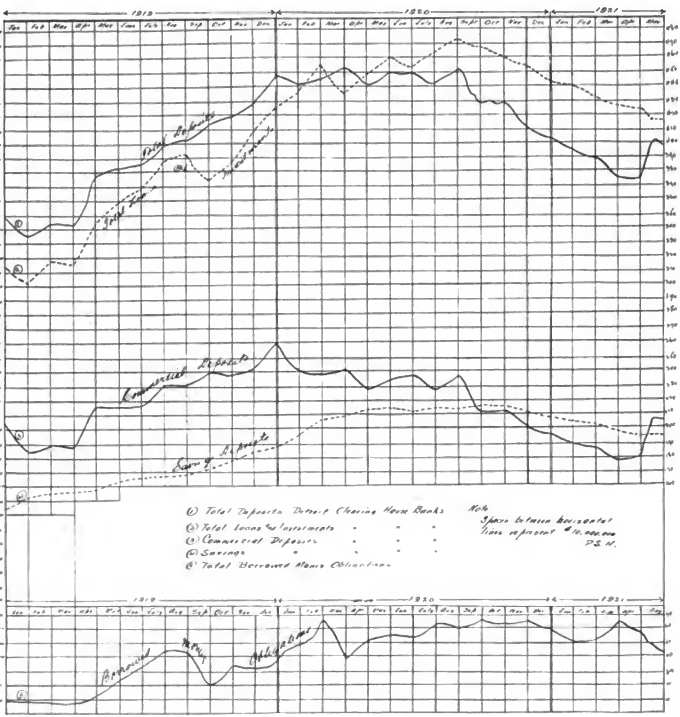
DIRECTORS

F. P. Byrne — William J. Kennedy
Nelson J. Dessert — Jerome H. Remick
J. B. Ford — A. A. Schantz
James T. McMillan — E. D. Stair

Detroit Creamery Company, - - Detroit, Michigan

Digitized by Google

How Banks Hav Stood By Business



BACK IN FEBRUARY, when the demand for crepe was highest and when the "buck" was being passed rapidly from wholesaler to retailer and return, the banks came in for a generous blessing because they were supposed to be arbitrarily holding back business. The bolshevik economist—and there are more of them getting space than we realize—told the people that money was tight only because the banks wished to scale down wages in industry by forcing hard times on the people. And another set of misled well-meaners pointed to the improving condition of the Federal Reserve Banks an conclusive proof that the member banks were thereby enabled to "loosen up."

Now every banker who has been borrowing from the Federal Reserve the last three or four years appreciates how much the Reserve Banks have helped to tide over the strained periods, and while the items of bills payable and rediscounts in bank statements have become common occurrences with most banks, yet rare is the banker who desires to see these items contained in his balance sheet. In fact, the departure of showing 10, 20 and even 30 per cent of liabilities in the form of borrowed money would make some of the old school of bankers turn over in their graves.

The existence of borrowed money items in bank statements, furthermore, got so common during 1920 that in one instance which came to notice a depositor questioned the condition of a certain up-state bank because it did not show any borrowed money.

When the criticism of the banks was at its highest we published

Digitized by Google

STRAIGHT LINE METHODS

Courage in Business

All modern industrial and mercantile expansion depends upon courage. It explains progress. It determines the limits of individual success. It is the physical expression of confidence and belief.

Business moves forward only so far as it is led by men with the vision of new conditions, new ideas, new forces, new methods—*and the courage to put them through.*

Business weaklings are left behind at the end of every period of inflation. Courage is not governed by conditions; it controls conditions. It not only recognizes, but eliminates, weak organization, mistakes, inefficiency.

Courage is inspired by knowledge. Knowledge dispels fear. Knowledge of your business—timely and dependable Facts and Figures from every department—points out weakness and waste; while knowledge of better methods, *with courage,* eliminates them.

ERNST & ERNST

AUDITS – SYSTEMS
TAX SERVICE

DIME BANK BUILDING. DETROIT
304 NATIONAL CITY BANK BLDG.. GRAND RAPIDS

NEW YORK	CHICAGO	CLEVELAND	CINCINNATI	NEW ORLEANS
PHILADELPHIA	MINNEAPOLIS	BUFFALO	INDIANAPOLIS	DALLAS
BOSTON	ST. PAUL	PITTSBURGH	TOLEDO	FORT WORTH
PROVIDENCE	ST. LOUIS		ATLANTA	HOUSTON
WASHINGTON	KANSAS CITY		RICHMOND	DENVER

STRAIGHT LINE METHODS

Digitized by Google

a story entitled "Borrower vs. Banker" (issue of February 26, 1921) and included therein a set of graphs showing how the clearing house banks of Detroit, collectively, had fared during 1919 and 1920 in the matter of deposits, loans and borrowed money. We now present a revision of those graphs in which the relation between total deposits and total investments is clearly demonstrated from January 1, 1919, to May 19, 1921. This set of graphs establishes an alibi for the banks more conclusively than hours of oratory or reams of discussion.

Please note the two upper graphs, total deposits and total investments. It will be observed that total deposits January 1, 1919, were about $37,000,000 in excess of total loans and investments. Now by following the two graphs across the page to the right it is clear that all during 1919 there was a reasonable margin between deposits and loans notwithstanding that both were mounting rapidly. At the same time please examine the graph at the bottom of the sketch entitled "Borrowed Money Obligations." It will be observed that the aggregate of these increased almost in sympathy with the increases in direct loans and deposits.

But along about February 1, 1920, things began to get out of gear. The continued rise in deposits changed to a series of small ups and downs all during the summer of 1920, while loans and investments (dotted line) did not follow suit except during March and April. During July and August total loans and investments increased again without a corresponding gain in total deposits, until by September 1 the loan item was more than $20,000,000 in excess of deposits. And, as the borrowed money graph shows at the bottom of the sketch, the difference had to be made up by rediscounting paper and borrowing money on collateral. An approximate statement of the clearing house banks collectively on September 3 would be as follows:

ASSETS.		LIABILITIES.	
Loans and investments	$473,000,000	Deposits	$451,000,000
Banking house and other assets	25,000,000	Capital and undivided profits	57,000,000
Reserves	70,000,000	Borrowed money	60,000,000
	$568,000,000		$568,000,000

Manifestly this is not an exhibit which permitted of much argument in favor of the "loosening up" idea and it is particularly unfortunate that the layman could not have looked upon the situation with the same equanimity that he regarded his own finances. The bankers have their sins, the Lord knows, but here was a case where they went the limit to protect the banks of the city, and all they got for it from many people was abuse and complaint. It is no wonder many of them get into the habit of assuming that well known ice-house attitude which makes the chills run up and down a borrower's back.

Looking further along the chart, the period from September 1, 1920, down to date has been one of a constantly widening gulf between deposits and loans, the breach widening from $22,000,000 last September to $49,000,000 May 1. Borrowed money totals while this was going on did not score a corresponding drop but instead went up April 1 to the highest point during the period—$65,000,000. But things began to right themselves in April, and by May 5 there had been a $25,000,000 gain in deposits and a still further liquidation in loans. And borrowed money went down to $43,000,000 for the first time since April, 1920. The chart also shows that during May commercial deposits regained part of their former position above savings deposits, the graphs of commercial deposits and savings deposits showing that the change took place along near May 1. What is needed, however, before there comes any real cause for shouting it to see the loan and investment graph drop down below deposits and to see a continued decrease in the borrowed money graph until the relation between deposits, loans and borrowed money becomes more nearly in the relation shown January 1, 1919, at the extreme left hand side of the sketch. It might not be amiss also to refer again to the relation between the banks and the Federal Reserve System and to point out that strength of the latter is not a conclusive proof of ability of the former to "loosen up." We should all be pleased to note that the Federal Reserve System is holding more than 50 per cent of gold against its liabilities, but should bear in mind that because the Reserve System is in sound shape, that does not mean that the banks are any better able to make loans.

The time will come some day when business men will study bank statistics sufficiently to understand why banks do not "loosen up" in periods like the one through which we are passing. If the same publicity had been given to information about the relation of deposits to loans and borrowed money of the individual banks as has been given to the feature of gold reserve ratio of the Federal Reserve Banks, this lack of understanding would have been largely cured. That the lack is widespread is evidenced by the remarks of our own estimable Prof. David Friday before the Detroit Real Estate Board, recently, when he called attention to the rising reserve ratio of the Reserve Banks as an indication that the banks should again open their money chests to new loans for building. The Federal Reserve Banks' relation to the ordinary banks is exactly that of the ordinary bank to its customer. I may be dealing with a bank that has a 50 per cent reserve but if I personally have not accumulated sufficient deposits therein to permit of my spending money, the strength of my bank is of no avail. And, furthermore, if I have tied myself up so that good judgment does not entitle me to more loans from my bank, the strength of the latter again is of no avail to me.

It should be pointed out further that the gold ratio of the Reserve Banks has risen more because of gold importations from abroad than from natural causes in this country. Between August 7, 1920, and May 18, 1921, the Reserve Banks themselves were contracting themselves. Total assets on the first date were $6,083,000,000 and on the latter date $5,490,000,000, a shrinkage of $693,000,000. But returning again to the Detroit situation, it will be interesting indeed to watch the course of these figures of loans and deposits and borrowed money for the next six months, for if the present rate of decrease is maintained there should be a return to normal relation before a great while. And when that relation is accomplished the banks will "loosen up" agreeably. But not before.

A Word About Covert Act Road Bonds

(*Continued from Page 33*)

contracts are let for the improvements, bonds are issued to anticipate the collection of the assessments. These bonds are the obligations of the county, the townships and the property assessed in proportion to the determined benefits derived from the improvements. Taxes are then collected in the regular way and it is provided by law that if any of the taxes are returned delinquent, the county shall pay the same so long as it is not obligated in the aggregate by other debts to more than 2 per cent of its assessed valuation.

This has been construed to refer to the taxes of the property owners' portion only. The bonds are frequently issued in three parts: the county portion, the township portion and the district portion. So long as the aggregate county debt is under 3 per cent of assessed valuation the county and district portions are classed as county obligation and the township portion as township obligation.

But the fact that the county road commission has the power to levy taxes on counties and townships (and now on cities and villages under recent amendments) without the specific authority of such municipalities as expressed by a vote of the electors has created an innovation in municipal obligations the constitutionality of which a number of bond attorneys have doubted. However, the supreme court in two decisions has upheld the constitutionality of the law and while it has not covered all possible constitutional objections in these decisions it is the opinion of highly respected legal talent that the supreme court would be slow in reversing the trend of these and other decisions upholding the right of the state to legislate regarding road matters as concerning the entire state.

On the other hand, the fact that the law has not been entirely judicated, that the bonds are not approved by the voters in the established way, that the assessments may be paid before maturity while the bonds cannot be called for payment before due, and that in the present market the requirement of the statute that the bonds must be sold at par necessitates resorting to sundry evasions, some of which may not be strictly legal, all tends to detract from the desirability of the bonds as a strictly high grade municipal obligation.

But it is quite generally admitted that the security behind the bonds is usually very ample, the yield with the tax-exempt features is attractive and the tendency to mature the same within the estimated life of the improvement gives the bonds when considered by themselves a fairly satisfactory rating among the investment offerings today.

EARNINGS MICHIGAN BANKS YEAR ENDED JUNE 30, 1920

Gross earnings	$47,807,175
Losses, bad debts, premiums charged off	2,240,058
Expenses, interest and taxes	34,066,804
Net profits	$11,260,319
Out of which total dividends of $5,906,321 were declared.	
Total average capital for above period	$50,987,560
Total average surplus for above period	35,911,070
Total average capital and surplus	$86,898,630
Upon which the net profits were equivalent to	12.96%
And upon which dividends were paid equivalent to	6.79%
Total average undivided profits for above period	$11,507,191
Total average deposits for above period	$43,748,750
Upon which net profits were equivalent to	1.33%

Digitized by Google

Foreign Exchange Rates, 1920

Monthly High and Low Mark

Month	United Kingdom. Sterling. High	Low	France. Francs. High	Low	Italy Lire. High	Low	Christiania. Kroner. High	Low	Belgium. Francs. High	Low	Germany. Mark. High	Low
January	3.79⅛	3.49¼	13.42	10.74	15.67	13.20	20.30	17.40	14.02	10.69	2.06	1.07
February	3.49¾	3.19	15.15	13.22	19.72	16.08	17.75	16.35	14.77	13.02	1.15	1.01
March	3.96	3.40½	14.91	12.94	20.72	17.48	19.20	17.10	14.12	12.77	1.66	1.05
April	4.06¾	3.84¼	17.15	14.37	26.65	20.56	20.40	19.15	15.92	13.60	1.98	1.34
May	3.92¼	3.74⅜	16.67	12.27	22.95	16.53	19.25	17.90	15.92	12.15	3.01	1.69
June	3.99¾	3.88¼	13.22	11.64	18.68	15.82	17.95	17.30	12.65	11.17	2.77	2.25
July	3.96½	3.70	12.37	11.67	18.89	16.17	17.00	15.60	12.62	11.07	2.72	2.20
August	3.72¼	3.53⅜	14.72	13.09	22.07	18.70	15.70	13.90	13.77	11.42	2.32	1.89
September	3.57¼	3.43¼	15.67	14.18	24.17	21.32	14.53	13.10	14.72	13.12	2.02	1.34
October	3.51⅜	3.40½	15.88	14.80	27.67	23.72	14.50	13.40	15.02	14.12	1.70	1.23½
November	3.62⅜	3.33¼	17.47	15.80	29.72	25.87	13.60	12.97	16.67	14.82	1.53	1.08
December	3.53⅜	3.42⅝	17.27	16.31	29.24	27.17	15.70	14.10	16.34	15.56	1.45¼	1.29
Year's Range	4.06¾	3.19	17.54	10.74	29.72	13.18	20.40	13.00	16.67	10.69	3.01	1.01

Where Have Liberty Bonds Gone?

(Continued from Page 78)

small affair. Up to June 30, 1920, the Government had purchased the following amounts at prices shown:

Issue.	Par Value.	Price Paid.
First Liberty conv. 4s and 4¼s	$ 36,912,000	$ 34,722,342
Second Liberty conv. 4s and 4¼s due 27-42	478,688,000	452,358,913
Third Liberty 4¼s due 1928	433,308,100	414,067,698
Fourth Liberty 4¼s due 1933-38	566,987,050	530,548,515
Victory 4¾s and 3¾s due 22-23	249,001,000	245,868,740
Total—Par value	$1,764,896,150	$1,677,566,210
Total—Paid therefor	1,677,566,210	
Saving to Government	$ 87,329,940	

In this instance alone we note that the Government bought up bonds to the par value of one and three-quarters billions out of a total outstanding of about twenty billions; or about 8.8 per cent of the total bonds outstanding have been purchased by the Government. It is not likely that private investors have bought up an equal amount either because of the tax free feature or the attractiveness of the yield at low prices so that one may readily imagine what the prices of the Liberty bonds would have been without Government support of the market.

PUBLIC DEBT OF THE UNITED STATES AS OF APRIL 30, 1921

PRELIMINARY STATEMENT

Total gross debt April 30		$23,995,564,776
Total gross debt before deduction of the balance held by the Treasurer free of current obligations, and without any deduction on account of obligations of foreign governments or other investments, was as follows:		
Bonds—		
Consols of 1930	$ 599,724,050	
Loan of 1925	118,489,900	
Panama's of 1916-1918	48,954,180	
Panama's of 1918-1938	25,847,400	
Panama's of 1961	50,000,000	
Canveron Bonds	28,394,500	
Postal Savings Bonds	10,718,240	
	$ 883,728,270	
First Liberty Loan	$1,952,299,850	
Second Liberty Loan	3,318,518,900	
Third Liberty Loan	3,644,456,250	
Fourth Liberty Loan	6,359,100,900	
	15,274,375,800	
Total bonds		$16,158,104,070
Notes—		
Victory Liberty Loan		$ 4,069,282,655
Treasury Certificates—		
Tax	$1,643,979,000	
Loan	905,519,000	
Pittman Act	239,375,000	
Special Issues	32,854,450	
	$ 2,819,788,450	
War Savings Securities, net cash receipts	713,879,170	
Total interest-bearing debt		$23,761,024,345
Debt on which interest has ceased		5,869,260
Non-interest bearing debt		228,671,270
Total gross debt		$23,995,564,776

TEXTBOOK OF WALL STREET

including

History N. Y. Curb. Methods of Trading.
History N. Y. Stock Exchange.
How These Markets Differ. Art of Speculation for Profits.
Augmenting One's Income.
How to Open an Account. Dictionary of Wall Street.

Copy free upon request.

McCall & Riley Co., Inc.

INVESTMENT SECURITIES
Suite 905
20 Broad Street, - - New York

THE MICHIGAN FINANCE CORPORATION

FLINT, MICHIGAN

Capital - $5,100,000.00

Wholesale and Retail Financing of Merchandise Sales. General Financing in all branches transacted, specializing in purchase of secured Motor Vehicle and Household Appliance notes.

WE SPECIALIZE IN PAPER SECURITIES

ALSO

We offer at attractive prices to yield around

6% TO 9%

RAILROAD BONDS — PUBLIC UTILITY BONDS
INDUSTRIAL BONDS — MUNICIPAL BONDS

OLMSTED & MULHALL

Investment Securities
Kalamazoo, Michigan
PRIVATE WIRES TO ALL MARKETS

Digitized by Google

Table of Contents

	Page
A word from the editor about this issue	5
What the investment bankers are doing for Michigan business	6
Where have the Liberty bonds gone?	8
The demand for public bonds	10
Public utility investments	18
Governmental securities investments	20
Industrial securities investments	23
Real estate securities investments	14
Steam railway securities investments	16
What does the future hold for Liberty bond owners?	28
How to figure the yield of a bond or a stock	30
Are present blue sky laws accomplishing the desired end?	32
A word about Covert Act road bonds	33
What is a legal investment for Michigan savings banks?	34
The future of foreign bonds in this country	36
The 1921 convention of the Michigan Bankers' Association	38
What changes, if any, should be made in the Federal Reserve law?	38
Reminiscences of a bank examiner	41
Foreign trade and prosperity	44
Bank costs today	46
The why of the A. I. B.	48
Trust powers for state and national banks	52
The 57 varieties of financial institutions	56
The modern bank building as a civic asset	58
The Detroit Stock Exchange	60
What are the advantages, both to corporation and stockholder, of having stock listed on a recognized exchange?	60
Chart showing the two major cycles of wholesale prices, 1810 to 1920, together with index numbers by years for that period	64
Michigan export statistics	64-65
Combined statements of the banks in the United States	65
How the wire system facilitates securities trading	69
Quixotic doctrines imperil the grain industry	73
The best way to "dress up" a financial statement for credit purposes	74
How the banks have stood by business	80
Table of earnings of Michigan banks	85
Table of foreign exchange rates, 1920	83
Public debt of the United States	85

Index to Advertisers

	Page
American Loan & Trust Co.	3
American State Bank, Detroit	36
American State Savings Bank, Lansing	47
Beckus, Fordon & Co.	65
Bolger, Mosser & Willaman	30
Brand, Richard & Co.	76
Breed, Elliott & Harrison	37
Bylesby, H. M. & Co., Inc.	16
Carlyle & Povah	64
Carson, H. C. & Co.	75
Charcoal Iron Co. of America	66-67-68
City National Bank, Lansing	42
Continental & Commercial Banks, Chicago	40
Continental Bank, Detroit	46
Dassard, Benj. & Co.	65
Dassard-Hull-Bumpus	20
Davis, Jno. H. Co.	49
Detroit Creamery Co.	75
Detroit Insurance Agency	59
Detroit Mortgage Corporation	25
Detroit Safe Co.—Diebold Safe & Lock Co.	59
Detroit Savings Bank—Back inside cover	
Detroit Trust Company	41
Dillon, Read & Company	53
Dime Savings Bank—Front inside cover	
Dodge, Jos. M.	76
Ernst & Ernst	61
Farmers & Mechanics Bank, Ann Arbor	77
Federal Bond & Mortgage Co.	24
Fenton, Davis & Boyle	9
First State Bank	43
Grand Rapids National City Bank and City Trust & Savings Bank	88
Grand Rapids Savings Bank	86
Grand Rapids Trust Co.	51
Gregory, Mayer & Thom Co.	75
Guaranty Trust Co., Detroit	46
Halsey, Stuart & Company	14
Hanchett Bond Company	21
Harris, Small & Lawson	1
Hornblower & Weeks	51
Howe, Snow, Corrigan & Bertles	55
Hughes, Gordon, Brasie & Co.	13
Jackson City Bank	45
Kanne, Higbie & Company	35
Leech, A. B. & Co.	17
Lee, Gustin & Company	64
McCall & Riley Company, New York	83
Merrill, Lynch & Company	53
Michigan Finance Corp., Flint	63
Michigan Trust Company, Grand Rapids	67
National Bank of Commerce, Detroit	5
National City Co.	77
Neer, Wm. A. & Co.	70
Nicol-Pord & Co.	15
Noble, H. W. & Co.	63
Olmsted & Mulhall, Kalamazoo	83
Otis & Co.	10-51
Paine, Webber & Co.	33
Peabody, Houghteling & Co.	22
Peoples State Bank—Back outside cover	
Peoples, W. J. & Co.	70
Phipps, Williams & Besson	16
Pontiac Commercial & Savings Bank	47
Pratt-Feyz & Co.	85
Rollins, E. H. & Sons	23
Security Trust Co.	42
Stacy & Braun	21
Straus, S. W. & Co., Inc.	57
Taylor, Ewart & Co.	52
Union Trust Co.	4
United Light & Railways Co.	19
United Savings Bank	45
Wagner, E. W. & Co.	69
Wallace & Co.	12
Watling, Lerchen & Co.	11
Wayne County & Home Savings Bank	39
Wayne County Bond & Mortgage Co. and North American Mortgage Corp.	29
Webb, Lee & Co.	61
Watt, Geo. M. & Co.	62
Zeiler, F. M. & Co., Chicago	71

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Established 1907

Published Every Saturday by the

MANUFACTURER PUBLISHING COMPANY

611 Free Press Building DETROIT, MICHIGAN Telephone Cherry 6018

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

JOHN A. RUSSELL, President and Editor
EDWARD R. GRACE, Vice-President
IRA W. WELBON, Secretary-Treasurer
JOHN P. FITZ GERALD, Second Vice-President
HAROLD HIGH, Managing Editor
PHIL S. HANNA, Financial Editor

Subscription Rate: Fifteen cents a copy. Five dollars a year in the United States, Canada and Mexico. Advertising Rates on application.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Volume 27

Number 24

Fifteen Cents a Copy

Five Dollars a Year

Public Library Detroit, Mich.

Michigan Bankers in Con[illegible]

The Week in the Motor Industry

An Experience in Foreign Advertising

Plowing With Pen and Ink

(Financial Section Starts on Page 22)

DETROIT, JUNE 11, 1921

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

ESTABLISHED NINETEEN HUNDRED SEVEN

Digitized by Google



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Capital, Surplus and Undivided Profits - $14,000,000

THE VALUE OF THE SERVICE RENDERED ITS CLIENTS BY THIS INSTITUTION CANNOT BE MEASURED IN DOLLARS ALONE; IT IS OUR AIM TO GIVE EACH CUSTOMER THE FULL BENEFIT OF OUR BUSINESS EXPERIENCE AS WELL AS OUR BANKING FACILITIES.

OFFICERS

JAMES T. KEENA, Chairman of the Board

JOHN W. STALEY, President
F. A. SCHULTE, Vice-President
JOHN R. BODDE, Vice-President
H. P. BORGMAN, Vice-President
R. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES B. AYERS, Vice-President
AUSTIN E. WING, Assistant to President
A. H. MOODY, Cashier
D. N. SWEENY, Assistant Cashier
D. E. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
G. W. BEASLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO D. HEAPHY, Assistant Cashier
C. I. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor
RODERICK P. FRASER, Manager Foreign Department

DIRECTORS

RUSSELL A. ALGER
GEORGE H. BARBOUR
W. T. BARBOUR
JOHN R. BODDE
H. P. BORGMAN
H. M. CAMPBELL
C. A. DU CHARME
FRANK J. HECKER
FRED W. HODGES
J. C. HUTCHINS
JAMES T. KEENA
H. B. LEDYARD
ROBERT S. MASON
FRED T. MORAN
FRED T. MURPHY
M. J. MURPHY
W. HOWIE MUIR
TRUMAN H. NEWBERRY
WALTER S. RUSSELL
HUGO SCHERER
F. A. SCHULTE
ANGUS SMITH
R. W. SMYLIE
JOHN W. STALEY
HOMER WARREN

(241)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Michigan Bankers in Convention

State Association Holds Its Thirty-fifth Annual Meeting in Detroit; A Review of the Discussions

By PHIL S. HANNA

MICHIGAN BANKERS, in their thirty-fifth annual convention, got down to business Monday afternoon in the west ball room of the Hotel Statler after half a day of participation in official proceedings and about a whole day of unofficial gatherings. As was expected, many of the delegates from upstate drove down Saturday and Sunday and those who came in this wise spent the greater part of Sunday in sightseeing. But at 9:30 Monday morning Mrs. H. M. Brown, secretary of the Michigan Bankers' Association, set up her official registration table in the ballroom lobby and began to hand out official badges to those who came to register. She also presented each delegate with souvenirs from various Detroit banks, the First & Old Detroit National giving a bronze ash tray, the Dime Savings a leather note book and the Peoples State a paper weight with an etched picture of Lincoln on it.

It began to appear early during the registration that estimates of attendance were far too low and by 10:30 the number had passed 440, and it was stated at noon that fully 700 persons, including the guests of the Association, had passed the registration desk.

There was an inviting array of entertainment features. Automobiles took the ladies to the Country Club for a reception and luncheon and some of the men stole off to play golf. But in the main the morning was spent in handshaking and renewing of acquaintances.

The Opening Session

There were very few vacant seats when the first session of the convention was called to order by President Staley. Following the invocation by Dr. Joseph A. Vance, Mayor Couzens extended a warm welcome to the bankers. He said humorously that the reputation of Detroit as a convention city was no doubt due largely to the generosity of the police commissioner and implied that perhaps the said commissioner had sometimes been color blind as to highhalls. But his message to the bankers was that Detroit wanted to co-operate with the rest of the state in all things, although he recognized that perhaps the country banker would not agree with him regarding municipal ownership.

Gerrit J. Diekema, Holland, responded for the bankers and showered his inimitable friendly spirit upon his hearers. He illustrated some of his points by anecdotes, of which there were too few, and impressed the gathering most forcefully with his conception of what the Association stands for, namely, "to develop the highest type of business integrity known the world over," and that the convention as an institution had for its object to inspire members to the most generous co-operation, not for private gain but for the broad benefits gained thereby for the entire state.

Following Mr. Diekema, President Staley delivered his annual address. In opening he called attention to his desire to make the sessions of the convention snappy and to inject more conciseness into them, and referred to the change from a three day session to one covering two days. His citations of what the banks had been through, the year during which he has been president, brought home to every one a realization of how much the fraternity has now to be thankful for, and while there are still many hard jobs ahead he pointed out that difficulties were now by custom being quietly solved. In reviewing the events of the year Mr. Staley pointed to the peak of inflation in March, 1920; to the overtaking of demand by production, with the consequent "buyers' strike" and high inventories, and made the significant statement that "the four months ending March, 1921, were without doubt the most severe in financial history." In his opinion it was most noteworthy that this period was passed with comparatively few business fatalities.

"At no time was the financial fabric of the country in jeopardy and at no time were we even near the limit of Federal Reserve Bank resources," said Mr. Staley, "the banks being entitled to the credit for such a small number of failures and the Federal Reserve system being entitled to the generous thanks of the country for the supply of funds."

The president's address in full was as follows:

"Assembling in convention today for the thirty-fifth consecutive year, the bankers of Michigan have much for which to be thankful. Into the last twelve months have been crowded many and varied and great problems, which have been bravely met and quietly solved by the bankers of this state and nation. Other problems, however, will continue to confront us.

"One year ago we were in the midst, and nearing the climax of, a frenzied, feverish activity in industry, commerce and trade, which was taxing the resources of our banks. We were in the midst of the mad and extravagant buyers' movement, which developed as an aftermath of the war, whose appeal had been for economy and thrift. As a result, the growing demands on the banks of the country, which had expanded bank loans over five billion dollars during the eighteen months after the armistice, called forth a mild warning from the Federal Reserve Board as early as November, 1919. This warning was again sounded by marking up the discount rate in February, in April and finally in June of last year. This period was marked by the exercise of caution by our bankers, but, too, in a spirit of helpfulness to every legitimate demand of trade and industry.

"Inflation in prices and wages, it now develops, reached its peak in March, 1920, but not until November was there evidence of any possibility of a precipitate decline. It was then that business came to a realization that production had overtaken demand, that in fact there had come a sudden revulsion to high prices by the buying public, which settled itself quickly and for a period of several months into a buyers' strike, a period marked by high inventories and heavy obligations in all lines of business.

"Perhaps, measured by what preceded it, business in America has never experienced a depression more severe than during the four months ending in March, and it may be said, too, that business acquitted itself well, for never have we known a depression paralleling this marked by so few failures or real business distress. That the banks deserve much of the credit for this is true, but to the Federal Reserve system must go the entire credit for the supply of funds which made it possible for the banks to carry their customers and to give added help where needed.

"Little attention need be given the occasional criticism of the Federal Reserve Board for its responsibility in checking the inflation and thereby bringing about business reaction. We were fortunate indeed that there was an agency powerful enough to do this very thing, and at the same time with resources sufficient amply to protect the situation so brought about. The conditions prevailing during those months of expansion were generally recognized by business men and bankers as unsound, and eventually leading to disaster if not checked, and today we fully realize the wisdom of the Federal Reserve Board's policy. Notwithstanding the action of that Board, it must be understood that at no time has our banking system been in jeopardy. We have never yet even approached the limit of the possibilities of that system. We have but to note the course of the Bank of England's reserves to realize the vast strength of our own system, even at the peak of the demands upon it this past year.

A Comparison of Reserves

"Like the Federal Reserve Banks here, the Bank of England is the great reservoir of bank reserves in England. Previous to the war her gold reserve but occasionally had gone below 50 per cent, and the average for the decade ending in 1910 was 53 per cent. In 1910 this percentage began a decline, which continued until it had reached 7.3 per cent late in 1920. It has since recovered to 14 per cent. The strength of the Bank of England, however, has never been questioned, and it is recognized today relatively as impregnable as at any period in its history.

"The Bank of France has in no sense altered its position in the financial structure of France, yet its gold reserves have dropped from 62 per cent in 1913 to 9 per cent in December last. Even the German Reichsbank maintains its position of power in Germany, though its reserves have declined from 42 per cent in 1913 to 1.2 per cent in December, 1920.

Digitized by Google

"When we recall that the low point in the gold reserves of the Federal Reserve Banks reached in May, 1920, was 42.5 per cent, we understand by comparison the strength of our bank position at that time. By the contraction of $584,000,000 in the Federal Reserve note issues since January 1, and the addition of more than $200,000,000 to the gold fund, this percentage has been increased to 57.6 per cent and has led to the suggestion from the Federal Reserve Board that liquidation has so far run its course as to warrant a constructive upward turn in business activity. We are on a new basis now, however, and we recognize that underlying the business conditions more sound today than at any period since our entry into the war. Sanity in all activities is once more dominant and the revival in trade and industry which we are now experiencing is marked by the good sense and sound judgment which are basic characteristics of American business but which for two years after the armistice were submerged in a wild orgy of extravagant ideas and actions. In the very fact that we are on a sound basis today lies our great hope of the future. Our problems are many, but in rebuilding our house the one essential is a firm foundation. However drastic may have been our experience during recent months, we know that we have passed the low point and whatever may be our problems their solution is clearer and nearer today.

"The most encouraging sign of these times is the overwhelming mandate of conservatism given at the polls in November. That this reflects the growing opinion of all civilized peoples may be accepted. The battle of business has ceased. Strife is giving way to a greater mutual confidence. We are a great commercial nation and our people are beginning to realize that our interests, individual and collective, are better conserved by helping to build up, rather than tear down, this great business structure.

"Of our national problems as they affect the general business situation, the questions of taxation, the tariff and transportation are the most important and far reaching. The best minds of the country are now directed at their intelligent solution. These questions are all, directly or indirectly, related to finance, but a question which supersedes all these as it affects our finances, and in the relative importance of its immediate need is a constructive plan for refunding the national debt. This should take the form of a long time bond at a rate of interest to conform to the present market, callable at a slight premium after a term of years. Should there be a marked decrease in interest rates during the next few years, the callable feature would give the Government opportunity to take advantage of it. The immediate refunding into bonds of the floating debt and one-half billions of short term Certificates of Indebtedness would soon release that amount of current funds, which these certificates now absorb. The banks purchased government short term certificates during the war but the funds were immediately turned back into trade and industry. The present floating debt of the Government is a war debt, and having been continuously renewed for two and one-half years, must be classed today as a fixed loan. Admitting that the recent business depression resulted directly from a strained credit position, accentuated by insistent government demands on our banks, we can doubt the rebound which would result by removing the Government as a current borrower? The refunding next in order and without delay of the Victory notes due in May, 1923, would remove a problem of refinancing which is bound otherwise to have a restrictive influence on money and credit during the next two years. While it would be the course of wise freedom to refund them into the same issue all succeeding maturities of Liberty loan bonds, and these issues are now selling at par, it is entirely possible that with the current debt and Victory notes out of the way, the credit situation might be so relieved as automatically to restore Liberty loan bonds to par.

"The financial problem next in importance is economy in public and private life. Few of us realize the tremendous power within our grasp if we but used the most common sense rules in our expenditures. Our domestic trade in 1920 is estimated at ninety-three billion dollars, of which 12 per cent, or eleven billion, was spent in what we would all admit to be extravagance. Suppose we cut in two these purchases in no sense essential, we would thereby save an amount sufficient in 60 months to wipe out the entire national debt. The surest way to approach this result is through the moral effect of a drastic cut in public expenditures. The new administration is committed to this course, and let us hope that those directing our destinies at Washington will have the courage and foresight to carry economy into the government expenditures to such a degree as to leave in our minds no doubt of its result. Let us not forget that the public revulsion to high prices is directed just as strongly at government extravagance. We all contribute our share toward the expense of government, and our people have a right to expect a reasonable degree of prudence in the appropriation of public funds, especially during this period of readjustment from those years of war waste. The early establishment of a budget system is the first important move in this direction. The rapid divorce of government from business, except in a regulatory way, and the injection of more sound business methods in government, are urgently needed. A broad program of world disarmament and a definite policy of refunding the war debt, to be met by future generations, would eliminate one billion dollars from the appropriations of the coming year. While expenditure of four billion dollars, as forecast by Congress, for the year ending June 30, 1922, reflects a tremendous decrease from that of 1920, when over seven billion dollars was levied in taxes, or even the current year, with five and one-half billions in appropriations, it is yet vastly too large. Business has carried and will continue to carry 80 per cent of this tax load. The prosperity of our people depends on the activity of industry, trade and

(Continued on Page 30)

"Among Those Present" at the Bankers' Convention

Mr. and Mrs. E. A. Dibble and Mr. and Mrs. E. T. Prideaux, Hillsdale; Mr. and Mrs. W. L. Scranton and Mr. and Mrs. C. S. Reed, Durand; F. N. Smith, Adrian; Edward D. McGugan, Freesoil; H. P. Saph, J. L. Carman and J. N. Bates, Marine City; Mr. and Mrs. W. F. Gallagher, Mr. and Mrs. W. A. Rosenkrans, Mr. and Mrs. L. C. Hall and Mr. and Mrs. A. E. Foster, Owosso; Frank N. Aldrich, Concord; Joseph Hoffman, Grand Haven; Charles G. Munn, Hamtramck; Charles L. Robertson, Jackson; Frank Schoiten and Paul F. Markoff, Spring Lake; C. H. Sutherland and George V. Collins, Clare; Frank R. Hines and George H. Noss, Pompeii.

Mr. and Mrs. G. A. Speers, Eaton Rapids; C. H. Frimodig, Houghton; Mr. and Mrs. A. J. Hoffman, North Adams; Mr. and Mrs. Wade Millis and Miss Dorothy Millis, Addison; E. W. De Lano, Allegan; Alvin S. Houghten, A. A. Bruder and E. A. Reid, Redford; Mr. and Mrs. John Y. Martin, Corunna; Mr. and Mrs. O. H. G. Lutz, Wyandotte; Clay H. Hollister and Mr. and Mrs. Eugene Richards, Grand Rapids; Mr. and Mrs. R. O. Hisbee and Mr. and Mrs. John J. Mikula, East Jordan; William W. McGregor and Herbert F. Walter, Birch Run; Mr. and Mrs. William Alden Smith, Mr. and Mrs. Gilbert L. Daane and Mr. and Mrs. Arthur M. Godwin, Grand Rapids.

Mr. and Mrs. Amos L. Kinney and Miss Edith A. Kinney, Silverwood; J. W. Zinger, Ruth; Emil Newberg, Ludington; Mr. and Mrs. H. H. Beaver, Hemlock; Dudley E. Waters, A. J. Maynard and Mr. and Mrs. H. Vander Muelen, Grand Rapids; E. D. Skinner and Mr. and Mrs. W. T. Bradford, Saline; Mr. and Mrs. Emeil Kempf, Freeman; F. E. Hammond, Muskegon; Mr. and Mrs. C. E. Fisher and Mr. and Mrs. R. S. Preston, Charlotte; J. R. Johnson, Mr. and Mrs. Kirk White, Mr. and Mrs. Matthias and Miss Caley and Mr. and Mrs. S. P. Selden, Lapeer; Mr. and Mrs. D. J. Evans, Millington; Mr. and Mrs. William McPherson, Howell; A. R. Vestling, Ludington; Mr. and Mrs. A. E. Bonsfield and Mr. and Mrs. J. H. Baker, Bay City.

Mr. and Mrs. W. H. Snelling, Fowler; Mr. and Mrs. W. H. Browne, Greenville; Harry L. Brimer, Petoskey; Mr. and Mrs. John W. Benford, Mount Pleasant; Mr. and Mrs. Charles M. Miller, Greenville; Mr. and Mrs. W. Merle Burger, Constantine; Mr. and Mrs. Fred F. McEachron, Hudsonville; W. E. Folsom, Algonac; Mr. and Mrs. H. G. Hayes, Hastings; John F. Seeley, Caro; Mr. and Mrs. James S. Bicknell and Mr. and Mrs. William H. Bicknell, Clare; Mr. and Mrs. F. J. and Miss V. J. Temple, Greenville; Mr. and Mrs. Frank E. and Miss Susan Y. Hill, Colon; Lavant Z. Caudin, Grand Rapids; H. C. Burke and Daniel J. Goulet, River Rouge.

C. F. Spaeth, Flint; H. J. Colby, A. L. Nichols, F. H. Rueh, O. L. Davis, W. E. Hall, James Mulhall and G. L. Taylor, Owosso; L. J. Kuehnle and Fred Sterling, Battle Creek; F. B. Jarvis and J. C. Snyder, Homer; Mr. and Mrs. Clyde L. Taylor, Otsego; Mr. and Mrs. M. A. Lambie, Hastings; Mr. and Mrs. Frank Welton and Mr. and Mrs. Henry Knowlton, Cadillac; Ira Cummings, Carson City; C. E. Greene and A. F. Lindke, Richmond; Mr. and Mrs. L. R. Ross, Harrisville; Mr. and Mrs. William Warmington, Brooklyn; Mr. and Mrs. Ward Peck, Metamora; Mr. and Mrs. Frank E. Gorman, Lansing; Mr. and Mrs. F. A. Howlett, Gregory; Russ S. Jenks, Henry Whiting and Mr. and Mrs. Charles Beyaching, St. Clair; Paul C. Schaible and Conrad Lehman, Chelsea.

Mr. and Mrs. Edward Whiting, Traverse City; Mr. and Mrs. William E. Schauppner, Weidman; A. Wesley Clarke, Sault Ste. Marie; Mr. and Mrs. Charles G. Bigelow, Albion; Mr. and Mrs. Floyd E. Oliver and Donald Oliver, Farwell; John Q. Ross and John W. Wilson, Muskegon; Mr. and Mrs. John H. Robson, Mr. and Mrs. Frank A. Marshall and Mr. and Mrs. William J. Hathaway, Ovid; Mr. and Mrs. W. J. Rachow and Mr. and Mrs. A. A. Stefanowski, Hamtramck; M. Vander Maas, Plainwell; Mr. and Mrs. Sylvester Sagmaw; Mr. and Mrs. F. Hatch and Mr. and Mrs. Lorin Cole, Newago; Mr. and Mrs. Leon F. Titus, Traverse City; Mr. and Mrs. George D. King, Mr. and Mrs. D. R. Tecumseh and Mr. and Mrs. G. A. Walter, Clarkston; W. J. and J. T. Clarke, Harbor Springs; Herbert E. Johnson, Kalamazoo.

Mr. and Mrs. K. L. Potter, Jackson; Mr. and Mrs. Ernest Clavinson, Saginaw; E. F. Harris and H. W. Parker, Bancroft; Ray T. Maynard, Saginaw; J. R. Dufty, Merrill; D. F. Zimmerman, C. J. Walz and R. E. Reichert, Ann Arbor;

(Continued on Page 36)

Digitized by Google

The Week in the Motor Industry

Price Reductions Generally Fail to Increase Sales; Ford Motor Company Said to Be Operating at Capacity

By MARC BRAUN

THE END of price cutting among the automobile manufacturers is not yet in sight. While there may be a temporary slowing-up in such announcements, it is likely that quite a few more will be made before the end of the month, as guaranteed prices of some of the makers expire June 30 or by July 15. A number of manufacturers again have announced that they have no reductions in mind, at least not until late in the year or the end of 1921. Some of them, however, added that should something unforseen happen and make a price reduction necessary in the meantime, dealers as well as purchasers will be protected by a refund.

Taking the business as a whole, it does not appear from what has been learned from manufacturers, dealers and prospective purchasers that the price slashing movement started some eight weeks ago has greatly helped sales. Of course, as is usually the case, there are exceptions, and some cars have been selling more rapidly—at least according to statements made by officials of either manufacturing or sales concerns. On the other hand, it is also known by many who are in a position to know that in a good many instances the expected increase in sales has not materialized.

Somewhat Demoralizing

There is ample evidence that the public in general has found the action of the manufacturers rather demoralizing, because it was started in the midst of the selling season. As was stated previously in this publication, the reduction of prices should have been delayed until July or August, which would have been at the end of the selling season. However, inasmuch as conditions are not alike with any two manufacturing concerns, it was a case with many of being guided strictly by what they thought best for their own interests.

At a recent meeting of the board of directors of the Jordan Motor Car Company, Cleveland, it was announced that Jordan dealers had asked for more than 600 cars between May 1 and 28 and that they took orders for more than 800 cars for immediate delivery. Officials announced that advance June orders covered by deposits in the hands of dealers were as follows from seven of the more important distributors: New York, 75; St. Louis, 30; Philadelphia, 102; Chicago, 75; Cleveland, 85; Pittsburgh, 35; Boston, 50.

A company which is not on the list of those which recently reduced prices is the Packard Motor Car Company, Detroit. It is said that its business as a whole is satisfactory. So far as the Detroit district is concerned the Packard Detroit Branch reports sales of $750,000 of cars during April and May—111 deliveries in April and 105 in May. Concerning the business, General Manager H. W. Peters says:

"Business kept up surprisingly well during the month of May, and while the May business is not quite up to that of April, the total is well in excess of $300,000. This gives us a grand total of three-quarters of a million for the last two months.

"This is especially gratifying when the price-cutting war is taken into consideration. The price cuts, coming when they did, just as the industry was coming out of the depression, and right at the peak of the automobile demand, was probably the most demoralizing one the business has ever experienced. To keep going steadily through it all, as we have done, is a popular indorsement of our merchandising policy.

"Packard prices have always been as low as good business allowed them to be. Prices and demand should work inversely. As the demand increases, lower prices are made possible, for large production means economical manufacture. Therefore, last fall upon an anticipated large production of the Single Six, the price was reduced from $3,640 to $2,975. Incidentally we delivered more Single Sixes last month than any month to date.

"The new trucks continue to move slowly. During May thirteen new units were delivered but indications are for a steady pick-up in the truck business for June."

The following telegram signed by A. B. C. Hardy, president and general manager of the Olds Motor Works, Lansing, has been sent to Oldsmobile distributors: "Any reports, rumors or newspaper stories that have predicted a reduction of Oldsmobile prices have no authority and can only have been inspired by those without information or who have sought to injure Oldsmobile business. Oldsmobile 43A and 47 prices were predicated upon material and labor costs even lower than present price levels, and bear out every claim we have made to the public that they represent values nowhere even approached in the present market."

It has been announced by President A. R. Erskine, of the Studebaker Corporation, Detroit and South Bend, Ind., that during April 6,559 cars were sold and during May 7,400, a total of 13,989, while in 1920 during the corresponding two months only 6,626 cars were sold. There were recently unfilled orders on hand for about 7,000 cars. In the course of his statement Mr. Erskine says: "In the first quarter of the year we did 13 per cent of the total automobile business in the country, and in this quarter are doing 15 per cent of the total business, excluding the Ford Motor Company. We are today making price adjustments, based on lower costs, in addition to reductions made eight months ago, and anticipate no difficulty in continuing record earnings throughout this year. Reductions in the prices of motor cars, which are now occurring, are a good thing for the industry, because they will assist in the restoration of confidence and stability. Prices cannot return to pre-war levels because wages will not and should not; and quality standards are higher."



—Butterfield in the Monroe Commercial

GET BUSY!

A Ford Statement

For several weeks rumors have been heard about things the Ford Motor Company isn't doing or wasn't going to do. One day it was said that men by the hundreds were being laid off; the next day it was reported that output had been reduced 50 per cent; still another day it was whispered that the plant was going to close the next week for an indefinite period. As a matter of fact all that is being said about Ford's doings is known at the Ford headquarters and whatever is being said does not seem to worry the Ford organization in the least.

"Why should we bother about all that is willingly or unwillingly said about us," asked a company official. "We know that much is being circulated by people who seem to have only one object—to hurt the Ford business. However, as the records show, these rumormongers do not hurt us a bit. The only thing that hurts us is our own inability to produce all the cars our dealers ask.

"Perhaps the best way to answer all these stories is the fact that our production for June is 100,000 cars, the same number as for May, which is more than 4,000 cars per day, our maximum factory and assembly plant output.

"We are not in a position to advise what the production figures will be for subsequent months, as definite schedules are not established more than thirty days in advance. Our branches and dealers, however, asked to be supplied with a considerably greater number of cars than the 100,000 scheduled for this month, so that Ford output at present is limited not by orders but by manufacturing facilities.

"Since May 12, when we broke this year's single day output—4,092 cars—we have gone up in production to more than 4,100 cars a day, and last Friday, May 27, we reached an output of 4,239.

"Of course none of us know what several months in the future will bring, but here at



—Darling in the New York Tribune

Getting Mad at Her Because She Doesn't Give as Much Milk as She Did Two Years Ago Isn't Going to Help the Supply Any

Digitized by Google

the Ford company we are looking ahead, not behind."

It has been officially announced by George C. Hubbs, vice president and general manager of the Grant Motor Car Corporation, Cleveland, that there has been no shutdown of the plant.

"Our business, like that in many other plants, is not as good as it was a few weeks ago, but we shipped twenty-one cars Saturday and so far as we can see now we shall continue to operate, as we are getting orders," said Mr. Hubbs. The Grant company has been turning out an average of 25 cars a day up to very recently.

Announcement was made by General Manager W. L. Day, of the General Motors Truck Company, Pontiac, that beginning Monday of this week, the plant would be operated as usual. For a week there was a temporary cessation of activities in the machine and assembly departments, but there is no truth in the rumor that the plant will be closed.

Activities at the plant of the Oakland Motor Car Company, Pontiac, continue at a good rate, and according to General Manager George H. Hannum the production of 100 cars a day was expected to be an accomplished fact during the week.

The Kissel Motor Car Company, Hartford, Wis., has reduced the price of four of its custom built models $500. Old and new prices are as follows:

Model	New Prices	Old Prices	Reduction
Standard Touring	$2,775	$3,475	$700
Standard Tourster	2,975	3,475	500
Standard Coupe	3,775	4,275	500
Standard Sedan	3,775	4,275	500

Since June 6 lower prices are in force on the Elgin, made by the Elgin Motor Car Corporation, Argo, Ill. The comparison:

Model	New Prices	Old Prices	Reduction
5-Passenger Touring	$1,495	$1,775	$280
4-Passenger Scout	1,595	1,895	280
5-Passenger Sedan	2,295	2,795	400
4-Passenger Coupe	2,395	2,795	400

The Hudson Motor Car Company, Detroit, has reduced prices $150 effective June 2, as follows:

Model	New Prices	Old Prices	Reduction
7-pass. phaeton	$2,250	$2,400	$150
4-pass. phaeton	2,250	2,400	150
Cabriolet	2,850	3,000	150
Coupe	3,125	3,275	150
Sedan	3,250	3,400	150
Touring limousine	3,475	3,625	150
Limousine	3,850	4,000	150

Effective since June 2 the prices of the Essex cars, made by Essex Motors, Inc., Detroit, are $150 lower. The new price schedule is as follows:

Model	New Prices	Old Prices	Reduction
2-pass. touring	$1,445	$1,595	$150
2-pass. roadster	1,445	1,595	150
2-pass. cabriolet	1,950	2,100	150
5-pass. sedan	2,360	2,450	100

In the case of the Hudson and Essex this is the second price cut since last fall, the total reduction on the Hudson ranging from $350 to $600; on Essex $350.

New lower prices on the Studebaker cars were announced last week by the Studebaker Corporation, Detroit and South Bend, Ind., the reductions ranging from $115 to $200. Prices now are as follows:

Light Six Models	New Prices	Old Prices	Reduction
2-pass. roadster	$1,300	.....	.....
Touring	1,335	$1,490	$155
Coupe	1,695	1,850	155
Sedan	1,995	2,150	155
Special Six Models			
2-pass. roadster	1,585	1,750	165
Touring	1,645	1,750	105
Coupe	2,450	2,650	200
Sedan	2,500	2,700	200
Six-Six Models			
7-pass. touring	1,995	2,110	115
Coupe	2,850	3,050	200
Sedan	2,950	3,150	200

The Paige-Detroit Motor Car Company, Detroit, announced price reductions ranging from $20 to $160, effective June 7. The old and new schedules are as follows:

Model 6-62	New Prices	Old Prices	Reduction
5-Passenger Touring	$1,635	$1,795	$160
5-Passenger Roadster	1,635	1,795	160
4-Passenger Sport	1,925	2,015	90
4-Passenger Coupe	2,450	2,670	150
5-Passenger Sedan	2,570	2,720	150
Model 6-66			
7-Passenger Touring	2,875	2,895	20
4-Passenger Sport	2,975	2,995	20
4-Passenger Coupe	3,255	3,275	20
7-Passenger Sedan	3,320	3,850	20
Limousine	4,020	.....	.....
Daytona Roadster	3,295	.....	.....

Paint, Oil & Varnish Club Hears of Hoover's Program

Herbert Hoover's program for reorganizing the Department of Commerce in a manner that will make it an efficient point of contact between the federal government and the business structure of the country without being inquisitorial in its nature, has been presented to Detroit business men by one of the men who will assist in the work. S. Marshall Evans, Chicago, president of the National Paint, Oil & Varnish Association, as guest of the Detroit Paint, Oil & Varnish Club at its annual meeting Tuesday evening at the Fort Icewcraft Country Club, carried the Secretary's story as revealed in a conference with business leaders only a few days ago.

Mr. Hoover's idea, Mr. Evans explained, was to assist in the creation of sections that would gauge accurately consumption and demand in the country's manufacture and production in all branches, and also the capacity of output, with the idea of co-ordinating so that the element of uncertainty that has prevailed in all industries might be eliminated and a fresh start on a sounder and more accurate basis be possible.

Mr. Evans said that when Hoover assumed his job in the Department of Commerce he found more than 400 bureaus whose duties overlapped and whose efficiency was at low ebb. This condition is being rapidly dissolved and it is hoped to so reorganize that is meeting with the demands of the country. It will not be long, according to Mr. Evans, before the results of this policy will be seen throughout the entire structure of American business.

George V. Horgan, of New York, accompanied Mr. Evans to Detroit and spoke of the rehabilitation of the paint industry of America in its period of reconstruction. Other speakers were: Otis M. Hoard, Chicago, editor of the Paint, Oil & Chemical Review; H. S. Bonnell, Detroit Graphite Company; William H. Carnegie, Berry Brothers; R. A. Plum, of the Truscon Laboratories, and Alfred Fischer, of the Michigan Manufacturer, all of Detroit.

At this annual election of the Detroit club the following were chosen: President, C. C. Boone; vice-president, Michael McNamara; treasurer, F. J. Holtz; secretary, L. E. Phelan, directors, Charles L. Forzey, Kirke W. Conner and H. J. Woodlock; board of control, H. S. Boutell; delegates to the national convention at Atlantic City in October, E. R. Hoyt, H. J. Woodlock, William Search and S. S. Thomas; alternates K. W. Connor, Jos. A. Miller, John Zeph and H. R. Lott.

The Ford Motor Company, Detroit, rather unexpectedly announced a price reduction taking effect Tuesday, June 7, this being the second cut since September, 1920, when the company started the general movement. The latest reductions range from $15 to $50.

In the course of the announcement the company states that the action was made possible by a number of factors, among which are the greater demand and larger sales of Ford cars, the greater efficiency in operating the plant, etc.

"During May we produced 101,424 Ford cars and trucks in the United States alone," says the statement, "and this was the biggest month in the history of our company, and our factory and assembling plants are now working on a 4,000 car daily schedule for June. The Ford business during April and May was greater by 56,633 cars and trucks than for the corresponding two months in 1920. The Ford factor is still being sold at less than the cost to produce on account of the recent big price reductions, and it is impossible, therefore, to make any further cut in the price of the tractor."

The Ford company also announces that wages of its workmen will not be reduced. The new and the old prices are as follows:

Models Without Starter	New Prices	Old Prices	Reduction
5-Passenger Touring	$415	$440	$25
2-Passenger Runabout	370	395	25
Chassis roadster	245	260	15
Models With Starter			
7-Passenger Sedan	695	745	50
5-Passenger Sedan	760	795	35
Truck chassis	495	545	50

After the touring and runabout $25 additional

Dodge Brothers, Detroit, announced new prices effective June 8, the reductions ranging from $300 to $365. New and former prices are:

Model	New Prices	Old Prices	Reduction
2-Passenger Roadster	$ 935	$1,235	$300
5-Passenger Touring	985	1,285	300
3-Passenger Coupe	1,340	1,715	375
5-Passenger Sedan	1,785	2,150	365

Almost coincident with the statement of the Ford Motor Company that it does not intend to close its plant during either June or July, as has been rumored, comes the report from Toledo that the Willys-Overland Company will operate full time with all its employes, the remainder of this month. So far as July is concerned little or nothing is to be done just now time to make any predictions, although it was announced that the complete manufacturing schedule for next month had not yet been set. Unofficially it was declared by local officials that the force is likely to be kept also next month, as the business outlook is satisfactory.

There will be no reduction in the price of the Briscoe, dealers in several cities announce in advertisements. The Briscoe Motor Corporation, Jackson, they say, will now equip all its cars with front and rear lights, mats on the running board, wind deflector on the windshield, motometers, and the open cars with gypsy curtains, all free of charge. The dealers say this added equipment is worth a reduction of more than $100.

BUILDING & LOAN ELECTION

After having been president of the Grand Rapids Mutual Building & Loan Association for thirty-three years, William Widdicomb has resigned owing to ill health. Charles N. Remington, who has been with the Association more than thirty years, has been elected president, and F. Carroll Follmer, who since 1889 has been a director, has been made chairman of the board. It was announced that the business of the Association is steadily growing. More than $3,000,000 of subscriptions were received by the Association during the last year, or twice as much as during 1919. This year subscriptions during March and April amounted to $734,000.

DURANT IN LANSING JUNE 23

Durant park, given to Lansing by W. C. Durant, will be formally dedicated June 23, with a parade and program. Mr. Durant is expected to attend.

YELLOW CAB NAMES BRADFIELD

Announcement of the appointment of H. C. Bradfield, Detroit, as director of sales and advertising for the Yellow Cab Manufacturing Company, Chicago, is made by that company. Mr. Bradfield, who has been president and general manager of the Bradfield Company, Detroit, has discontinued his Detroit business and is now with the Yellow Cab Manufacturing Company. The Yellow Cab Manufacturing Company, in addition to being the largest manufacturer of taxicabs, also makes Yellow Cab-trucks in the three-quarter and one and a quarter-ton capacities, and a six cylinder high grade motor car, the Ambassador. The company is on a capacity schedule at present.

Digitized by Google

A Foreign Advertising Adventure

Some Problems Encountered by Hupp Motor Car Corp., And How It Has Proceeded With Their Solution

By FRED ERICK DICKINSON

Advertising Manager, Hupp Motor Car Corporation, Detroit

THE COMPANY which I represent entered the field of foreign advertising, as a great many companies in the early days entered it, at the point of least resistance. Within two years of our establishment we had obtained a good, strong foothold abroad, largely through the efficacy of a rather daring and remarkable piece of "stunt" publicity. Within a very short time after that we had established ourselves rather firmly, because of the timeliness of our entry and the peculiar adaptability of our product to the foreign demand.

Advertising, in a formal sense, played a very small part at the beginning of our export merchandising. It is amusing to look back at those early days and note that out of the mass of formal advertising which grew out of our entry into the foreign field, the bulk of it was used in this country to establish ourselves in the domestic field. It apparent ly never occurred to us that information concerning our remarkable world tour could be disseminated through the export publicity media in such a way as to develop our export market. We used this information right at home and profited by it greatly. But that, speaking generally, was as far as it went. The reason for this was our complete ignorance, even after a couple of years of export merchandising, of the ways and means by which export advertising, in a formal sense, is accomplished.

The Distributors Started It

That ignorance, by the way, exists today in the minds of many organizations selling in the foreign field, and I am frank to say that after all of these years, and after considerable study and marked improvement, our organization has not entirely solved the export advertising problem.

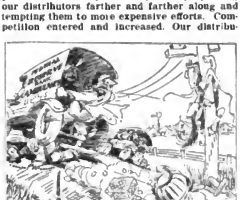
But to go back: Circumstances were considerably kinder to us than we were to ourselves. In spite of our almost criminal ignorance of how it could be developed by advertising, our foreign demand increased. The impetus given it by our dramatic entry had not died out and it was further stimulated by what was practically a repetition of the original stunt.

Again, I must confess that that repetition was undertaken largely to furnish material for domestic use. It seems unbelievable, doesn't it, that intelligent men could be so blind as not to realise the possibilities of what they were doing for use in one field and so keenly conscious of its use in another field? But, again, I must give as an excuse the seemingly impenetrable darkness which surrounded formal foreign advertising.

Speaking from the standpoint of an advertising man, we did not deserve the success we obtained; but nevertheless success was ours. Our distributors dotted the globe and they were selling all of our product that we could, or thought we could, afford to give them.

Then, one by one, these distributors, in a very limited and grudging way, began to advertise. In those days they advertised, I sincerely believe, not because they needed it and not because they had a complete realization of what advertising could do for them, but because it seemed the natural and expected procedure for a man in business to spend a certain sum, very indefinite in amount, and very haphazard as to method, in advertising. A great many people at home and abroad are still advertising in this manner. They literally know not what they do or why they do it. It is part of the game, just as the chiropodists, twenty years ago, all wore high hats and the undertakers today all wear frock coats.

But as the years went by, this natural and necessary burden of advertising increased. The publications who profited by it kept pushing our distributors farther and farther along and tempting them to more expensive efforts. Competition entered and increased. Our distributors, with a vague conception of the possible good that might come from advertising, increased their own advertising burden to the point where they began to look around for some one to help them carry it. They naturally looked in our direction.



Irving in the New York Tribune

That Ambulance Will Have to Make a Return Trip If They Don't Slow Down on the Country Roads

At the Mercy of 80

This marked the beginning, with our company, of the division of expense between the factory and the distributor on advertising bills, on the basis of a certain definite amount per car shipped, as the factory share. The distributor wrote his own advertising copy, selected his own advertising media and determined the size and extent of his schedule.

Having entered upon this arrangement, it was continued for a number of years, and it is entirely to the present purpose to tell you that on the whole it was a very unsatisfactory arrangement, and to tell you why.

I am not saying that it could not have been made satisfactory or that all similar arrangements have proved and are still proving unsatisfactory to other organizations. If I am to preserve the integrity of my remarks in a way that will make them in the slightest degree helpful to you, I cannot go beyond our own experience.

As to copy and the things that were printed in public regarding our product we were at the mercy of about 80 separate individuals; practically all of them untrained as writers of advertising; many of them unacquainted with our product except in a most limited sense; most of them, because of distance and widely varying environments, unable to grasp our ideas and ideals. This condition made not only for ineffectious and useless copy but for actually dangerous copy. Statements were made, if not literally over our name, virtually with our sanction, that we could not substantiate. Misstatements were many, exaggerations the rule. In those countries where the precept "Let the buyer beware" still held sway, representations were made that got us into trouble. I recall one instance in particular where our product was advertised as "guaranteed for life." The ambiguous nature of that guarantee, interpreted according to our ideals, cost us money.

The question might be asked at this point: "Why didn't you furnish your own copy, thus helping the dealer out and preventing unpleasant complications?" We did that very thing but our distributors still had their own ideas. It wasn't strong enough for them. Some of them seemed to exaggerate and distort. It did not contain that evanescent "something," the absence of which even a child can detect, but the presence of which no one seems to recognize—good color. Many of them were willing to use our copy and no two of them wanted the same kind of copy. We were placed in the position of writing special stuff for every important country in the world and submitting it to a captious critic in every one of them.

Advertising to Each Other

"Why, then, did you not force the issue and refuse to participate in the expense of advertising of which you did not approve?" We did that, too, and became involved in endless disputes. We were pitted against four acerse "fathers," each fighting for hard cash in the shape of an advertising allowance. Now, an endless discussion carried on across a hemisphere with a man who does not speak or write your language, is a difficult and unpleasant thing. Distributors were alienated. The friction arising from advertising controversies interfered with sales and service. We found ourselves giving in where we should not have given in, simply for the sake of preserving an important connection. Thus bad precedents crept but I defy any one with as much at stake as never found its way into advertising channels. A bad way of doing business, you will say, in. Money was allotted for advertising that we had to have done differently.

I have dwelt at some length on the matter of copy in order that I may save time on some of the other factors. The difficulties that arose around copy typify in a measure the difficulties that arose around the selection of media and the size and extent of schedules.

Theoretically, a man doing business in Australia should know what Australian advertising media to use for his advertising. Actually, that man knows as much about it unless he is an advertising man. The same thing, by the way, holds true in this country. Our distributors by and large were not advertising men. They selected publications because they themselves read those publications or because their friends read them or because their wife's uncle owned them or because the publisher was a good fellow or because the business manager would give them a rake-off or because their solicitor happened to drop in at the time the

Digitized by Google

advertising was being placed. We found our advertising appearing in media that would not sell a car for us in a thousand years. Many distributors displayed a fondness for advertising in their own trade publications, read only by men selling the kind of things that they themselves had to sell—dealers advertising to each other, in other words. Dealers would select an absolutely worthless medium, whose circulation was confined to their own territories, and pass up an excellent medium that would actually sell cars for them, because part of that medium's circulation was in another dealer's territory. Shortsightedness, ignorance and lack of experience controlled our list.

And the disputes and misunderstandings that arose over copy were duplicated and aggravated by the disputes that arose over media.

The differences of opinion that arose as to size and extent of campaigns were not as numerous and serious as were the other causes of contention. Nevertheless, in this respect, and in many places, conditions were not altogether satisfactory. Although we made a certain allowance per car, the amount was intended as a limit and not as a definite recommendation. Hence we found some distributors wasting their own money and ours as well simply for the purpose of absorbing the maximum allowance. One-half the amount, or two-thirds, would have been adequate. As in the case of a distributor who had a limited territory, a fairly active market and only one inexpensive publication covering the entire market, we would find that distributor blossoming out into full page schedules and using all the space would have accomplished the maximum results.

My enumeration thus far has included only what I will call, for lack of a better phrase, the basic difficulties of our plan of sales management at that time. There were many other accessory and supplementary difficulties. In order that our plan might work smoothly and grow of system and be not altogether haphazard and efficient, a considerable amount of checking had to be done. Hence this rule: that a distributor, in order to receive his full advertising allowance, must submit to us month by clippings of his advertising accompanied by receipted bills for the payment thereof. Hardly any distributor, it seemed to us, even after months of education and stimulation, seemed able to comply with these simple requirements. Entire campaigns came without receipted bills; some without bills at all. Duplicates would not correspond in size with the lineage shown on the bills. Additions and extensions were wrong. Rates fluctuated, even in the course of a short campaign. Repeated urgings and warnings failed to bring monthly or regular submission of these claims; and they would all come piling in at the end of the year, or the middle of the year following their appearance. We, on our end, occasionally made mistakes; credits that should have been passed, were not passed, or the amount was incorrect. All of this entailed endless correspondence and an increasing burden of misunderstanding and suspicion and a decreasing amount of actual advertising efficiency.

The New Plan

After convincing ourselves that this particular method of handling foreign advertising was not working out in our particular case, we decided to make a radical change. We inaugurated an entirely different system—the system under which we are now working. That system is not perfect, either in itself or in our application of it, but it is at least a step ahead of thinking, a decided advance over its predecessor. Again, let me say that my implied condemnation of the older plan simply applies to our experience. We could not make a "go" of it. Possibly others smarter than we can do it. It has points in its favor.

Some three or four years ago we announced to all of our foreign distributors that at the expiration of the current season no further advertising allowances were to be made. We told them that from then on we proposed to handle our export advertising in much the same manner as we were handling our domestic advertising. We would make up a list of publications having circulation in the territories of our export distributors, and would run in those publications a consistent advertising campaign composed of advertising which we prepared ourselves. We carefully explained to them our reasons for the change, which were briefly, as follows: We wanted to be sure that our story was being told regularly and steadily throughout our market, and told in our own words. We wanted to guard ourselves against misstatement, exaggeration and insufficiency of statement. We were going to pay the entire cost of this venture ourselves. It was probably the significance of this last statement that smothered the fury of the reaction which was expected. Only those distributors who were obviously misusing and diverting our advertising allowance made any great protest.

So we started in with all of the resources and ability and ingenuity at our command. We made many mistakes—some of them as ludicrous as had ever been made by our distributors. But our mistakes were not perpetuated, because we had it completely in our power to rectify these errors as soon as they were discovered. We had no differences of opinion to iron out, no long-winded and long-distance correspondence to conduct. We were treading on no one's toes and wounding no one's sensibilities.

We are still handling our foreign advertising after this manner and we are still making mistakes, and still, in some instances, wasting money. But these mistakes and these wastes are decreasing. On the whole, every one concerned is as satisfied as one could expect a large and scattered and heterogeneous group to be.

Before going on to more discussion of our methods and experience, and the points of general information that have arisen out of them, let me say that in a few scattered instances, where circumstances seem to warrant it, we are still continuing our allowance system. These places are so few that we are able to keep them entirely under our direction and control.

New Problems

Our change of plan brought with it very many problems, the discussion of which I hope will throw some light of everybody's foreign advertising problems.

First came the handling of the machinery and routine connected with an activity of this size. We decided that this could not be handled by an agency—certainly an agency acquainted with the foreign field and having established relations with the publication and handling knowledge of conditions in that field, and preferably an agency located in this country.

We had many bids for our business from agencies located abroad but we could not see where an agency located in a foreign country, when it came to placing advertising outside of that country's boundaries, would have any advantage over a similar agency located in the United States. We were not established to conduct negotiations with agencies located in each country in the world. We also felt that the complications involved in those dealings would be equal to the complications formerly involved in dealing with each of our distributors. The responsibility would be too much divided. In many countries, of course, no reputable agencies were available. So to an agency located in this country, and familiar from long experience with the foreign field, we turned over the burden of our routine.

The next problem was the compilation of a list. For the sake of saving time and getting started, our first list was largely the work of our agency; but no sooner was advertising started in that list than we began to check up on its individual units, through our distributors, through our foreign travelers and through all other sources of information at our command. Little by little, and here and there, it was changed—in some places expanded, in others contracted; in still other places wholesale substitutions were made.

In making such adjustments this has been our procedure: Whenever a doubt has arisen as to the availability of a certain publication or group of publications, for our purpose, we have gathered together from all of our sources of information, both friendly and unfriendly, all the facts that we could muster; and we have decided the issue on the weight of evidence, combined with our conception of the job we were trying to do. This process will continue, I expect, as long as we are doing foreign advertising. For conditions are constantly changing; the fortunes of various publications are constantly rising and falling; our individual problems are by no means fixed. So much for our list and its history from the beginning to the present.

Cracking the Copy Nut

Copy was the next nut to be cracked. On the question of foreign advertising copy there were, and are, as many opinions as there are individuals engaged in the production of it—plus, I might say, as many individuals as there are engaged in reading it or hearing about it.

We attacked our copy problems, and are still attacking it, from three different angles.

First: What specific purpose were we trying to accomplish aside from the general purpose of the whole general purpose of all advertising—of selling our product?

Second: Placing ourselves in the position of the people who were to read our advertising unaffected, or misinformed, or totally uninformed—what did our common sense tell us should be said in order to accomplish our immediate purpose?

Third: How near to, or how far from, accomplishing our purpose had the independent advertising of our distributors come, and in what way had they registered success or failure?

The first point was easy. The success of all of our advertising effort (and we have been successful, I believe, in that respect) has depended on our ability to establish for our product a certain definite reputation. I will not go into a discussion of the right or wrong of our opinions on this subject, or the technique involved, because it is too big a subject for the present space allotment. But, assuming that our ideas on the subject of advertising copy in general were right, we could see no reason why the immediate purpose of our foreign advertising should differ from the immediate purpose of our domestic advertising.

The disposal of the second point was not so easy. There were so many things that could be talked about, and so many ways of talking about each one of them, that, with the limitations of a moderately sized advertisement and a moderately sized campaign staring us in the face, the decision of what to include and what to discard was a hard one to make. We finally decided that our campaigns should be limited to very brief, simple statements concerning these three things:

1. Brief cataloging of our product—just enough pretty definitely to locate it as to general type and position in respect to other similar products. For example, to explain what I mean, we wanted them to know it was a four-cylinder car, of a certain size, made in certain models and with certain equipment.

2. A modest statement of those qualities which gave our product a certain reputation.

3. With an eye to establishing or promoting confidence, an indication of the age, size and reputation of our concern.

Opinions may differ regarding the wisdom of our confining ourselves to these points, but nevertheless we have so confined ourselves and

(*Continued on Page 36*)

Digitized by Google

Plowing With Pen and Ink

Being a Rambling Yarn About the Crooks Who Make Banks, Bankers and Depositors Their Special Victims

By F. W. HERSEY

SOME ANCIENT paragrapher has written: "Pen and ink is wit's plough." Whether he had reference to the nimble brains and facile pens of the Jim-the-Penman's of his day, or the poor but honest writers of literature (season this term well before using) we dare not say, but if ploughing means to dig dirt for a living, which is hard, laborious toil, and the antithesis of plough is pen in this sense, then all we have to say is that he meant forgers and "kiters" and not authors. Being in the office boy stage of authorship, with most of our future behind us, we think we know.

One thing is certain: Whenever General Prosperity is A. W. O. L. for any length of time, leaving Major Depression in command of the camp, the bold-up man, the sneak thief, the pickpocket, the forger and the check kiter propagate their species faster than a rabbit can multiply. Of course, the criminal class, including the above craftsmen and their variations, are part of the woof of the social fabric and are as constant and contrary as the weather, but the point we are angling for is that it is not until jobs are scarce and purses lean that "pen-ploughers" of various degrees of ability become so numerous as to attract more than ordinary attention.

In prosperous times the crook and the confidence man organize stock companies and go "wild-catting" where the game is plentiful. They are students of psychology. Come easy, go easy is a trade term with them. When the "kale" is short and below grade they take to living on other men's bank accounts by the power of the pen.

Detroit and Michigan and all the rest of the country have been "in the dumps" financially. There have not been jobs for men who were willing to work, and the need of money has driven many of them to the desperation that often breeds crime. On the other hand, the end of the war released a class of men in whom the germ of criminality always has been more or less active. War is a state of savagery and anything is fair if it puts the enemy hors de combat. Consequently these potential criminals returned to citizen status with less consideration for morals, law and order.

Thus the habitual crook class is augmented by a large percentage of novices and amateurs and cities and towns begin to talk of "waves of crime." Detroit is enjoying one at present. It is a dull day indeed that there is not at least one hold-up. It is a poor, neglected bank that has not been burglarized or shot up, excepting, of course, those institutions having standing armies in garrison all the time. These are violent crimes and are periodic. They, like lightning, seldom strike twice in the same place. They mean rough work and somebody usually gets hurt, but the kind of crime the banks fear and have to face the year around is that of the well-trained hand and clever "front" of the forger and the bank swindler.

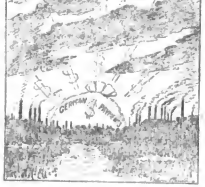
These expert penmen, who can duplicate the "John Hancock" of any person short of a Horace Greeley, do not announce their arrival with "Hands Up," or "stick 'em up, you're being robbed," as one Detroit thug said. Sometimes they telephone that they are coming, but they are reticent about the real nature of their errand. Occasionally they write a nice letter and announce their intention to arrive and take away a few thousand dollars worth of bonds. And too often they make good.

Confidence is the very lifeblood of banking. Who, unless he were of unsound mind, would put his money into a bank if he did not have confidence in the institution, its officials and all it represents? The bank swindler plays upon this confidence—the confidence the banker has in his patrons; the confidence the patrons have in the bank, and last, but not least, he relies upon the confidence he has in his own ability to win the confidence the bank and patron do business on. This is involved and full of "confidence," but you get the idea, don't you?

In case you are foxy, let us illustrate with a little tale from the records of Fred F. Christie, assistant cashier of the First & Old Detroit National Bank. This is a little story about a check "kiter," by which we mean one who makes a check for 50 cents look so much like $50 that only he and the check maker know the difference. Well this gent, passing under the name of Rosenberg, came into a Detroit bank with a check for $6.50 made out to Harry Rosenberg and signed by J. Rubin. On the back was written the indorsement, Harry Rosenberg, and address, 672 Jefferson. On the face of the check and at one end was written: "Check in full to 3/27/18."

Rosenberg, or whatever his real name was, took the check to a bank official for his O. K. It was a small amount and the holder of it was affable and prepossessing enough to inspire confidence, and the O. K. was given in the form of a special initial the official used. The smiling young man did not cash the check then but left the bank without the official's noticing. Later he returned and presented the check to the teller. The $6.50 had been raised to $620.20. The bank official's O. K. was displayed, the teller saw no reason to question it, and the money was paid.

What the swindler had done was as follows: First he erased with acid the amount written out in pen and ink and the figures, "$6.50." Then he used a machine to write in red ink "Six Hundred Twenty Dollars Twenty Cents." Where the figures $6.50 had been he wrote $620.20 in very large figures. Where the writing had been wiped out with acid he drew a wavy line. Now the whole job appears to be crude, but when one considers that many bonafide checks are poorly written and often have crudities that become characteristic of the depositor, it is not surprising that the teller did not question



—Harding in the Brooklyn Eagle
LOOKS LIKE SETTLED WEATHER



—Brown in the Chicago Daily News
SAME OLD MOTIVE POWER

Digitized by Google

the check. His mistake, as well as that of the bank official, was in not sending the presenter to the bank on which the check was drawn, and which was within a block or so of the bank victimized.

The kiter did not write $620.20 because that was the exact sum he wanted, nor because it was a happy thought. In fact, the "twenty cents" marks this operator as skilled. He knew that an odd number would lessen suspicion regarding the size of the check by giving it a business cast, and also he knew that the "twenty cents" written away from the main figure would draw attention from the raised figures. Such little details do not escape the clever crook. Likewise he had to trust to the possibility that the teller would not have a keen enough sense of smell to detect the odor of the acid used. This would indicate that tellers should be good smellers as well as tellers.

For some months now Detroit and Michigan cities in general have been experiencing a steady increase in attempted and successful forgeries. Along with the so-called wave of violent crimes the "sly-foots," the "soft-voiced" and the "velvet-fingered" are trying to have their day. The amateurs and the novices far outnumber the regulars, which means that every bank must double its precautions, if it already has not done so.

The man who claims the world owes him a living is likely to present his bill any time; and there is as much genius applied to being crooked as to being honest—perhaps more. Michigan is a fine field to work in. It has 672 banks with resources of more than a billion and a half. Although there is no official estimate of the amount of money filched annually from them through worthless checks and other schemes, it probably will run into several hundred thousand dollars, while the amount lifted from merchants and other

How many of these penmen are operating in the country today is unknown. Certainly they are legion. William S. Flick, manager of the Detroit office of the William J. Burns International Detective Agency, said that in the 47 years the American Bankers Association has been in existence, an average of four such criminals had been captured and prosecuted each week. This is a report from only one source.

In times like the present much of the forgery and check kiting may be called spontaneous. The custom of many plants to pay off employes with pay checks has made men acquainted with bank procedure. Either a sudden idea springing up where honesty has been the policy, either from desire or fear or grim necessity, has made forgers out of more than one man and woman. A man gets his pay check. It may be for a sum which his estimation is less than he deserves. The thought of making it what he thinks it should be occurs to him, and if he has the ability and the inclination, he may become a check kiter. Then again, the simplicity of the check-making procedure, combined with ignorance of the penalty for such an act, may induce a man to try forging one for himself. To the degree that the maker is clever, the check will be cleverly made.

Sometimes there is neither rhyme nor reason to the forgery of some individuals. Take the case of a Negro, known as John R. Smith, who for a time made out checks for sums from $8,092 to $23,098 in Rocky Ford, Ga. The checks were drawn on a Detroit bank. Smith had lost a leg in a railroad accident while a railroad worker and the clerk in the bank at Rocky Ford assumed that he had been paid compensation by the railroad. No attempt ever was made to collect on the checks. The Negro simply presented them at the bank for collection and deposit to his account, which he did not have. The answer to this problem is "imitation is the sincerest flattery."

Passing pay checks on small grocers and provision dealers is a standard practice among low grade forgers. They select a locality, study the layout and note the plants paying off with checks, and then scatter a few "phonies" in the region. These checks usually are for small sums in payment for goods with a margin of cash as change. Mr. Christie has a record of that kind of a scheme. This worker, whose identity is unknown, visited a Detroit hotel and hired a stenographer to write checks. The operator was under the influence of liquor and somewhat careless in his manner. He had a list of names, but when the stenographer began work he told her not to use the list.

"Who will I make the checks out to?" the girl asked.

"Oh, I don't care. Make them out to anybody you happen to think of," the man replied.

The girl was somewhat puzzled and did not react quickly, so the forger said: "Make one out to John R. Money; that's a good name." For an hour or more the forger dictated names and the girl made out the checks for sums never exceeding $35, but running about $24.50 and $28.80. These sums represented the usual run of weekly pay checks.

The forger used for Pittsburgh Plate Glass Company, the Detroit Pressed Steel Company and numerous other concerns known to pay their employes by check. Later the operator hired an automobile, usually a cheap second hand machine, and began his calls. He would visit a grocery somewhere on the outskirts of the city, buy a bill of goods amounting to half or two-thirds of the amount of the check, and present the check. It bore the name an address of the payee. For six or eight weeks this crook operated in the city, seldom failed to pass a check and cleaned up about $2,000 in small amounts. What he did with the groceries he bought and carried away no one ever knew.

It was due to Mr. Christie's efforts that the story of the man's operations was learned, but he never was caught. It never occurred to the stenographer that her cue was to call in the police. She told some business man who told Christie about the operations. He interviewed the girl and added the story to his records.

Professional forgers are ever on the alert to get signatures and business cards. One operator met a Detroit business man on the Cleveland boat, struck up an acquaintance and asked for a business card. Later the forger opened the business man's travelling bag and stole his cards and papers bearing his signature. A few days later the business man was surprised to learn that checks bearing his signature had been cashed by his boat acquaintance. The original signature has been carefully traced on checks.

For more than ten years Mr. Christie has made a practice of keeping a record of forged checks and the names and aliases of bank swindlers. Whenever he gets possession of these spurious checks he makes tracings of the handwriting and a complete record of the transactions. Through his records at least twelve dangerous crooks have been brought to justice in the last decade. When the First & Old Detroit moves into its new building Mr. Christie will have a complete identification department with photographic apparatus and files.

"I believe," said Mr. Christie, "that all banks should employ means to protect each other. I have yet to experience any objection to my wiring other banks when questionable checks come to my attention. Although such wires are sent 'collect' and often the telegraph tolls amount to considerable money the banks always are glad to be warned. Incidentally I have been able to nail more than one forger on the spot. In the course of a day's business it is impossible to stop every swindle. A banker cannot assume that every man who presents a check is a crook, nor can he abstain from being accommodating."

"We hear a lot about service being essential to business, and where is there a greater service rendered every day in the year than in a bank. Business diplomacy and courtesy, together with the constant desire to build up patronage, dictates against being 'cold turkey' every hour of the day. Humans will make mistakes, and next to the ounce of prevention we should have co-operative protection direct from the cashier's department. We have the legal machinery, the detective service and the police but the crime must be definitely indicated or committed before these agencies can be called in. When such agencies are called in and the suspect happens to be innocent, a lot of damage has been done, for there are many bank patrons who will set their own pride above the efforts made to protect them against fraud."

One might get the impression from the foregoing that bank officials and clerks are too careless as a rule, but such is not the case. Detroit banks are protected by rules and regulations, by the Pinkertons and the Burns operatives and by special detectives from the Detroit police department. They have their own uniformed guards. There are frequent conferences on safety. Such safeguards make it difficult for swindlers to work their schemes but where they are successful in preventing the loss of large sums of money at one operation, the loss of small sums by one scheme or another is frequently suffered.

The clever crook knows that where in the orderly procedure of events he would not be able to work a trick, if he can create momentary confusion or disturb the mind of a teller by some unexpected turn he may be able to get away with something. He studies bank routine and the bank officials. He picks the teller who may exhibit to his keen eyes evidences of nevousness or some other weakness which may be used to advantage. Then he works a stunt like this:

The name of the operator was Cole. He entered a bank and deposited $4,500, saying at the time that he was a stranger in the city and had come to buy a business and probably would use most of the money within a short time, but would open another account as soon as he took possession of the business. For several days this account was active, but between withdrawals and deposits it remained at $4,500, possibly a trifle over. Cole knew that when a check

(Continued on Page 32)

Digitized by Google

Announcement

We are now the exclusive distributors in Eastern Michigan for Alexander Bros., makers of high grade leather belting.

A complete stock of flat and round belting, belt dressing, cements, etc., is carried by us.

Mechanical leathers can be supplied in all shapes and sizes.

Mr. Bolton, formerly of Alexander Bros.' Detroit Branch, is now in charge of our Belting Department, and is ready to give attention to your belting requirements.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

Twenty Years in the Life of Charles E. Mitchell

CHARLES E. MITCHELL at 43 is president of the National City Bank, New York, the largest banking institution in the United States. Twenty years ago he was an order clerk in an office of the Western Electric Company, receiving $10 a week salary and learning how little he knew about business. Because this boy, born to comfort and plenty, early recognized how much a man must know to be successful in any vocation, and knowing that important fact, had the desire and the energy to seek the knowledge he lacked, Charles E. Mitchell is today worth $100,000 a year to the institution he directs.

There are many men who may know more than Mr. Mitchell, men whose thirst for knowledge has won them enviable reputations because of their learning, but who are not reckoned as great leaders because leadership was not a strong element in their makeup. Evidently Mr. Mitchell was born to leadership, for in his high school days in Chelsea, Mass., his birthplace, he developed leadership, which, necessarily, implies a certain amount of popularity.

His natural ability to lead instilled in him the desire to lead and that ambition drove him to ten and twelve-hour work days and hard study. His father was mayor of Chelsea. At one time, before financial reverses changed the Mitchell outlook, the son enjoyed reasonable privileges and advantages, but always with some attendant responsibility. For instance, when the youngster desired a pony, his father gratified the wish but gave the boy to understand that a pony meant grooming, and the boy must do it himself.

Charles E. Mitchell learned to groom a pony knew so little, compared with what there and to enjoy it. Consequently when the Mitchell fortunes became depleted, the young man knew that through hard work lay his path to success. In high school his leadership and his growing ability to judge men by their works early manifested itself in a peculiar manner. The school military battalion lost in a drill contest, and in an open letter to the citizens of Chelsea Mitchell, high private in the rear rank, told why the battalion had lost.

He deprecated the interference of the faculty in the selection of battalion leaders who were neither popular nor competent. He called attention to the fallacy of having a drillmaster whose hands were tied and who was none too competent to get out of the boys the best they could give. His third criticism was the fact that there was but one drill hour a week, when there should be at least two. The letter was marked evidence of the boy's ability to find the mistakes and suggest the remedy—constructive, not destructive, criticism.

In Amherst college Mr. Mitchell continued to develop leadership, became a member of the board of directors of the college paper, leader in athletic sports, and was graduated cum laude. Just before graduation the Western Electric Company requested that several promising students be sent to the New York office. Mitchell was chosen as one of the probationers. At that time he had no definite idea what his life's work was to be, and the trip to New York was a venture in prospecting for a vocation.

Soon after his arrival in New York Mitchell was sent to Chicago, where he was listed as an order clerk and paid $10 a week. He was a good order clerk so far as he understood business, but he was not satisfied because he seemed to be to know. With money he had saved he took a course in a business school which helped him in his new position as assistant in the credit department, to which he was promoted soon after. Later, when 24 years old, he was made chief of the credit department.

As the new duties required some knowledge of contracts and agreements Mr. Mitchell began the study of commercial law and had made considerable progress when the company decided to establish a branch in South Africa. Mr. Mitchell was selected to direct this work and was sent to New York to prepare for the task. Later he was called back to Chicago to become assistant to the president. His next promotion was to the position of assistant manager, which came when he was twenty-six years old. Having finished the law course, he next took up the study of electrical engineering. During these years Mr. Mitchell was mastering the details of organization. He conceived the idea of combining a number of factories in one of the allied industries, and to get the necessary financial aid he went to Oakleigh Thorne, head of the Trust Company of America.

After talking with the young man Mr. Thorne persuaded him to come to the bank as his assistant. Mr. Mitchell saw an opportunity to become associated with men who were doing big things and he accepted the offer. He joined the bank in panic times, but his ability was recognized and he was sent to Europe to study investment banking conditions. On his return he found that Mr. Thorne had decided to sell out. Mr. Mitchell then organized his own company under the name of C. E. Mitchell &

(Continued on Page 35)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

AUGUST N. JOHNSON
MACHINE CO.
MANISTEE, MICHIGAN

MACHINE AND
BOILER SHOPS

General Repairing

MARINE WORK, ENGINES
BRASS AND IRON CASTINGS
STEAM FORGINGS

BOILERS, TANKS, OXWELDING
BOILER REPAIRS
and ELECTRIC WELDING

We are the only boiler works in Northwestern Michigan equipped to do general work. If your boiler troubles you, let us solve the trouble.

AUTOMOTIVE

Production* :: *Sales* :: *Service* :: *Financing* :: *Personnel

CONTINENTAL MOTORS' POSITION

The business of the Continental Motors Corporation, taken as a whole, continues reasonably good under existing conditions, according to one of the corporation officials. Activities are greater at the Detroit plant, where passenger car engines are made, than at the Muskegon plant, where commercial vehicle engines are produced. The report that the latter plant is to close down for 90 days is without foundation, but it may be necessary further temporarily to curtail production. Officials believe they will be able to continue to employ the present force but that much of the night work may have to be discontinued for a time. Customers of the company continue placing orders daily, although not for as large quantities as would be the case under normal business conditions. Both plants will be kept in operation as long as orders are received. In some sections of the country the business improvement is slow, while in other sections the conditions are much better. Taken as a whole, there is no cause for worry and a general improvement will gradually come.

HARFST CADILLAC BRANCH HEAD

Wilbur H. Collins, manager of the Detroit branch of the Cadillac Motor Car Company, has resigned to join his father, R. H. Collins, in the Durant organization. He is succeeded by Richard Harfst, who has been in the office of the president of the General Motors Corporation, New York. Mr. Harfst left a branch managership of the Peoples State Bank to become assistant to Mr. Collins at the Cadillac branch, but later was called to New York.

DURANT PICKING DISTRIBUTORS

C. M. Steves, vice-president of the Durant Motors Company of California, is making allotments of the new Durant car to agencies in the Northwest, according to announcement.

N. A. C. C. ELECTS DIRECTORS

Five new directors elected by the National Automobile Chamber of Commerce are as follows: A. J. Brosseau, Mack Brothers Motor Car Company; A. R. Erskine, Studebaker Corporation; Arran Macauley, Packard Motor Car Company; W. E. Metzger, Columbia Motors Company, and R. E. Olds, Reo Motor Car Company.

NEW SCRIPPS-BOOTH SERIES

The Scripps-Booth Corporation, Detroit, has placed on the market a new medium-weight Scripps-Booth car, known as "F Series Medium Weight Six." The announcement says that the model will in no way affect production on the present "B Series Light Six" models. Some of the important features of the "F" models are the following: Engine, Continental, 3½ by 4½, developing over 60 h. p.; Rouse & Beck disc clutch; Alemite high pressure lubricating system; steel felloed wheels; extra long spring suspension; frame seven inches deep; wheelbase, 115 inches; 32 by 4-inch cord tires; new General Motors axles. The prices of the four body styles are as follows: Three-passenger roadster, $1,470; five-passenger touring, $1,490; four-passenger coupe, $2,350; five-passenger sedan, $2,375.

A. G. PARTRIDGE JOINS STAR

A. G. Partridge, formerly vice-president and general sales manager of the Firestone Tire & Rubber Company, Akron, has been elected vice-president and sales manager of the Star Rubber Company, Akron, having assumed his duties on June 1. He succeeds O. L. Weaver, who has been identified with Star since its organization and who is retiring because of ill health. Mr. Weaver will continue as a director and secretary of the company and will render such assistance to Mr. Partridge as his health will permit.

OLDS PROMOTES SHASSBERGER

Ernest J. Shassberger has been promoted to be advertising manager of the Olds Motor Works, Lansing. He has been with the company since 1918.

ACASON'S NEW MODEL

The Acason Motor Truck Company, Detroit, has just added a ¾-ton truck to its lines, which includes 1, 1½, 2½, 3½ and 5-ton models. The latest of these utility vehicles has a wheelbase of 142 inches, worm-drive rear axle, pneumatic tires and sells for $1,650.

PACKARD EXPORT RESIGNATIONS

Resignations from the Packard Motors Export Corporation are reported as follows: Col. Fred Cardway, vice-president and general manager, who will devote his time to his personal interests; Paul D. Davis, connected with the sales and promotion in foreign trade for both Packard and the Firestone Tire & Rubber Company; Charles A. Cobb, assistant sales manager; Paul F. Mulvey, secretary to Col. Cardway.

PORTAGE RUBBER RECEIVERSHIP

George D. Bates, banker of Akron, O., has been appointed receiver for the Portage Rubber Company, Barberton, O. A petition asking that a receiver be named was filed by the Wellman-Seaver-Morgan Company and several other firms claiming more than $22,000 due them. The petition stated that the Portage concern owed $1,700,000.

In a statement as to the affairs of the company, President M. S. Long said that the trouble was brought about largely through the claims of certain fabric manufacturers for damages for the failure of the company to take fabric which it was alleged it had contracted for during the winter and spring of 1920, at a time when the price of fabric was more than double what it is now.

"A plan had been worked out satisfactorily to the company's bank creditors," says Mr. Long, "and to practically all its merchandise creditors, but some of the fabric manufacturers who are making the largest claim against the company refused to give their assent, and it was this condition which brought about the filing of the petition in bankruptcy. As this proceeding offered the quickest and easiest solution of the company's problems, it would not contest the adjudication in bankruptcy."

FORD PRODUCES No. 5,000,000

The Ford Motor Company built car No. 5,000,000 at the Highland Park plant, last week, and it may be placed alongside the first car in the Ford museum. It is estimated that the total output since the first car was built represents a value of $2,500,000,000, at an average price of $500 each.

MORE GMC RUMORS DENIED

Reports that A. P. Sloan, Jr., vice-president in charge of operations, was severing his connection with the corporation; that the Olds and Oakland divisions were to be sold and that the new St. Louis plant also was to be disposed of, have been officially denied by the General Motors Co.

Digitized by Google

DURANT CAR IN 90 DAYS

Edward Ver Linden, head of the Ver Linden division of Durant Motors, Lansing, announces that the first Durant car will make its appearance in 90 days. Some of the best engineering talent in the country is engaged on the car, which is to combine many of the Ver Linden ideas. The type is not yet known.

Rapid progress is being made on the assembly plant in Lansing and a part of the factory will be in operation by November. Mr. Ver Linden is personally supervising the selection of shop equipment, which will be installed and turning out cars by January 1. When the first models are complete it is expected that hundreds of dealers will be invited to Lansing to inspect the cars and observe tests and demonstrations. The nucleus of the sales organization has been started.

Temporary offices have been opened on the grounds where the Durant plant is being erected. These are occupied by Mr. Ver Linden and his staff. Much interest is being taken locally in the offer of $500, $300 and $200 prizes for the best letters on the advantages of the Durant scheme of purchasing stock on the installment plan.

GOODYEAR SALES STATEMENT

Casing sales are reported to be 50 per cent and tube sales 48 per cent greater now than at any time since January by the Goodyear Tire & Rubber Company, Akron.

TOWERS TO JOIN PAIGE

Walter K. Towers will leave the sales and publicity department of the Reo Motor Car Company, Lansing, to become advertising manager of the Paige-Detroit Motor Car Company, Detroit, June 15.

GOVERNMENT SEEKS MOTOR DATA

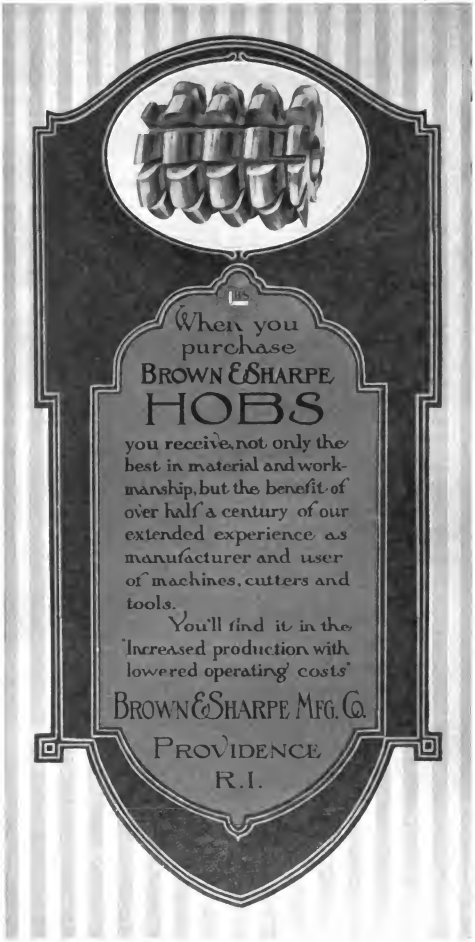
According to advices from Washington, the National Automobile Chamber of Commerce has assured Herbert Hoover, Secretary of Commerce, that accurate statistics on passenger car and truck production will be furnished the Government by manufacturers. Mr. Hoover said that such figures were desired. Attending the conference with Mr. Hoover were the following: J. Walter Drake, Hupmobile, chairman; Percy Owen, Liberty; Alfred H. Swayne, General Motors; A. T. Waterfall, Dodge Brothers; A. E. Williams, Jr., Garford; Pyke Johnson, Washington representative; John C. Long, statistician; Gaston Plainiff, Ford; J. E. Kepperley, Overland; H. S. Vance, Studebaker; R. A. Hauer, International Motor; M. L. Gemmeway, general manager of the Motor and Accessory Manufacturing Association; Clyde Jennings, of Automotive Industries, and T. F Cullen, of the Automobile Trade Journal.

STATE DEALERS CHOOSE EDENBURN

W. D. Edenburn, automotive editor of the Detroit News, will sever his connection with that publication June 18 to become manager of the new Michigan Automobile Trade Association which was organized May 11 last and which is opening offices in the Garfield building, 4610 Woodward avenue. This is said to be one of fourteen state units of a national association of car dealers and comprises the whole state of Michigan outside of Detroit. The objects are similar to those of the D. A. D. A. Guy Garber, Saginaw, will head the organization.

NO NEW GOODRICH FINANCING

The B. F. Goodrich Rubber Company, Akron, O., announces the resignation of E. C. Tibbetts, advertising manager; R. E. Hackenecr, assistant advertising manager; James O'Mara, in charge of publicity; William Blackwell, purchasing agent, and E. P. Rowen, in charge of Diamond tire sales. President B. G. Work is credited with the statement that the company at no time has been considering financing of any sort, and that the concern is actually in an excellent financial position and is steadily paying off its bank loans and reducing inventories



Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4838 Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

NATIONAL ASSOCIATION CONVENTION

Extensive plans have been made for the entertainment of delegates of the National Team and Motor Truck Owners' Association to the nineteenth annual convention to be held on board the steamer Noronic, June 13, 14, 15 and 16. The boat will leave Detroit at 5 o'clock on the afternoon of June 13, make Mackinaw island the following day, remain three hours, then proceed to Georgian Bay, then to Owen Sound, Ont., and from there return to Detroit.

During the cruise the delegates will be expected to give a reasonable amount of time to convention sessions and the rest to the program of deck sports and such entertainment as will be provided along the route. At Mackinaw island, for instance, the United States Coast Guard will give a demonstration of life-saving methods and equipment. At Owen Sound the Owen Sound Board of Trade will furnish automobiles for a trip.

To break the tedium of sailing and convention argument, the committee has arranged a program of deck sports, such as balloon shooting, target practice, motion pictures a masquerade ball and other entertainment. The committee in charge consists of E. Foster Moreton, president of the Detroit Transportation Association, host of the delegates, chairman; Thomas O'Brien, Detroit; Joseph X. Galvin, Chicago; Hugh C. Moore, Philadelphia, and Isaac Goldberg, New York.

The D. T. A. is one of the strongest units of the national association.

ITINERARY

The Steamer "Noronic" will run on the following schedule:

Leave Detroit	5:00 P. M., June 13
Arrive Mackinaw Isle	2:00 P. M., June 14
Leave Mackinaw Isle	6:00 P. M., June 14
Arrive Owen Sound, Ont.	2:00 P. M., June 15
Leave Owen Sound	5:00 P. M., June 15
Arrive Detroit	5:00 P. M., June 16

CONVENTION PROGRAM

Monday, June 13
8:30 P. M.

Address of Welcome—E. Foster Moreton, president, Detroit Transportation Association.
Greeting from Michigan—Alex. J. Groesbeck, governor of the State of Michigan.
Detroit's Greeting—James Couzens, mayor of the city of Detroit.
Response from National Association—F. J. Abel, president.

Tuesday, June 14
9:30 A. M. to 1:00 P. M.

A. 1. Roll call.
2. Reading of the minutes.
3. Appointment of convention committees.
4. Nomination of officers.
B. 1. The president's report, F. J. Abel, president, Buffalo.
2. The secretary's report, F. L. Henk, secretary, Detroit.
3. The treasurer's report, W. J. McDevitt, treasurer, Cincinnati.
4. Report of standing committees.
C. Address—"The Horse—The Short Haul Money Maker," Wayne Dinsmore, secretary, Horse Association of America, Chicago.

8:30 P. M. to 10:30 P. M.

Address, "Uniform Methods in the Cartage Industry," Joseph W. Glenn, Buffalo Trucking Association.
Address, "Truck and Cargo Insurance," C. M. Carter, Detroit Insurance Agency.

Wednesday, June 15
9:30 A. M. to 12:30 P. M.

1. Address, "Motor Truck Costs," R. W. Andrews, transportation engineer, Packard Motor Car Company, Detroit.
2. An open discussion on the subject of this speaker will be held.
3. Unfinished business.
4. New business.

Thursday, June 16
9:30 A. M. to 12:30 P. M.

1. Address, "Insurance, Highway Transport, Teams' Liability, Live Stock, Special Hazards," C. M. Carter, Detroit Insurance Agency.
2. Address, "The Future of the Motor Truck," W. W. Kreh, Goodyear Tire & Rubber Company.

FIREPROOF STORAGE'S BUSINESS

The Fireproof Storage & Transfer Company, Lansing, reports a good business, with its large new storage structure being gradually filled with all kinds of goods. There are six stories, to be devoted largely to commercial storage. H. H. Hardy, of the company, reports that while the concern is doing a big business in general hauling and storage, the use of commercial trucks enables it to give other service, such as lifting heavy articles to upper floors of buildings. Recently the company hoisted a 4½-ton boiler twenty feet to the second floor of the Tolling Belle Vernon Creamery company building, at Mason.

BUSES IN THE FAR WEST

Bus operation in the far west is building up many sections that have not expanded for generations. In California alone more than 3,600 motor buses travel daily out of Sacramento, Stockton, Fresno, Oakland, San Francisco and Los Angeles. More than 5,000,000 persons were transported in this district during the last twelve months. Accidents have been negligible.

About Yellowstone Park, the Grand Canon and other show places much has been done with bus operation. This branch of activity promises to develop into one of the important units of the automotive industry, along with the passenger car and the truck.

SERVICE FOR SCHOOL CHILDREN

Hillsdale county's consolidated school is the latest Michigan rural educational district to install motor bus service for its children. A bus has just been purchased from Fred L. Waite, Lansing.

TERMINAL PROVIDED IN LANSING

Bus service has grown so considerably in Lansing that the city authorities have set aside a terminal for this class of transportation. Grand avenue, from Ottawa to Ionia avenue, has been closed to other traffic.

H. S. DODSON
R. V. CARD
Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS
226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio **General Offices: Youngstown, Ohio**

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

William R. Wilson Heads The Reorganized Maxwell

William Robert Wilson, formerly a Dodge Brothers executive, and until this latest change vice-president of the Irving National Bank, New York, and a strong board of directors, consisting of financial men and prominent manufacturers, now control the new Maxwell Motor Corporation, reorganized from the Maxwell and Chalmers motor units by Walter P. Chrysler. Mr. Wilson is president of the company and Mr. Chrysler chairman of the board.

W. Ledyard Mitchell, former president of the Maxwell unit, and active in the reorganization, becomes vice-president of the new corporation, and with him are Arthur E. Barker, formerly general sales manager, and Carll Tucker, as vice-presidents. T. H. Thomas is the comptroller. The other directors are C. C. Jenks, Dr. Fred T. Murphy, Allen P. Edwards and Harry Bronner, all of Detroit; J. R. Harbeck, James C. Brady, Elton Parks, J. S. Bache, E. R. Tinker, Harry Sanderson, Thomas F. Doherty, T. C. P. Martin, all of New York, and Mr. Wilson and Mr. Tucker.

The new president of the corporation is 37 years old, was born in Chicago and was graduated with honors from Armour Institute of Technology in 1906 with the advanced mechanical engineering degree for exceptional work in engineering. For several years he was engaged in work requiring skill in directing operations, construction work, sales and cost-accounting. His entrance into the automotive industry was as assistant to the general manager and assistant manufacturing manager with the Studebaker Corporation, from which position he was called to the Dodge Brothers' plant to assist in organization and extension work.

His ability to select the right men and his advanced ideas of organization and development work attracted the attention of bankers and eventually he was called to New York to become vice president of the Irving National. While with the Dodge organization Mr. Wilson picked most of the executives who are now with the company.

Mr. Mitchell is one of the best known automotive men in the country and has been with the Maxwell concern since 1915. Mr. Barker formerly was a sales executive with the Dodge Brothers but joined the Maxwell company when Mr. Chrysler became chairman of the reorganization committee. He has been in charge of the commercial affairs of the company. Mr. Tucker has been associated with the Maxwell organization as representative of the Brady interests in New York and is one of the principal stockholders in the corporation.

NEW WELDING CONCERN

The G. E. M. Welding Company has been organized in Lansing and is doing business for the Olds Motor Works. It will also do a general welding business. It is located in a new building just completed. E. J. Mackey and Edward Gaffney are the organizers.

VIM TRUCK SELLS OUT

The Vim Motor Truck Company, Philadelphia, has been sold to the Standard Steel Car Company, Pittsburgh, which will operate the company as a subsidiary.

GOODYEAR PRODUCTION REPORT

The Goodyear Tire & Rubber Company is producing 17,000 tires a day and sales for one week recently reached 48,000 units, the largest any week since September, 1920.

NEW STEVENS-DURYEA DIRECTOR

Stevens-Duryea, Inc., has elected John G. Perris vice-president and director in charge of manufacturing and engineering. The company is located in Chicopee Falls, Mass.

Colombia Treaty to Help Commerce With America

H. P. Rousseau, of the Litscher Lite Corporation Grand Rapids, has returned from a trip to Colombia, South America, where he went on a special mission to instruct dealers in Litscher Lite plants. Referring to his trip, Mr. Rousseau, in the course of a letter to this publication, says:

"At the time I was in Colombia the so-called "Colombia Treaty Measure," which included the payment of $25,000,000 to Colombia by the United States, was receiving discussion, and as this measure was passed by Washington while I was there I can say that it had a decided effect upon the feeling of Colombians toward citizens of this country.

"I believe that trade relations between Colombia and the United States are going to be much benefited by this measure, although many people in this country feel that it should never have been passed.

"My time was spent at Cartegena and Barranquilla, both good sized cities, but decidedly lacking in sanitation, as they are on the coast and are terribly hot, even though I visited them during the cool season. I was informed that in the mountainous interior of the country the climate is much better, but I do not believe that Americans would care for the seacoast of Colombia during the hot season.

"There was a tremendous business done in bananas in the section I visited, and of course there is nothing in the way of manufacturing. Very limited sanitary conditions, and hotel accommodations exceedingly poor, and very uncomfortable. Oil is found in Colombia, in fact three representatives of the Standard Oil Company went down on the same ship I did, but I did not get into the oil country."

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:25 a. m. and every two hours to 5:25 p. m. Toledo only, 7:25 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m

JACKSON-KALAMAZOO LIMITEDS—6:50 a. m. and every two hours to 4:50 p m. To Lansing, 6:50 p. m

JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

GRAND RAPIDS LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p m Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.
Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
F. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2933

TRANSPORTATION NEWS

Rail :: :: *Water*

Detroit—The Detroit, Toledo & Ironton Railroad is considering the proposal of the Wyandotte Board of Commerce that the railroad provide commuter service between Detroit and Trenton and points touched by the D. U. R. with the use of gasoline cars.

Washington—Recent decisions of the Interstate Commerce Commission are as follows:

Detroit, Toledo & Ironton Railroad given permission to issue $182,000 in first mortgage bonds to be sold at not less than par and accrued interest to principal stockholders, proceeds to be used to reimburse treasury for expenditures between July 1, 1919, and July 1, 1920, and for additions and improvements. The bonds are to bear 5 per cent interest.

The Pere Marquette is permitted to pledge and repledge all or part of $3,231,000 of its first mortgage bonds, Series A, held in the treasury as collateral security for notes, for a sum not to exceed $2,100,150. The bonds were authenticated by the corporation trustee under the mortgage securing them.

The complaint of the Dewey Fuel Company, Jackson, against the Cincinnati, Northern and other railroads, charging excessive rates on coal, i. e., $2.20 instead of $2.10, was dismissed. The rate was declared not unreasonable.

Mulkey Salt Company, Detroit, was awarded $72.60 damages for misrouting of salt consignments in 1917 by the Wabash Railroad.

Interior Lumber Company's complaint against the Boyne City, Gaylord & Alpena Railroad, charging excessive rates on lumber, dismissed. The company is located in Pittsburgh.

Sault Ste. Marie—The lake steamer W. Grant Morden passed through the Canadian locks a few days ago carrying 765,000 bushels of wheat and barley, thus breaking the former record by 8,000 bushels.

Detroit—The Pere Marquette's summer passenger schedule went into effect Sunday, June 5. A number of changes were made. Detailed information may be had at any P. M. office.

Philadelphia—The Pennsylvania Railroad Company reports that its April business was the largest so far this year, the total being $44,717,812, gross. On the other hand, operating expenses for the month were also the highest thus far, totaling $43,082,619. The total gross operating revenue for the first four months of 1921 was $164,543,308 and the operating expenses $152,223,271, there being a net operating income balance of $2,522,238. Expenses of operating the road are steadily decreasing. For instance, the cost in connection with maintenance of equipment, which totaled $13,779,696 in January and more than $12,000,000 both in February and March, was reduced to $9,462,603 in April. Transportation expenses have been reduced from $22,605,903 in January to $16,944,563 in April.

Detroit—The Wholesalers' Bureau of the Detroit Board of Commerce is organizing shipping clerks and traffic men working on less than carload lots into an organization that will be able to work for the improvement of deliveries.

Washington—The efforts of the Grand Trunk to compel the Secretary of the Treasury to issue a warrant for $500,000, part of the government guaranty, have failed as a result of a decision of the Court of Appeals of the District of Columbia affirming the findings of the District Supreme Court, which denied the mandamus asked by the railroad. The refusal of payment was due to the fact that a final accounting had not been made by the railroad.

Grand Rapids—During May the Grand Rapids & Indiana division of the Pennsylvania Railroad handled 33,715 cars of freight, as compared with 43,392 a year ago. The road operated 948 trains.

Prominent Advertising Men Organize Albee Corporation

The Albee Corporation, advertising service, has been organized in Detroit with offices in Detroit, Chicago and Milwaukee. The officers are Harry C. Maley, president; Albert L. Gale, vice president; William N. Albee, treasurer; Major Walter C. Cole, secretary. These and Joseph Meadon are directors. The principal offices of the new corporation will be in the Marquette building, Detroit, although the corporation's Chicago business will require the maintenance of a number of its principals and extensive offices in that city

The Albee Corporation will have no connection with the business of the William N. Albee Company, also in the Marquette building, which concern has been engaged for several years as sales and advertising counsel to a number of important automobile manufacturers. There are no changes in the organization of the William N. Albee Company. Mr. Maley, who will be the active head of the new corporation, was formerly in the engraving business, a farm paper publisher, a member of Critchfield & Company, and until recently was at the head of the Chicago office of the Fred M. Randall Company as first vice-president.

Mr. Albee, formerly a newspaper publisher, has for several years been and will continue to be president of the William N. Albee Company of Detroit. Mr. Gale was for years a newspaper man and will be in charge of the Chicago office.

Major Cole, before the war, was secretary of the Detroit Board of Commerce, the Adcraft Club of Detroit, and other affiliated organizations with the Board of Commerce. During the war he commanded the motor transport of the 89th Division. Mr. Meadon is president of the Franklin Press and prominently identified with the advertising and printing businesses in Detroit. He is president of the National Direct Mail Advertising Association and prominently identified with the Associated Advertising Clubs of the World. Associated with these men are C. W. Walther, J. A. Hoppes, W. L. Haskell, H. B. Joslyn and others whose names are well known in advertising circles.

W. F. Holliday, for the last five years a member of the advertising department of the Burroughs Adding Machine Company, has resigned to accept a position as one of the principals of the plan and copy department of the Albee Corporation.

For two years Mr. Holliday has been editing the Burroughs Bulletin, which under his direction has gained recognition as one of the best sales publications in the country. He has also done copy writing, field research work and merchandising work while with the Burroughs organization. In addition, Mr. Holliday has had a considerable amount of practical advertising agency experience in the East and for a number of years sold goods on the road.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON		CLEVELAND		DETROIT
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:		Atlanta	Denver	Portland
EUROPEAN:		Columbia Steel & Engineering Co., Ltd., London, Eng.		

Detroit Warehouse—1300 West Fort Street Cherry 6700



Forge Shop, Studebaker Corporation, Detroit

Power plants



Seldom have proper attention until trouble develops. Why wait until demands on your plant exceed the capacity? Refer your problem to

LOCKWOOD, GREENE & CO.

ENGINEERS

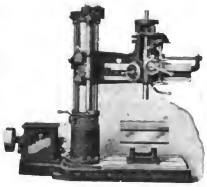
1227 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK
CLEVELAND CHARLOTTE PHILADELPHIA

LOCKWOOD, GREENE & CO. OF CANADA, LTD., 295 BOUVE HALL HILL, MONTREAL, P. Q.
COMPAGNIE LOCKWOOD GREENE, 47, AVENUE DE l'OPÉRA, PARIS, FRANCE

CINCINNATI-BICKFORD

RADIALS
&
UPRIGHTS
have been
LEADERS
since
1874



A postal will bring a Salesman to show you why!

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

THE eighth world wonder is the workman who really enjoys and prides in his work. We have him. In fact we have many just like him. How do we do it? By a system which recognizes merit and rewards initiative.

The benefit of such a system is soon reflected in the low cost of our work.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

Need an Elevator?
Ask LEITELT
Modern Designs
Superior Construction
LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 6451 Main 6602
680 Post St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Lansing—The steel skeleton structure of the new Prudden office building is being erected, although the work has been somewhat delayed by the breakdown of a car in which steel was being shipped to Lansing.

Detroit—The city has decided to proceed with the construction of a municipal garage to cost $500,000. It will be located on city property, will be three storied high, built of reinforced concrete, and have 50,000 feet floor space. The third floor will be devoted to repair work and construction of special bodies.

Cheboygan—The county road commissioners have awarded the contract for grading and improving six miles of highway on trunk line No. 10 between this city and Aloha. The work is to be completed by January 1 at a cost of approximately $48,000.

Detroit—John Finn & Sons, general contractors on the two-story and basement, brick and stone printing establishment to be erected at Moran street and East Grand Boulevard for the Friesema Brothers Printing Company have let the following sub-contracts: Excavation, Detroit Excavating Company; plastering, Interstate Plastering Company; roofing and sheet metal work, Detroit Cornice and Slate Company; painting, Jos. Schafer & Company; marble, Christa-Batcheider Marble Company; terrazo, Michigan Tile & Mosaic Company; stone, artificial, the Maul Company; reinforcing steel, Truscon Steel Company; steel sash, David Lupton's Sons Company, steel rolling curtain, Kinnear Manufacturing Company; carpentry, Rozycki Bros.; freight elevator, structural steel, miscellaneous iron and steel, and steel stack, Tietema Work; steel and steel form erected, Des. Lauriers Metal Products Company.

Lansing—Directors of the Korff Manufacturing Company will rebuild the plant, recently destroyed by fire, if finances can be raised through the sale of treasury stock. About $8,000 will be required to repair the damage and put the plant into operation. About half of this has been subscribed. The company does a national business in undertakers' equipment and other lines.

Detroit—Among the contracts awarded by architects and contractors during the week ended June 2, as mentioned in the report of the Builders' & Traders' Exchange, were the following: A department store building to be erected at Michigan avenue and Lockwood street; a factory building at Junction and Herbert streets for the Artesia Water Company and a number of sub-contracts for stores and residences. Among the important items reported in preparation by architects were the following: A three-story fireproof steel construction club house; a brick ladder house; three brick stores; a 32-family apartment building; a two building brick veneer flat building; brick and steel additions to the Pierce and Ilely schools; a 19-family brick apartment building and a two-story brick and reinforced concrete market building.

Saginaw—There was much less building work done during May this year than during the corresponding month a year ago. Total number of permits taken out was 228, involving an expenditure of $221,609, as compared with 276 permits and costs of $412,952 a year ago. Of the 228 permits issued in May, 85 were for garages and minor buildings, 32 for dwellings, 109 for repairs and alterations, one for a church and one for a state fair exhibit building.

Detroit—Three hundred seventy-nine permits were issued during the week ended May 28, the cost aggregating $959,656. This compares with $837,005 for the previous week and $1,612,570 for the corresponding week in 1920. Of the 379 permits, 234 were for new buildings, as compared with 188 for the week of May 21 and 279 for the corresponding week a year ago. The 145 permits for alterations or additions involved $233,430, as compared with $142,850 for the previous week, when 98 permits were issued, and $682,675 in 1920, when the total was 167.

Cheboygan—The state highway commission is expected to begin shortly the construction of a one-mile stretch of concrete highway in Mackinaw avenue, extending from Main street one mile west. The city council recently voted not to levy an additional tax to raise $12,800 for making it a curb-to-curb pavement.

Detroit—Fair weather, plenty of materials at fair prices, abundant labor supply and ready transportation have enabled the Wayne County Road Commission to lay 103,007 square yards of concrete road (9.8 miles) up to June 1. For the last ten years the date for pouring the first concrete has been on or about May 20. Road construction progress is averaging about two miles a week.

Pontiac—During the week ended June 4 there were issued ten building permits, the most important being for an addition to a shop, to cost $2,000.

Detroit—The total number of permits taken out during May was 1,843, as compared with 2,296 during the corresponding month in 1920. The outlay involved this year was $5,203,710, as compared with $5,739,815 a year ago. There were 1,251 permits for new buildings and 592 for alterations and additions, compared with 1,574 and 722 respectively last year. The list of new buildings is made up as follows: Automobile sheds, barns, etc., 761; single residences, 369; stores, 32; two-apartment residences, 56; stores and tenement houses, 21; lumber sheds, storage places, 11; major garages, 10; churches, 3; schools, 1; stores, 2; warehouses, 6; factories and shops, 3; banks, 1; miscellaneous, 25.

Grand Rapids—Three hundred and eighty-six permits were issued during May involving an expenditure of $586,630, as compared with 293 permits issued a year ago and involving $564,122. There were 62 permits for residences, the high mark thus far this year for this class of buildings. During the week ended May 27 permits issued totaled 83 and the cost involved was $157,410. Of the number, eleven were for residences. For the week ended June 3 permits totaled 61, the lowest number since the end of March. The expenditure involved was $154,600. Of the permits, thirteen were for new construction. The largest item was for a two-story factory to cost $50,000 for the Office Metal Furniture Company. Total expenditure for building and repairs from January to the end of May is recorded as $1,778,352.

POSITION WANTED

Young man (college graduate) with executive ability and wide knowledge of markets, prices and general business conditions, wishes to become associated with Detroit corporation in capacity where this knowledge may be fully utilized. Have until recently been on staff of largest financial newspaper in the East. Am now doing independent work for prominent Detroit institution. Can organize and develop statistical department, take complete charge of publicity or would make capable assistant in executive. Opportunity, not salary, is of primary importance. Address Box 418, Michigan Manufacturer and Financial Record.

Digitized by Google

Michigan Students Seek Foreign Trade Positions

With the resumption of world commerce it is likely that manufacturers will give considerable attention to the organization of their foreign trade personnel. The demand for representatives abroad and employes at home who understand trade conditions and psychology of various countries will be considerably stimulated. One of the best sources of supply for such brains will be the national employment bureau of the American Cosmopolitan Club, an organization of foreign students in the colleges and universities of the United States.

There are 12,000 such students in this country, and every large college and university has a chapter of the American Cosmopolitan Club. Its purpose is to bring together the American and foreign students in a better understanding and to provide better opportunities for these foreign students to understand American ideals and customs.

The employment bureau has been established to help foreign students obtain temporary or permanent employment while in this country. At the University of Michigan there are 250 alien students, many of whom seek employment in the vacation period, while others remain in the country after graduation long enough to learn the American way of applying the business or professional knowledge they have been acquiring. It is believed that the employment of these students by manufacturers would be of mutual benefit. The manufacturer would gain the advantages of the student's knowledge of his own country and its trade requirements, while the student would learn about American goods and manufacturing, so that in later years in his own country he would be capable of representing the concern he once worked for, or, if in business, he would have no cause for prejudice against the American trade mark.

The bureau lays no obligations either upon the employer nor the student, and the expenses of maintenance are borne by the American Cosmopolitan Club. Contributions to this work have been made and will be accepted with gratitude, but it is not money that the club desires most, but co-operation of the employers by giving employment to foreign students when possible. Dr. Leonard, University of Minnesota, is president of the club. The University of Michigan has a chapter, for which Prof. Hildner is faculty advisor, and to whom communications regarding the bureau should be addressed.

COLUMBIA REDUCES PRICES

Lower prices were announced by the Columbia Motors Company, Detroit, June 9. Also a new lower priced model. The reductions range from $150 to $400. The new and the old prices are as follows:

Model	New Prices	Old Prices	Reduction
Special Touring	$1,795	$1,995	$200
Roadster	1,795	1,945	150
Sport	1,795	1,945	150
Coupe	2,495	2,895	400
Sedan	2,695	2,895	200
Challenger Tour'g, new	1,495	....	...

GILMARTIN'S NEW CONNECTION

Hugo A. Gilmartin, one of Detroit's veteran newspaper men, and who formerly was secretary of the municipal water board, has been elected treasurer of the American Machine Products Company, Eighteenth and Howard streets, manufacturer of drills, reamers and cutters.



A Machine Tool Service Station

In Detroit
where so many Warner & Swasey turret lathes are operating a Service Staton is imperative,
so we put on at 5928 Second Boulevard.

Two practical men are there to serve you—
Men who know Detroit and its vicinty
and who know Warner & Swasey Turret Lathes,
C. S. Stilwell, Manager, and Wm. B. Pope.

Turret lathes of each size are on exhibit there.
You can buy one right off the floor if you like,
and equip it with tools from the stock we keep there,
or you can buy tools for the machines you have.
Our tools are adaptable to any make turret lathe.

Come and look us over—or telephone us.

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.
Branch Offices: Detroit ..... 5928 Second Boulevard
Boston ..... Oliver Building
New York ..... Singer Building
Buffalo ..... Iroquois Building
Indianapolis ..... Lemcke Annex
Dayton ..... Mutual Home Building
Milwaukee ..... Sycamore Building
Chicago ..... 616-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Pitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, JUNE 11, 1921

The Proposed Treaty With Mexico

THE OFFER of a treaty of amity and commerce, made by President Harding's administration to the government of Mexico, is the most forward act that could have been made toward the betterment of trade conditions in the United States. Mexico is a great customer of producers of merchandise, and she has not been our customer in the past. There is scarcely a hardware store in the republic that is not German. There is scarcely a drygoods store that is not French. The products of France and Germany in these lines have found their way to Mexican consumers almost exclusively in the past. The railroad situation in the country is very bad. The railroads are about half running. It will take, in the judgment of those who claim to know most about the subject, from $300,000,000 to $400,000,000 of materials to rehabilitate the railroads of the republic. While a great deal of American railroad supply was furnished the Mexicans in the past, a great deal more of it came from England and Germany.

The dispute with Mexico which must be settled first concerns reparation for the lives of American citizens which were taken during the revolution. There are said to be more than 500 cases of this kind. Once this point is covered, there is really little to be settled. The titles to properties held by foreigners have furnished some basis for controversy. But it is noteworthy that there are titles and titles. There are large foreign investments in timber and plantations as well as in mines and oil properties. So far as has been reported, there has been no sequestration of the titles to timber lands and plantations. People holding deeds to such properties seem to have no fear that their deeds will be annulled. This leaves mining properties and oil properties in controversy. It is not to be presumed that any nation, whether it be the United States, Great Britain or France, will tolerate the wiping out of titles to property in Mexico held by its nationals, without reparation. Mexico is not fixed financially to make reparation for the conversion of such properties to the benefit of her own citizens, nor are her citizens fixed so as to acquire them and make payments which might be used for reparative purposes. Consequently the only disposition which could be made of such properties would be to offer them to other foreigners than those who now control them. Such a course could be only provocative of international jealousy and the Mexicans have some pretty smart diplomats who will not add this as a new difficulty to the rehabilitation of their country.

Mexico can make money very fast, once she is settled [illegible] to be a valued customer of the United States. The problems of exportation and importation between the United States and Mexico are less intricate than those with customers farther afield. The principal one is the problem of credit. The merchants of Mexico have been brought up on a system of payments with twelve months and sixteen months' acceptances, which were usually handled in England on a low with other countries there is no special reason why the Mexibasis of discount, not more than 5 per cent. If we are going to have financial problems in connection with export dealings can problem should seem so hard as to be evaded.

The administration program of renewal of conditions of peace and trade with Mexico opens up, therefore, very large possibilities of immediate trade with the United States. The fact that the proposals come from the United States and include all our basic requirements tends toward speed in negotiation, inasmuch as the Spanish diplomacy has always seemed to lack complete initiative, and was marked by delay in leaving something out every time a schedule of proposals for agreement was made from that side first. The treatment of the Mexican situation by the American government is marked by intelligence and good order, as it will no doubt be also marked by justice and good nature. The opening up of a Mexican market just now would be to the present and permanent advantage of the United States.

The Income Tax Proposal

AT THE TIME this paper goes to press it looks as if the influence of the Governor's office over the Senate of the state is going to be efficacious in forcing that body to submit a constitutional amendment making an income tax possible for state purposes. Some time ago the corporate and industrial interests of the state were lulled into a state of false security by the administration by suggestions that they accept the corporation tax, in the hope that the income tax would not be pressed by the politicians and the agriculturists. Now that the corporation tax has been provided for, with the result that the state's deficit will be paid by industry and not, in any portion, by the general properties of the state, the same influences which put the corporation tax over are at work to make provision for an income tax.

The attractiveness of an income tax is accounted for by the possibilities which lie in it for exempting the general properties of the state from any form of taxation. It is quite true that there is a possibility of retaining the system of taxing the general properties directly and making the income tax a source of supplementary revenue. But it is also equally possible to make the income tax and the corporation tax the principal sources of state revenue, to the exclusion of any general tax. If such a system were applied, the result would be to load approximately 65 per cent of the total cost of the state's government upon Wayne county, an immense portion of the remainder on Kent county and the balance upon Oakland, Genesee, Bay, Saginaw, Jackson, Calhoun and Kalamazoo. These are the great industrial areas of the state, and it is fair to say that 95 per cent of the income tax would fall upon them. Under no redistribution is it likely that the mineralized counties would pay more than they pay now.

This situation may cause the industrial counties of Michigan to stand up on their own defense in a way in which they have not stood up before. Whatever injustice there may be in a tonnage tax or in taxes upon timber removed from the taxable areas in which it grew and is standing, it is not nearly so unjust to adopt such a system as it would be to levy practically all of the state's burdens upon the counties which are the seats of manufacturing industry. Indeed under the new conditions which have come about in the last half year there would be no injustice in a tonnage tax at all. Minnesota is today the greatest iron ore producing area in the Great Lakes district, and, for that matter, in the entire country. The state of Minnesota has, during the last session of its legislature, put a tax upon the production of minerals, which means iron ore, in the form of what is called a vocational tax; but which, whatever its name, is a levy of 6 per cent upon the value of iron ore taken from

Digitized by Google

the mines within that state. There are some questions of the constitutionality of this tax, which will be cleared up in due season. If the tax stands, and with Minnesota making the market price of iron ore, inclusive of the tax, the producers of Michigan iron ore will be in the position of collecting the tonnage tax from the consumers, with this difference, that where the Minnesota tax goes into the state treasury, the Michigan equivalent will go into the treasuries of the mining companies. The industrial counties, in this condition, may well inquire why the tonnage tax should not be enacted, to their relief, and to the discomfiture of the mining counties.

If the income tax amendment is presented to the people, we have no doubt that very many voices will be raised to make it look very attractive to the populace, and especially to the agricultural element. Yet we are not inclined to believe that, down at bottom, the agriculturists of this state are so radical as to desire to load their tax burdens upon manufacturing industry. The duty will, therefore, devolve upon the people of the industrial counties of presenting the case of the viciousness of the income tax to their fellow-citizens so clearly and so judicially that the state will not run away with the issue and pass it without thought. The existence of the federal income tax and its administration have shown commerce and industry how burdensome and discouraging such an impost can be.

Mr. Staley's Address

THOSE BANKERS—and others as well—who did not hear the annual address of President John W. Staley before the convention of Michigan bankers on Monday will do well to give it a careful examination. The full text of the address appears in this issue. And those who were so fortunate as to attend this session can well afford to refresh their memories by rereading Mr. Staley's remarks, for they will find much of guidance for the future, and sane hopefulness. The implication is clear all through the address that the worst has been passed; the comparisons of conditions here, even at their worst, with conditions in other countries prove clearly that on a basis of comparative injury due to the war, our hurts have been slight and we have much for which to be thankful.

Mr. Staley's appeal for economy is timely. And his remedy is worthy of consideration. Eleven billions are spent annually for what "we would all admit to be extravagance." which Mr. Staley proposes we cut in half and apply annually five and one-half billions of savings toward wiping out our national debt.

It is refreshing, too, to read a paper such as his which not only criticises but offers as well a workable remedy. Men who devote their lives solely to the management of banks do not espouse a calling in which there is much popular applause these days, nor is there the opportunity, if a banker wishes to render the utmost to his clients, for private gain such as obtains in the industries; therefore the impelling motive which tends to hold an able man to his job in a bank is love of the job and an innate belief that it is his first duty to serve. And more often than not such men are not bringing axes to grind at the bar of public opinion. They represent too many diverse and opposed business interests to risk their deposits by taking up the cudgel for any one class of customers. So it is for these reasons that the bank customer as well as the banker may have faith in the absolute unbias of an address such as this editorial makes reference to.

Curiously, the three most important national problems confronting America as set forth by Mr. Staley, may be described popularly as "the three T's"—taxation, tariff and transportation. And it is precisely as Mr. Staley says: "These questions are all directly or indirectly related to finance, but a question which supersedes all these as it affects our finances, and in the relative importance of its immediate need, is a constructive plan for refunding the national debt." We cannot indorse this expression too strongly, and we recommend this presentation with particular urgency to the business man, for in the sensible postponement of due date of our national debt and a proper shifting of it from the banks to individuals, the first two "T's" are half solved. And by a return to the sensible economy of personal and public expenditures the other half is solved.

But the third "T" (transportation) is not so easy of solution. Nor did the speaker offer a prescription for solving it. We can picture readily the ill effects of artificially sustained railroad costs in a country which has billions invested in industries hither and yon dependent for their prosperity on the foundation principle of reasonable transportation costs. Coincident with every dollar's drop in the cost of everything else but transportation, the latter becomes an increasingly serious bar to normalcy (whatever that may be). It does no good to lend the Texas farmer money from the federal treasury against his crops if at some time soon he shall not be able to get those crops to market and sell them for more than the amount of the freight bill. And likewise it is of no avail for the War Finance Corporation, or any other government body, to help an industry in carrying its debt if it cannot get its raw material to the factory and its finished product to market at low enough figures to permit of a profit. With every drop in selling price of any article which must be transported, and there are few not so affected, the fixed charge of transportation just helps to close the door to better business for the maker of those articles in direct proportion as the percentage of transportation costs in them is to other costs.

The significant statement that this generation will not see a return to normal conditions is exceedingly sane and wise counsel, and rather than being a cause for alarm is more a valuable hint to those who have the old familiar speculative stunts up their sleeves awaiting easy money, to turn to that business which will reurn smaller profits yet which will contribute to the well being of all the people.

Short Measure Stuff

POOR SPORTSMANSHIP

BOLSHEVISM, socialism et al are funny theories. When American industry was booming along on the crest of high production to meet abnormal demand the nation was honeycombed with cliques that wanted to take it over by force and operate it "for the benefit of the workers."

Today, when there are great enterprises that could be bought for a song, or in some cases unloaded merely for the privilege of getting the obligations transferred, the desire to wrest possession from the capitalists, so-called, seems to have disappeared.

It would appear that the restless minority is perfectly willing to take over the winnings but when the ownership of property incurs obligations under any system that deals equitably with the rights of others, then that is another story.

The reds and the wobblies ought at least to make a showing, when the market on the stuff they say they would like to control is at such low ebb. Otherwise they are apt to be accused of bad faith by their own supporters.

* * *

A DANGEROUS SUGGESTION

"Iron Ore," published at Ishpeming, Mich., has started a movement to popularize the game of pitching horseshoes as a home pastime, and sets up the advantages of having the shoes made of copper, in order to stimulate demand for the red metal, produced in such large quantities by the paper's subscribers. That would be all right if they would issue an insurance policy with every set to guarantee that the Mrs. wouldn't get playful after hubby comes home from his night out.

* * *

No financier was ever so concerned about the possibility of a run on his bank as his secretary would be over a run in her stocking.

* * *

Nowadays the average citizen is less interested in Russian developments or the return to normalcy than in the size of the reduction in automobile prices.

* * *

Someone told us the other day that traffic cops would rather not have to bawl folks out, but judging from observation, we doubt it.

* * *

We often wonder how a phonograph record feels after it finds its way into a barber shop or shoe shining cabinet and can't get out.

—A. F.

Digitized by Google



FINANCIAL

Holland-St. Louis Sugar Issues Annual Statement

Below are given the comparative balance sheets, income and expense statements and surplus accounts of the Holland-St. Louis Sugar Company for the fiscal year which ended April 30, 1921-20. Farmers who believe that their business is the only one that has suffered from post-war conditions will do well to study the following figures:

COMPARATIVE REVENUE AND EXPENSES

	Year end. 4-30-21	Year end. 4-30-20
Revenues		
Sales of mdse	$5,386,033.90	$4,599,303.42
Mdse. inventory	1,231,185.41	75,865.38
Profit from Merrill farm	4,194.43	17,390.85
Profit on fertilizer	.....	8,933.34
Int. on U. S. Certifs	.....	7,353.34
Loss without 1850 depreciation	3,847.59	.....
	$6,627,555.85	$4,702,383.67
*Charged to surplus.		
Operating Expenses		
Holland plant	$ 334,333.85	$ 313,292.40
St. Louis plant	1,435,571.26	1,264,317.81
Decatur plant	2,960,857.13	1,377,331.91
Selling expense	178,447.06	119,404.73
Bond interest	.....	14,054.00
Depreciation	.....	336,046.75
Federal taxes	.....	281,468.16
Gain for year ending 4-30-20	.....	571,845.90
	$4,357,239.83	$4,702,253.37

COMPARATIVE SURPLUS ACCOUNT

Credits		
Balance May 1, '20	$ 450,576.57	$ 396,596.31
Plus Res. for Div.	120,000.00	.....
Credit 1917 Income Tax	11,697.63	.....
Equalization refund	.....	137,318.47
Increase 1913 inventory	.....	24,382.35
Appreciation fixed assets	.....	230,000.00
Plus gain for year	.....	571,845.90
	$ 582,377.65	$1,450,593.95
Debits		
Common Stock Div., 7-16-19	$ 120,000.00	$ 120,000.00
Common Stock Div., 10-13-20-19	60,000.00	60,000.00
Preferred Stock Div., 5-5-21-20	3,806.80	3,306.30
Loss for yr. end. 4-30-21	33,847.59	.....
Deprec. adjustments	.....	544,442.85
Res. for dividends	.....	120,000.00
Addal 1919 Fed. tax	.....	58,758.84
Surplus at end of period	222,236.33	430,373.97
	$ 582,377.65	$1,450,593.95

Assets

	Apr. 30, '21	Apr. 30, '20
Plant and equipment	$5,635,753.73	$5,455,513.50
General Inventory	161,897.23	156,778.57
Mdse. inventory at cost	1,561,185.41	75,856.38
Cash in banks	557,605.09	355,445.97
Bills receivable	580.00	2,135.04
Accts. receivable	44,754.97	17,856.80
Prepaid expenses	56,545.76	70,193.14
U S Beet Seed Co. stock	4,300.00	4,300.00
Seed advances	59,161.38	98,315.39
Material in transit	28,533.33	10,957.23
War Sav. Stamps	545.40	526.00
U. S. Certifs. of Ind.	.....	500,000.00
	$8,545,859.09	$4,758,921.52

Liabilities

Common stock	$2,000,000.00	$2,000,000.00
Preferred stock	125,540.00	125,540.00
Second mtge. bonds	54,700.00	54,700.00
Accounts payable	9,284.58	149,513.51
Bills payable	1,554,000.00	.....
Accts. payable m'l'l in transit	38,558.72	.....
Reserve for frgt. claims	8,141.38	.....
Reserve for depreciation	1,358,226.53	1,358,226.53
Reserve for dividends	.....	120,000.00
Reserve for taxes	.....	586,970.18
Surplus	539,821.38	430,375.97
	$8,545,859.09	$4,758,921.52

OPERATING DATA

	Holland	St. Louis	Decatur	Total
Beets sliced, tons	42,545	85,287	90,456	198,290
Sugar packed 100-lb. bags	89,595	164,705	293,110	430,310
Pulp manufactured, tons	2,855	3,184	4,245	9,784
Molasses manufactured, tons	1,855	1,043	2,585	5,128
Acreage harvested, 1920	.....	.....	.....	21,414
Acreage contracted, 1921	.....	.....	.....	21,765
Paid farmers for beets	.....	.....	.....	$2,135,770.30

*Steffens Plant.

A letter to the stockholders, and a list of the directors and local managers, follows:

To the Stockholders,
Holland-St. Louis Sugar Company.

Because of the unusual combination of extraordinary difficulties and of uncontrollable expenses and losses during our fiscal year just closed, our financial statement herewith is far from being what, six months since, we had reasonably to expect it would be.

Our beets were necessarily contracted for at the peak of high prices early in the year 1920. Unexpected advances in railroad freight rates during the year cost us over $130,000. Our coal, packages, and other supplies cost us at least $300,000 more than the same amounts would cost us our this year's prices. We were forced to pay for our best seed $30,000 in excess of the normal price. The labor market and labor competition were such as to compel us to pay for beet laborers $130,000 more than was provided for in the farmers' contracts. The abnormally warm weather during the entire manufacturing season caused a large deterioration in the quality of the beets and the consequent lowering of the sugar content. Contrary to the world's expectation, the price of sugar declined instead of advancing from the time we entered the market in October. Because of these and other facts of similar nature the result of our year's operation is very unsatisfactory, showing a loss instead of a gain.

Should we purchase the same tonnage of beets next fall and winter as last, with sugar at six cents a pound, the beets would cost us $730,000 less than they did last winter. All in all we look to the future with hope and courage and we promise you our best efforts for a better report next year.

Respectfully submitted,
C. M. McLEAN, General Manager.

Directors: G. J. Diekema, president; Cass T. Wright, vice-president; C. M. McLean, secretary-treasurer; John J. Bale, J. J. Cappon, C. J. Den Herder, F. C. Hall, Geo. E. Hunt, A. La Huis, J. W. Pfeiffer, Howard Van S. Tracy, J. A. Vander Veen; general manager, C. M. McLean; local managers, Holland plant, S. R. McLean; St. Louis plant, B. C. Hubbard; Decatur plant, J. H. Carmody.

CONSUMERS POWER CO. REPORT

(Ann. Report, December 31, 1920.)

OPERATIONS

The combined results of operations compared with 1919 and 1918 are as follows:

	1920	1919	1918
*Gross Earnings			
Electric	$ 9,623,747.77	$ 8,026,300.81	$6,477,210.55
Gas	4,397,716.52	3,741,762.65	3,422,386.10
Heating and water	246,789.06	170,167.49	130,889.55
	$14,137,453.35	$11,439,080.15	$9,430,486.20
Operating Expenses, Rentals and Taxes	9,935,681.07	7,917,668.67	6,154,719.77
Net Earnings	$ 4,201,772.28	$ 3,522,060.48	$3,275,975.43
Interest and Other Charges	5,112,969.49	1,686,822.97	1,549,115.59
Net income available for depreciation and Dividends	$ 2,388,812.79	$ 2,532,217.51	$1,726,859.84

Acquisition of the Michigan Light Company enables the company to supply electric light and power in addition to electricity to Jackson, Saginaw, Bay City, Flint, Port Huron, Alpena, Manistee, Royal Oak and Birmingham, in addition to serving approximately 2,000 industrial plants, the company, on December 31, 1920, had more than 175,000 other customers located in 99 municipalities in twenty-nine Michigan counties.

*For comparative purposes, operating results of the Michigan Light Company acquired in February, 1920 are combined with the Consumers Power Company's figures in this report for preceding years.

GROWTH OF BUSINESS

Electric:	1920	1919	1918	1917	1916
Sales in K. W. H.	372,182,902	257,441,424	214,562,424	204,456,962	251,454,831
Customers	118,920	102,665	88,619	83,548	73,656
Gas:					
Sales in 1,000 cu. ft.	2,695,354	2,196,794	2,022,061	1,966,277	1,625,529
Customers	50,000	46,000	44,000	51,073	47,622

SOURCES OF REVENUE

Municipal, Residential and Commercial Lighting	42%
Motor Car and Allied Industries	9%
Electric Railways	9%
Boiler and Machine Shops	6%
Food Products, Woodworking & Furniture Companies	6%
Miscellaneous Power Users	19%
	100%

CONSTRUCTION

The demand for electric service has grown so rapidly, particularly during the last few years, that it was necessary to carry on an extensive construction program in 1920. Additions and improvements also were made to the gas and electric distribution systems. Water sites and flowage lands were acquired. The expenditures for such purposes amounted in the aggregate to over $6,000,000, the larger part of which was for the electric system.

CONSUMERS POWER COMPANY AND SUBSIDIARY (Michigan Light Company)

CONSOLIDATED BALANCE SHEET, DEC. 31, 1920

ASSETS

Property, Plant and Equipment—		
General Account	$41,229,319.29	
Investments in and Advances to Company		
Owning Water Power Land, Etc.	104,115.99	
Special Deposits and Funds		
Sinking Fund Deposits, etc.	$ 4,870.00	
Proceeds of Bonds Sold in Advance of Construction	729,668.70	734,538.70
Bond Discount and Expenses in Process of Amortization		2,489,128.94
Deferred Charges:		
Prepaid Insurance	$ 22,728.61	
Expenditures Appraising Property	134,044.64	
Sundry Prepaid Items	41,007.30	196,780.55
Current Assets:		
Cash in Banks	$ 567,868.45	
Working Funds	117,186.45	
Accounts Receivable	1,772,140.25	
Notes Receivable (including $14,022.76 Discount per contra)	35,648.36	
Due on Subscriptions to 7% Preferred Stock	190,668.28	
Materials and Supplies	1,866,157.85	4,549,720.04
		$72,806,583.71

LIABILITIES

Capital Stock of Consumers Power Company		
6% Cumulative Preferred—Authorized 1,000,000 shares par value $100 each—Outstanding	$12,430,300.00	
7% Cumulative Preferred—Authorized 70,000 shares, par value $100 each—		
Outstanding $443,900.00		
Subscribed but unissued 244,000.00	687,900.00	
Common Stock—Authorized 200,000 shares, par value $100 each—Outstanding	11,125,500.00	$23,243,700.00
Michigan Light Company — 6% Cumulative Preferred Stock in hands of Public		96,800.00
Funded and Unfunded Debt Outstanding (Details on page 15 of Report):		
Mortgage Bonds	$35,062,200.00	
Debenture Bonds	3,000,000.00	38,062,200.00
Deferred Liabilities:		
Customers' Security Deposits		341,967.47
Current Liabilities:		
Notes Payable	$ 896,944.14	
Audited Accounts and Wages		
Payable	1,040,396.99	
Taxes Payable January, 1921	507,663.83	
Advances Payable — Commonwealth Power Railway & Light Company	697,172.49	
Line and Main Extension Deposits	214,728.68	
Accrued Interest	159,360.20	
Accrued Taxes	39,731.19	
Notes Receivable Discounted per contra	14,022.76	
Sundry Creditors	4,456.21	3,784,396.92
Reserves:		
Depreciation	$ 2,095,854.96	
Renewal of Benches and Retorts	116,148.91	
Contingencies, Employers' Liability, Etc.	168,747.00	2,381,150.96
Surplus		1,306,875.36
		$72,806,583.71

Digitized by Google

CONSOLIDATED INCOME ACCOUNT
For the Year Ended December 31, 1920
and
Summary of Surplus Account

Gross Earnings—	
Electric	$ 9,672,747.77
Gas	4,228,716.32
Heating and Water	245,389.66
Total Gross Earnings	$14,137,453.75
Operating Expenses, Rentals and Taxes	9,935,581.87
Net Earnings	$ 4,201,772.28
Interest and Other Fixed Charges	2,112,959.49
Net Income Available for Depreciation and Dividends	$ 2,288,812.79

SUMMARY OF SURPLUS ACCOUNT

Surplus January 1, 1920			$ 1,532,999.58
Net Income available for Depreciation and Dividends, Year Ended December 31, 1920 (as above)			$2,288,812.79
Deduct:			
Dividends on Preferred Stock	$788,846.61		
Provision for Depreciation	896,668.00	1,260,846.61	827,967.15
			$ 2,360,966.76
Deduct—Dividends on Common Stock			1,154,691.50
Surplus December 31, 1920 (Per Balance Sheet)			$ 1,206,275.26

FUNDED DEBT OUTSTANDING
December 31, 1920

Combined Properties	Rate	Maturity	Held by Public
Consumers Power Company			
Serial Debentures	7%	*Serially	$3,000,000
General & Refunding Mortgage Bonds, Series A	7%	Jan. 1, 1930	5,000,000
General & Refunding Mortgage Bonds, Series B	7%	July 1, 1935	2,500,000
Consumers Power Company as Formerly Constituted			
Commonwealth Power Co. First Mortgage Bonds	6%	Dec. 1, 1924	1,670,000
Cadillac Water & Light Co. First Mortgage Bonds	5%	Sept. 1, 1925	125,000
Grand Rapids & Muskegon Power Company			
First Mortgage Bonds	5%	Mar. 1, 1931	†11,000
Consumers Power Company			
First Lien & Refunding Mortgage Bonds	5%	Jan. 1, 1938	122,284,000
Michigan Light Company as Formerly Constituted			
Flint Gas Company First Mortgage Bonds	6%	Nov. 1, 1924	493,500
Pontiac Light Company First Mortgage Bonds	5%	Jan. 1, 1927	170,000
Jackson Gas Company First Mortgage Bonds	5%	April 1, 1937	340,000
Michigan Light Company First & Refunding Mortgage Bonds	5%	Mar. 1, 1946	12,582,000
Total Bonds and Debentures			$148,962,500

*$500,000 due annually February 1, 1922–1927 inclusive.
†Does not include $460,000 bonds retired by sinking fund.
‡$2,940,000 additional Consumers Power Company First Lien and Refunding 5's and $1,559,500 additional Michigan Light Company First and Refunding 5's pledged under Consumers Power Company, General and Refunding Mortgage.

CONWAY TO LEAVE LANSING

The many friends and acquaintances of Joseph M. Conway, deputy commissioner of the Michigan banking department, will be surprised to learn that he has resigned his office, effective June 15, to become connected in an official capacity with a Detroit bank, announcement of which will be made shortly.

MOHRMANN AND LAMB MOVE UP

Banking Commissioner Hugh A. McPherson is authority for the statement that Harry O. Mohrmann, chief examiner of the state banking department since March 1, 1920, will become deputy commissioner upon the retirement of Joseph M. Conway, June 15, and that Scott E. Lamb, an examiner, will become chief examiner to succeed Mohrmann. Both of these men have been connected with the department a long time.

BANKERS O. K. TOWNSEND BILL

A resolution was unanimously adopted by the Michigan Bankers' Association, in convention in Detroit, this week, indorsing the Townsend bill now before Congress which provides for a national roads commission and federal aid in building trunk line highways.

C. R. WILSON DIVIDEND

Directors of the C. R. Wilson Body Company, Detroit, have authorized payment on July 1 of the regular quarterly dividend of 1¾ per cent upon the outstanding preferred stock, to stockholders of record June 20.



And He Too Was Called

He had been named as executor in the will of a dear friend—recently departed.

He had done much work in settling the estate. Much was still to be done.

Then the unexpected happened. He too was called suddenly—with the task unfinished.

Confusion resulted. Work already done had to be traced. Books had to be checked. Another administrator had to be chosen to finish the work. The wife and children were put to additional trouble and annoyance. The estate was delayed months in settling.

Such complications cannot occur when a trust company is the executor. Individuals may fail, but the work of a trust company, composed of many experienced individuals, goes on uninterrupted by mishap or death.

The Union Trust Company because of its thirty years of service is particularly well fitted to serve you in such matters of almost sacred trust.

We will send you useful literature on wills and executorships or we will gladly talk with you personally and in confidence.

Union Trust Company

First trust company in Detroit

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

7% FARM DRAINAGE BONDS 7%

There is no better Security on earth than Tax Liens on Cultivated Farms.

Ordinarily FARM DRAINAGE DISTRICT BONDS pay the Investor Six Per cent, but for quick sale, we offer ten choice issues to pay from 7% to 7½%. Interest payable annually or semi-annually by coupon collectible at your bank.

They come in $1,000, $500 and $100 denominations, and run from Three to Twenty years and are FREE OF ALL FEDERAL INCOME TAXES.

Upon Postal Card request, we will send Circular No. 1963—"A Few Reasons Why Farm Drainage Bonds Are So Highly Regarded."

Interest is falling. Buy High Income now for future years!

THE HANCHETT BOND CO.
(Incorporated 1910)
Municipal Bond House
CHICAGO
Dime Bank Bldg., Detroit.
W. H. Dunham, Representative.

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

The Detroit Savings Bank

Unsurpassed in convenience and location. Splendidly equipped for service.
GRISWOLD & STATE STREETS

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

	June 1, 1921	May 25, 1921.	June 4, 1920
RESOURCES			
Gold and gold certificates	281,098	279,261	164,519
Gold settlement fund—Federal Reserve Board	504,746	474,552	431,227
Gold with foreign agencies	.....	.....	111,551
Total gold held by banks	785,844	754,313	707,277
Gold with Federal Reserve agents	1,477,665	1,505,229	1,110,864
Gold redemption fund	145,144	133,805	148,718
Total gold reserves	2,408,653	2,393,347	1,960,383
Legal tender notes, silver, etc	160,172	165,285	128,087
Total reserves	2,568,825	2,558,632	2,088,940
Bills discounted			
Sec. by U. S. Government obligations	775,568	792,951	1,453,415
All other	1,182,370	1,076,306	1,130,842
Bills bought in open market	77,078	87,138	410,685
Total bills on hand	2,003,805	1,957,391	2,974,946
U. S. Government bonds	82,915	28,571	36,796
U. S. Victory notes	22	22	69
U. S. certificates of Indebtedness—			
One-year certificates (Pittman Act)	236,878	233,375	289,375
All other	6,614	46,754	18,441
Total earning assets	2,249,732	2,263,128	3,278,626
Bank premises	28,497	23,396	12,942
5% Redemption fund against F. R. bank notes	10,427	11,174	11,745
Uncollected items	847,094	510,175	788,803
All other resources	18,114	12,663	6,764
Total resources	5,434,689	5,379,760	6,195,809
LIABILITIES			
Capital paid in	103,216	102,173	94,106
Surplus	205,026	202,036	120,120
Reserved for Govt. Franchise Tax	86,283	35,271	.....
Deposits—			
Government deposits	32,853	17,288	26,745
Due to members—reserve account	1,656,581	1,655,609	1,858,774
Other deposits, including foreign government credits	31,466	33,024	91,876
Total deposits	1,720,390	1,705,356	1,957,395
F. R. notes in actual circulation	2,751,299	2,784,804	3,127,284
F. R. bank notes in circulation—net liability	142,493	144,831	161,282
Deferred availability items	445,087	414,929	609,298
All other liabilities	20,585	19,757	76,947
Total liabilities	5,434,689	5,379,760	6,195,809
Ratio of total reserves to deposit and F. R. note liabilities combined	67.4%	57.6%	*42.8%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	71.5%	71.7%	*46.9%

*Calculated on basis of net deposits and F. R. notes in circulation.

Banks and Bankers

TWO NEW LANSING BANKS

Application for a charter for the Bank of Lansing and the Industrial Bank has been approved by the state banking commissioner. The Bank of Lansing is to be capitalized at $200,000 and the Industrial Bank for $50,000. It is understood that both institutions will be managed by the same association. Fred Affeldt, an employe of the banking commission, is back of the new organization. He has severed his connection with the commission.

NEW BANK AT TEMPERANCE

A movement is on foot at Temperance, Mich., to organize a state bank. Subscribers are all residents. A private bank recently failed at Temperance.

A. I. B. CONVENTION PLANS

Arrangements have been made to entertain more than 1,000 delegates at the annual convention of the American Institute of Banking, in Minneapolis, July 19-22. Not all the subjects for discussion have been decided upon, but among the speakers will be the following:

W. D. Simmons, associated Simmons Hardware Companies, St. Louis; E. W. Decker, president of the Northwestern National Bank of Minneapolis; John H. Puelicher, president of the Marshall & Ilsley Bank, Milwaukee, and vice-president of the American Bankers' Association; A. A. Crane, vice-president of the First National Bank of Minneapolis; Charles Donnelly, president of the Northern Pacific Railway Company; Joseph Chapman, founder of the institute's oldest chapter and vice-president of the L. S. Donaldson Company, Minneapolis; Dr. Walter Lichtenstein, foreign trade advisor of the First National Bank, Chicago, and D. C. Wills, of the Cleveland Federal Reserve Bank.

There will be a symposium on foreign trade lead by Dr. Lichtenstein. Departmental conferences will be held by ten groups on the following subjects: Advertising and publicity, auditing and accounting, bonds and investments, business development, collections and transits, credits, foreign exchange and foreign trade, mutual savings banks, office management and trust functions.

PONTIAC MERGER COMPLETED

Formal consolidation of the Pontiac Commercial and Savings Bank with the Oakland County Savings Bank took place May 31. All the officers of the former continue in their present capacities and Fred W. Perry, new president of the latter bank, becomes a vice-president of the consolidation. The former Oakland County Savings Bank will be continued in its present offices as a branch until a new building is erected.

Digitized by Google

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 6	$107,645,664	$121,466,004
January 12	60,178,447	140,667,086
January 18	101,466,682	121,241,067
January 66	76,016,697	67,641,666
February 2	67,666,626	81,774,666
February 9	76,606,462	101,046,606
February 16	70,061,622	101,262,770
February 23	67,711,064	82,666,767
March 2	88,626,592	127,098,854
March 9	76,766,856	103,011,649
March 15	66,666,462	133,176,066
March 22	60,166,496	148,837,686
March 36	66,061,371	118,461,666
April 6	78,166,671	104,806,641
April 16	61,661,667	124,881,367
April 60	66,777,666	161,666,146
April 26	66,636,660	112,266,676
May 3	61,044,066	114,786,767
May 11	70,616,666	167,483,966
May 16	128,141,704	115,794,716
May 25	84,000,661	116,163,741
June 1	66,602,606	66,666,726
June 9	11,666,606	111,686,628
Month of		
January	389,480,666	467,321,670
February	306,441,666	426,366,666
March	277,676,666	676,466,666
April	264,666,676	660,676,666
May	286,162,621	464,666,663
June	.....	666,706,287
July	.....	666,634,166
August	.....	662,366,666
September	.....	661,692,640
October	.....	616,426,760
November	.....	466,066,440
December	.....	462,661,240
Yearly totals, 1960		$6,196,626,806
Yearly totals, 1616		$4,804,686,166

Kalamazoo Stocks.

	Bid	Ask
Paper Companies		
American Box Board, com.	..	..
American Box Board, pfd.	..	..
Bardeen	17	18½
Bryant	17	18
Eddy, com.	3	5¼
Eddy, pfd.	..	10
Hawthorne	10	10¼
Kalamazoo	17	19½
Kazoo Veg. Parch.	10½	11½
King	17½	18½
Lee, units	100	105
Mac Sim Bar	8	10
Michigan	17	17½
Monarch	11¼	18¼
Rex	15	17
Northern Michigan Pulp	100	125
Standard	34	40
Sutherland	10	10½
Watervliet	15¾	20¼
Western Board	16	20
Banks		
First National	266	..
Home Savings	168	176
Kalamazoo City Savings	160	200
Kalamazoo National	146	150
Miscellaneous		
Barley Motor, com.	26	50
Barley Motor, pfd.	66	66
Hayes Wheel	..	..
Kazoo Loose Leaf	12	14
Kazoo Corset	..	10
Utah-Idaho Sugar	..	..
Kalamazoo Sanitary Mfg.	..	10¼
Limousine Body	..	19¼

Quotes by Olmstead & Mulhall, June 6.

Jackson Stocks

Hayes Wheel Co.	12¾	18¼
Hayes Motor Truck Wheel	..	..
Jackson Corset	10	11
Reynolds Spring, com.	9	16
Reyn'ds Spring, pfd.	66	60
Sparks-Withington	..	16½
Jackson City Bank	240	260
National Union Bank	160	250
State Savings Bank	166	185
Peoples National Bank	260	..

Quotes by Jackson office of Webb, Lee & Co., June 7.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	..	8
Economy Baler Co., com.	7	15
King Trailer Co., pfd.	..	..
Hoster Steel Ball, com.	6	13
Michigan Milling Co. com.	..	7¾
Motor Products Co., com.	..	56
Prod. Foundries, com.	..	2½
C. A. Sauer Co.	5	..

Quotes by Langley, Hildner & Co., June 6.

THE OLDEST HOUSE IN MICHIGAN

WE have a descriptive circular of selected municipal, corporation and foreign government bonds, which we consider attractive investments.

We shall be glad to send this upon request.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Service Personally Rendered

by the officers of this institution to banks and business houses carrying accounts here is the factor which assures that every customer receives exactly the kind of attention required.

For 36 years the DIME SAVINGS BANK has been growing stronger and more helpful because it invariably gives its clients' special needs the individual consideration due them.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JUNE 17th

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Dividend Cash	Annual Dividend Payable	Last Dividend When Paid	Last Dividend Cash	Last Dividend Stock	New Dividend Payable	New Dividend Ex.-Div. Date	New Dividend Amount Cash	New Dividend Amount Stock	Dividends Total This Year Cash	Dividends Total This Year Stock	Capitalization Outstanding
American Chicle, pfd.	81½	82	100	114 - 60	264 - 55	6%	Quar.	4- 1-21	1½%	1%					3%	2%	$3,000,000
Am. La. & Trac. Co., com.			100			*4%	Quar.	6- 3-21	1%						2%	2%	$23,371,000
Do., pfd.			100			6%	Quar.	8- 3-21	1½%						3%		14,236,200
Bower Roller Bearing Co.			10	17½ - 17	29½ - 16		Varies	1-20	20								$400,000
Char. Iron Co. of Amerten, com.		2	10	2½ - 1½	5½ - 1¾		Varies	4- 1-19	2%								$2,839,350
Do., pfd.	2¾		10	3 - 2½	5½ - 2¾		Varies	7- 1-19	2%								$5,217,350
Cities Service Co., com. XD.	218	223	100	224¾ -216	355 -300½	216%	Mon.	6- 1-21	1½%	1¼%	7- 1-21	6-15-21	1½%	1¼%	3%	7½%	$43,440,887
Do., pfd. XD.	63½	64¾	100	63¾ - 63½	70 - 65	6%	Mon.	6- 1-21			7- 1-21	6-16-21	1½%		2½%		$76,719,271
Commerce Land & Zinc Co.			1	10 - 6	50 - 10		Varies	11-25-17	20%								$500,000
Columbia Sugar	8½	8½	10	14½ - 8¾	20½ - 11¾	12%	Quar.	4- 1-21	2%						6%		$3,000,000
Commerce Motor Car Co.			10	2¾ - 2¾	18 - 2¾		Varies	4- 1-21	2%								$800,000
Com. P. R. & L. Co., com.			100	16 - 12¾	10½ - 10½		Varies	11- 1-17									$15,585,900
Do., pfd.			100	34 - 29	65 - 23	116%	Quar.	3- 1-21	1½%						1½%		$17,950,000
Continental Motor Co., com.	3¾	3½	10	7¾ - 3¾	14¾ - 3¾		Varies	12-20-20	1								$14,807,250
Do., pfd.			100	81 - 81	93 - 73	7%	Quar.	4-15-21	1¾%						3½%		$2,184,700
Det. Br. & Malleable Wks.	90		100	98 - 94	96 - 93	6%	Mon.	6- 1-21	1%						3%		$1,472,100
D. & C. Navigation Co.		72	100	75½ - 71	100 - 67	8%	Quar.	4- 1-21	2%		7- 1-21	6-15-21	2%		4½%		$6,000,000
Detroit Creamery Co.	20		10	23½ - 20¾	38¾ - 16	8%	Quar.	4- 1-21	2½%						2½%		$3,187,780
Detroit Edison Co.	94	93½	100	98 - 92½	114 - 92¾	8%	Quar.	4-15-21	2%		7-15-21	6-30-21	2%		4%		$27,856,200
Detroit United . XD.			100			8%	Quar.	6- 1-21		2½%					2%	2½%	$15,000,000
Durant Motors	23	23½	None	23¼ - 22¾													1,000,000 shs.
Edmund & Jones, com.			None	14½ - 9¼	34 - 14½		Varies	1- 1-21	50c						50c		$40,000 shs.
Do., pfd.			100	70 - 70	75 - 70	7%	Quar.	4- 1-21	1¾%						3½%		$600,000
Federal Truck		17¼	10	22 - 17	82 - 10¾		Varies	12-31-20									$2,000,000
Ford Motor Co. of Canada.	255	258	100	299 -217	460 -210		Varies	7-15-20	15%		6-15-21	6-11-21	15%		15%		$7,000,000
Gen. Al. & Br. Mfg. Co., com.			10	14½ - 9¼	25 - 11	7%	Quar.	4- 1-21		5%							$2,184,700
General Motors	9¼	9¾	None	16 - 9¾	42 - 12¼	$1.00	Quar.	5- 2-21	25c						50c		20,517,053 shs.
Goodman Sugar, com.			None		59¾ - 39½												170,000 shs.
Do., pfd.			100			7%	Quar.	4- 4-21	1¾%						3½%		$3,140,000
Hanna Furnace, com.			10	26 - 25													$1,989,050
Do., pfd.			100			8%	Quar.	3-15-21	2%		6-15-21	6- 6-21	2%		2%		$780,000
Hall Lamp Co.			10	18 - 13	32½ - 16		Varies	12-31-20									$1,000,000
Hayes Mfg. Co., com.	2¼	2½	10	3¾ - 2¾	6¾ - 2¾		Varies	3- 1-20	13½%								$1,500,000
Holland-St. Louis Sugar Co.	6¾	7¾	10	8 - 7¾	19 - 7¾		Varies	10-30-20	1½								$2,000,000
Iron Silver Mining Co.			20		62 - 42	6%	Semi-Ann.	7- 1-19	10								$2,500,000
A. B. Kresge, com.			100	141 -140	151 - 90		Varies	3-31-21	1%		7-1-21	6-16-21	3%		3%		$10,000,000
Do., pfd.			100	96¾ - 95¾	103 - 100	7%	Quar.	4- 1-21	1¾%		7-1-21	6-16-21	1¾%		3½%		$2,000,000
Lincoln Motor, Class A	17½	18½	50	21½ - 17½	30 - 13¾		Varies	7-20-20	1								$2,000,000
Linderman Steel, Com.			10		24 - 18¼	12½%	Quar.	4- 1-21	30c						60c		$1,098,980
Marsman Crude Rubber Co.			10	6¼ - 6¼	11½ - 3¾		Varies	12- 1-20	2½c								$750,000
Massian Drop Forge, com. XD.	38		None		50 - 38¾	$3.00	Quar.	5- 1-21	25c						$1.50		$12,500 shs.
Do., pfd.			100		90 - 90	7%	Quar.	4- 1-21	1¾%						3½%		$200,000
Michigan Stamping Co., com. XD			10	13¾ - 17½	18 - 13¾	8%	Quar.	5-25-21	2%						4%		$1,200,000
Michigan Sugar Co., com. XD	6¼	7	10	9 - 6¼	13¾ - 7¼	4%	Quar.	6- 1-21	1%				2%			2%	$7,471,100
Do., pfd.	8¾	8¾	10	9¾ - 8¾	9¾ - 8	6%	Quar.	4-15-21	1½		6-15-21	6- 1-21	1½%		3%		$3,703,100
Milne-Detroit Theater Co.			10	16½ - 16	21 - 15¾		Varies	4-10-21	*6%						9%		$350,000
Motor Products		50½	None	57 - 37½	60 - 47		Varies	5- 1-21	1						$2 50	2%	$2,885,000
Motor Wheel, com.	8¾	9½	10	11¾ - 8	13½ - 8¾		Varies	3-21-21	2%		6-20-21	6-10-21			2%		$4,500,000
Murray Mfg.			100				Varies	4-15-21	1%								$733,450
National Grocer Co.	6¾	6¾	100	9¼ - 6¾	156 -156		Varies	12-31-20	2%								$2,000,000
Do., pfd.			100		157 - 90	6%	Semi-Ann.	12-31-20	3%						3%		$1,500,000
Packard Motor Co., com.	8	8½	10	13 - 7¾	28¾ - 9¼		Varies	10-30-20	2½								$13,885,100
Do., pfd.	68	68½	100	71 - 68¾	94½ - 67	7%	Quar.	4-15-21	1¾		6-15-21	5-31-21	1¾%		3½%		$15,223,500
Paige-Detroit Motor Car, com.	14	16	10	23¼ - 12	43½ - 12¾		Varies	12-10-20	1								$2,000,000
Parke, Davis Co.	37	40	25	39¾ - 30	117½ - 33	20%	Quar.	4- 1-21	5%		6-30-21	6-20-21	*6%		6%		$1,500,000
Penberthy Injector, pfd.			100	92 - 92		8	Quar.	4- 1-21	2%						8%		$500,000
Rex Motor Co.	17	17½	10	25 - 17	29¼ - 16¾	10%	Quar.	4- 1-21	2½%						10%		$9,937,250
Scotten-Dillon Co.			10	21 - 18	39 - 23½	10%	Quar.	4-15-21	2½%						5%	50%	$2,250,000
Timken Axle, com.	22¾	24¼	10	34¾ - 20½	63¼ - 28¾	7%	Varies	1-15-21	2%						4%		$3,000,000
Do., pfd. XD			100		93¾ - 76	7%	Quar.	6- 1-21	1¾%						3½%	3½%	$3,000,000
True-Con Steel Co., com.		20	10	28½ - 19	29½ - 10	16%	Quar.	4-15-21	4%						8%	50%	$2,000,000
Do., pfd.			100	94 - 93½	94 - 84	7%	Quar.	6- 1-21	1¾%						3½%		$2,300,000
U. S. Radiator, com.			100		31½ - 20		Varies										$4,000,000
Do., pfd.			100	87 - 87	95¾ - 80	17%	Annually	1-25-21	7%						7%		$2,800,000
Waring Hat Co., com.			None														$50,000 shs.
Do., pfd.			100		103¾ - 100	8%	Quar.	4- 1-21	2%						4%		$1,000,000
Western Knitting Mills	10	10¾	None	11 - 8¾	10¾ - 8¾		Varies	11-25-20	50c								$160,000 shs.
White Star Line	22		50	25 - 25	50 - 16¾		Annually	Nov	$2								$750,000
Wolverine Port. Cement Co.			10		5¾ - 2¾		Varies	12-15-17	2½								$1,000,000

*Old $60-$70; new 63¼-26. †7% in 1911, 7% in 1920, 7% in 1921, no Common dividends since organized. *1% Extra dividend. ‖Book value, $1,016,097. Ed. & J. §Book value, $3,219,327, Godchaux. ‖Sterl. Book value, $7,622,795-00, Western Knitting Mills. ‖Book value $5,084,450, Motor Products. **Also 4% stock. †With Extras. ‡New. 12½% monthly stock dividend.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 2, 1921	June 8, 1921
Canada		....	....	.1081
London	4.8655	3.6275	3.8500	3.7575
Switzerland	.1930	.1529	.1692	.1702
Paris	.1930	.0559	.0746	.0732
Belgium	.1930	.0625	.0743	.0728
Holland	.4019G	.3162	.3375	.3240
Italy	.1930	.02465	.0268	.0240
Greece	.1930	.0763	.0735	.0688
Spain	.1930	.1328	.1352	.1289
Vienna	.2026	.0022	.0025	.0023
Berlin	.2382	.01316	.0158	.0150
Denmark	.2679	.1595	.1810	.1735
Norway	.2682	.1595	.1868	.1805
Sweden	.2680	.2045	.2190	.2250

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	June 7, 1921	June 8, 1921	Dec. 27, 1920	July 1, 1920	June 3, 1919	July 1, 1919	June 3, 1918	July 1, 1918
1st Liberty 3½s	87.94	92.50	90.00	91.06	99.22	99.78	99.56	99.88
1st Liberty 1st 4s	87.48	85.50	85.32	85.60	92.00	94.30	92.30	94.12
1st Liberty 2nd 4s	86.60	86.30	84.10	85.00	91.58	93.94	93.04	94.18
1st Liberty 1st 4½s	87.86	86.35	85.50	85.18	93.46	93.14	94.52	....
1st Liberty 2nd 4½s	86.66	86.30	84.34	85.00	92.30	94.08	93.74	....
1st Liberty 3rd 4½s	90.90	90.04	87.30	88.32	94.88	94.10	94.44	....
1st Liberty 4th 4½s	86.74	86.46	84.84	85.56	92.78	93.10	....	....
Victory Bonds, 4¾s	98.27	98.48	94.96	98.50	94.00	98.00	98.84	98.86

Digitized by Google

Michigan Bond Items

At a meeting of the Hillsdale common council, Monday, June 6, an ordinance for the issuance of $16,000 bonds for the resurfacing of Howell street was passed. It provides for $8,000 in bonds for Hillsdale Paving District No. 2 in denominations of $500 each, bearing interest at the rate of 6 per cent, from Nos. 1 to 16 inclusive, taking date of July 1, 1921, and covering the city's share of the cost of the pavement. The bonds will be due as follows: Nos. 1-4, July 1, 1928; Nos. 5-8, July 1, 1929; Nos. 9-12, July 1, 1930; Nos. 13-16, July 1, 1931. To cover the portion to be paid by the property owners, sixteen bonds on the same terms will be issued as follows: Nos. 1-2, July 1, 1923; Nos.3-4, July 1, 1924; Nos. 5-6, July 1, 1925; Nos. 7-10, July 1, 1926; Nos. 11-16, July 1, 1927. Interest on both sets of bonds to be payable semi-annually on January 1 and July 1.

Union school district of Flint has sold $2,560,000 of 6 per cent bonds maturing serially, to Halsey, Stuart & Company and others. These are being offered to yield from 5½ to 6 per cent.

The Harris Trust & Savings Bank, Chicago, and Elston & Company have purchased $3,000,000 of three-year, 8 per cent sinking fund (closed) mortgage bonds of the Columbus Railway Power & Lighting Company.

UNITED LIGHT & RAILWAYS ANNUAL

The annual report of the United Light & Railways Company is at hand this week. We give the following excerpts therefrom:

CONSOLIDATED EARNINGS STATEMENT

12 months ended Dec. 31, 1920	
*Gross earnings (all sources).....	$11,950,518.55
*Operating expenses (including general and income taxes).....	7,884,518.62
**Maintenance of property.....	816,745.81
Net earnings	$ 2,375,251.51
Interest on subsidiary Co. bonds, notes, etc., owned by public.....	700,646.70
Dividends on Subsidiary Co. pref. stocks owned by public.....	159,986.00
Earnings of Subsidiary Co. applicable to common stock owned by public	12,525.40
	2,292,094.41
Interest on 1st and ref. 5% bonds U. L. & Rys. Co.....	455,424.22
Balance	1,926,860.18
Interest on 6%, 3½ yr. bond secured gold notes, series A.....	37,252.25
Interest on 7%, 5 yr. bond secured gold notes, series B.....	105,000.00
Interest on 7½, 1 yr. bond secured gold notes.....	96,122.45
Interest on 7%, bond secured gold notes, series of 1920.....	102,396.03
Interest on 8%, 10 yr. bond secured gold notes	14,980.36
Interest on 10 yr. convertible gold debentures	130,000.00
Balance	1,470,896.69
Interest on commercial loans.....	47,112.61
Credited to surplus account.....	$ 1,423,784.08

Net earnings applicable to dividends last three fiscal years after deduction of taxes: 1919, $1,033,-112.07; 1919, $1,038,767.72; 1917, $1,304,871.01.

*Gross earnings and operating expenses of the subsidiary companies include inter-company transactions to the amount of $1,593,081.55, of which $444,811.78 represents electric power sold to subsidiary railway properties.

**In addition to amount set aside or expended for maintenance of property, a further sum of $335,292.14 was set aside for depreciation and credited to depreciation reserve.

"Gross earnings of your company's subsidiaries show a very material increase, and due to careful buying and close attention to operations the net earnings also show a substantial increase; in fact, your board is gratified in presenting in this report to you, the most favorable statement of operations in your company's history. The year 1921 will not be without its problems, but it will be the policy of your management in the period of readjustment through which the world, and especially our country, is passing to be eminently fair in the matter of wages with its employes; conservative in the purchase of supplies, and economical in the expenditures of money."

"Due to the conservative policy of deferring dividends on the common stock, the cash resources of your company have been substantially augmented, and on December 31, 1920, the 'Surplus and Reserves,' after charging off property placed out of service, showed an increase of $623,070.69 over December 31, 1919."

GROSS AND NET OF SUBSIDIARY COMPANIES

	1920	1919
Gross	$11,797,450.59	$9,951,185.03
Net	3,118,221.65	2,666,622.77

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, from which authoritative figures are obtainable, these quotations must be considered as nominal. We endeavor to obtain figures from reasonable sources but do not assume responsibility for their correctness. It should be borne in mind that prices for many stocks which are closely held are apt to vary widely on sale.)

Local Stocks	Bid	Asked
Burroughs Adding Machine.....	147	147
Columbia National Fire.....	15½	18
Commerce Fin.	25	28
Detroit Mortgage, com.....	2	2½
Detroit Mortgage, pfd.....	5¼	5⅝
Detroit Copper & Brass.....	17	20
Detroit National Fire.....	35	38
Detroit Life	64	66
Eureka Croscus	01	02
Federal Bakeries Co.....	27	30
Federal Discount Co.....	7½	8
Fisher Body	68¾	69¼
General Necessities Corp.....	10⅝	12
Gladys-Belle Oil, com.....	20	32
Gladys-Belle Oil, pfd.....	13	04
Great Lakes Engineering, new.....	11	14
Hoover Steel Ball.....	1	1½
Hayes Wheel Co.....	14	16
Interstate Fire	26	30
Invador Oil	70	75
Jackson Gasolene Spring.....	5	6
Jewell, Bigelow & Brooks Units.....	10	11
Jowett, Bigelow & Brooks, com.....	5	7
Kelsey Wheel	51	52
Little Wonder Stove.....	1	1⅝
Monroe Binder Board.....	08	10
Detroit Motor Bus.....	6¾	8⅝
McCord Manufacturing, com.....	7	7½
McCord Manufacturing, pfd.....	46	50
Michigan Copper & Brass.....	14	10
Motor Products Corp.....	78	80
Noble Oil, com	23	24
Peninsular Portland Cement.....	13½	14
Peninsular Fire Ins.....	21	01
River Rubber Co.....	11⅝	13⅝
Trippensee Mfg. Co.....	5⅝	7½
Union Mtge., 100% com.....		7½
Union Mtge., 100% com.....		7¼

Motor Stocks	Bid	Asked
Briscoe Motors	9¾	11¼
Columbia Motors	2¼	2⅝
Chalmers	¾	1¼
Chevrolet	156	400
Cleveland	32	35
Curtis Aeroplane	3	4
Durant Motors	09	24
Elgin Motors	5	6¼
Ford	166	170
Hupp	11	11½
Liberty Motors	1	1⅝
Lee Tire	37⅜	38½
Pierce-Arrow Truck	19¼	19⅝
Mercer	3	4
Mitchell Motor	3	4
Moreland	3¼	3⅝
Nash	200	225
Republic Truck	13⅜	14¼
Saxon Motors	2¼	2⅝
Scripps Booth	08	09
Stearns	25¼	25⅝
Stromberg Carburetor	22¾	24¼
Studebaker	71	71¼
Willys-Overland	27¾	27⅞
Grant Motor	2¼	2⅝
Jordan Motor	70	105
Peerless Motor	23	27
White Motor	32¼	32⅝

POLISH REMITTANCES FACILITATED

The Guaranty Trust Company of New York, through its Detroit correspondent, Howard B. Lee, advises that his company has been appointed fiscal agent for the Polish government and that funds which are to be transmitted from this country by Poles to their relatives abroad may be handled through this New York bank in a manner which will remove much of delay and danger which has been incidental to sending funds to Poland.

Price Range Detroit Bank Stocks

Name	Detroit Stock Exchange					
	Range 1921 High	Low	Range 1920 High	Low	June 7, '21 Bid	Ask
American State.....	221	215	220	200	*216	
Bank of Detroit.....	....	....	....	....	*185	
Detroit Savings	260	260	....	....	*260	
Dime Savings	260	258	260	258	260	
First and Old Detroit Nat'l	273	271	275	269	....	*272
First State.....	....	....	....	....	*181	185
Highland Park State.....	300	280	298	288	*290	
Merchants National.....	149	149	153	149	*150	
Nat'l Bank of Commerce	315	310	320	300	*315	....
Peninsular State.....	....	....	240	240	*220	....
Wayne State	260	255	235	205	....	....
United Savings.....	308	300	312	300	*325	....
Union Trust Co. Home.....	....	....	347	347	*347	....
American Loan and Trust	....	....	....	....	....	105
Bankers Trust.....	....	....	....	....	....	....
Guaranty Trust.....	....	....	....	....	....	....
Detroit Trust.....	395	385	380	372	300	....
Security Trust.....	....	....	....	....	2300	....
Union Trust.....	180	180	197	197	*180	190
Commonwealth-Federal	....	....	130	....	1105	107
Continental Bank.....	....	....	....	....	1135	....

*Last Sale.
†Nominal Quotation.

Current Investment Offerings

CHARLES A. PARCELLS & CO., DETROIT

Name	Rate	Maturity	Price	Yld.
Eddy Paper Co., 1st mtge.....	7.50	5-1-21	98.25	7.75
Libby, McNeill, Libby 1st coupons.....	7.00	3-1-21	98.75	7.60
Great Northern	7.00	7-1-26	98.50	7.37
Southw. Pw. & Lt....	8.00	1-1-41	99.00	8.10
Governm't of France	7.80	5-1-41	95.00	8.10
Huron County Road.	5.00	11-1-22-24	.....	6.00

CARROLL S. JONES DIES

Carroll S. Jones, cashier of the G. W. Jones Exchange Bank of Marcellus for more than 40 years, died Monday of this week of valvular heart disease. He helped to organize the bank. For many years he was a leader in banking circles of Southwestern Michigan. Beside the widow he leaves a daughter, Donna V. Jones, who is assistant cashier of the bank, and a son, Carroll B. Jones.

THURMAN RECEIVER REPORTS

Morton H. Luce, temporary receiver for Allen G. Thurman & Company, has presented a report in circuit court of Kenty county placing the liabilities of the concern at $278,704.58 and assets at $65,887.43, according to Grand Rapids advices. It is also reported that four actions asking for recovery of property alleged to have been wrongfully converted by the company have been instituted by former customers.

M. P. A. TOUR NOTICE

Directors of the Michigan Pikes Association announce that the number who can be taken on the tour is limited this year and therefore urge all intending participants in the jaunt around Lake Superior in July to send in applications to Secretary Willard K. Bush, 1220 Book building, Detroit, as soon as possible.

Detroit Tigers' Home Dates for 1921

June 21, 22, 23.....	St. Louis
July 8, 9, 10, 11.....	Boston
July 12, 13, 14, 15.....	Philadelphia
July 16, 17, 18, 19.....	New York
July 20, 21, 22, 24.....	Washington
August 12, 13.....	St. Louis
August 17, 18, 19.....	Boston
August 20, 21, 22.....	Philadelphia
August 23, 24, 25.....	Washington
August 26, 27, 28.....	New York
August 31, Sept. 2, 3, 4.....	Cleveland
September 1 a. m., p. m.....	Chicago
October 1, 2.....	St. Louis

Digitized by Google

Lansing Stocks

	Bid	Asked
Atlas Drop Forge Co.	22	24½
Auto Body, com.	5½	8
Auto Body, pfd.	7	9
Bates & Edmonds Motor Co.	15	20
Duplex Truck	7	9
Federal Drop Forge Co.	2½	4½
Flirt Bond & Mortgage Co., Lansing Company	33	42
Michigan Mortgage Co.	9	10
Michigan Screw Co.	18	29
Motor Wheel Corporation	8½	9¼
Novo Engine Co.	22	26
Reo Motor Car Co.	17½	19

Quotes by C. M. Murchey & Co., June 6

Grand Rapids Stocks

American Public Utilities, com.	9	10
American Public Utilities, pfd.	16	19
Commonwealth P. R. & L., com.	10¾	12
Commonwealth P. R. & L., pfd.	29½	91½
Citizens Telephone Co.	3¾	4¾
United Light & Railways, com.	25	25¾
United Light & Railways, pfd.	80	82½
Cities Service, Bankers' Shares.	25¾	26¾
Cities Service, com.	218	223
Cities Service, pfd.	93¾	94¼
Cities Service, Debenture "B"	117	121
Cities Service, Debenture "C"	87	90
Cities Service, Debenture "D"	82	86

Quotes by Howe, Snow, Corrigan & Bertles, June 6.

Detroit Listed Bonds

Name	Bid	Ask
June 7, 1921		
Cons. Pow. Co.—5s, 1936	80	81
Detroit & Flint—5s, 1922	93¾	93¾
Detroit, Ft. W. & B. I.—5s, 1937	90	87
D., M. & Short Line—5s, 1939	79	81
Detroit & Pontiac Ry.—5s, 1923	99	99
Detroit & Pontiac—4½s, 1926		94
Detroit & Port H. L.—5s, 1940	99	75
Detroit Railway—5s, 1924		99
Detroit, Ypsi. & A.—4s, 1924		100
D., Y. & A. A., Jackson—5s, 1928	79	99
Det. United Ry.—4½s, 1931		91
Detroit Edison Co.—5s, 1959	97	99
Det. Ed. Co. 5s & ref. 5s, 1940	79	81
East Mich. Edison—5s, 1931	93	96
Detroit Edison deb. 7s, 1928	95¾	96¾
Detroit Edison deb. 7s, 1929	94¾	94¾
Detroit Edison deb. 7s, 1930		97
Detroit Edison deb. 5s, 1931	100½	101
D. C. Gas Co., G. M.—5s, 1913-23		90
D. C. Gas Co., P. L.—5s, 1933		95
Detroit & Sub. Gas Co.—5s, 1929	91	96
Mich. State Tel. Co.—5s, 1924	87	..
By-Prod. Coke Corp.—6s, 1930	..	..

Sales, Week Ended June 7

Detroit Edison 7s, 1930, 9,400 @ 96.
Detroit Edison 7s, 1929, 1,000 @ 93¾.
Detroit Edison 7s, 1928, 100 @ 95½.
Mich. State Tel Co. 5s, 1924, 2,000 @ 87½.

Sales Bank Stock

5 Dime Bank @ 280.
Listed stocks, 25,098 shares.
Unlisted stocks, 102,299 shares.

FOREIGN REPRESENTATION

Announcement

We wish to announce that Mr. Samuel J. Hoexter, of S. J. Hoexter, Inc., will shortly sail for Europe to open trade connections in Germany, Austria, Czecko-Slovakia, Holland, Belgium, Norway, Sweden and Denmark for American manufacturers.

Mr. Hoexter is open to represent manufacturers in a few additional non-competing lines. He will also undertake a limited number of commissions to purchase European products for shipment to this country.

He will be pleased to hear from business men interested in bringing their products to the attention of foreign buyers with a view to establishing European connections.

S. J. HOEXTER, INC.

416 East Montcalm Street, Detroit. Phone Cadillac 7611.

Potsdamer Str. 45, Berlin W.

COAL C. C. COREY COKE

1303-4 MAJESTIC BLDG. DETROIT, MICH.

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS

NATIONAL TWIST DRILL & TOOL CO.

DETROIT, U.S.A.

NATIONAL TWIST DRILL & TOOL

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	18½	19¾	18
Firestone Tire & Rubber	89	89	87
Do, pfd.	87	88	73
Fisher Ohio Body	14¾	20	14
Do, pfd.	73	75¼	61
Goodyear Tire & Rubber	7	29	7
Do, pfd.	22¼	89½	23¼
Miller Rubber	72	90	47
Murray Ohio	3	9	6
National Acme	26	28¾	20
Paragon Refining	14	25½	16
Portage Rubber	10	27	10
Do, pfd.	37	46	30
Standard Parts	½	11	½
Do, pfd.	..	22½	1¾
Victor Rubber	20	20¼	16
Youngstown Sheet & Tube	59½	75	57
Do, pfd.	104½	104½	102¾

Quotes by Otis & Co., June 4.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	8	8¾
Commonwealth Power	9¾	10¾
Lufkin Rule, pfd.	13	15
Michigan Sugar, com.	8¾	9¾
Michigan Sugar, pfd.	2	2¾
National Grocer, com.	7	7¾
National Grocer, pfd.	92	95
Saginaw Shipbuilding Co.	7½	8½
Symons Bros.	9¾	10
Valley Home Tel. Co., pfd.		48

BANK STOCKS

Second National	396	915
American State Bank	200	210
Bank of Saginaw	190	210
Commercial National	190	200
Peoples Savings	295	299

Quotes by Phipps, Williams & Beeson, June 6

Detroit Listed Bonds

Name	Bid	Ask
June 7, 1921		
Cons. Pow. Co.—5s, 1936	80	81
Detroit & Flint—5s, 1922	93¾	93¾
Detroit, Ft. W. & B. I.—5s, 1937	90	87
D., M. & Short Line—5s, 1939	79	81
Detroit & Pontiac Ry.—5s, 1923	99	99
Detroit & Pontiac—4½s, 1926		94
Detroit & Port H. L.—5s, 1940	99	75
Detroit Railway—5s, 1924		99
Detroit, Ypsi. & A.—4s, 1924		100
D., Y. & A. A., Jackson—5s, 1928	79	99
Det. United Ry.—4½s, 1931		91
Detroit Edison Co.—5s, 1959	97	99
Det. Ed. Co. 5s & ref. 5s, 1940	79	81
East Mich. Edison—5s, 1931	93	96
Detroit Edison deb. 7s, 1928	95¾	96¾
Detroit Edison deb. 7s, 1929	94¾	94¾
Detroit Edison deb. 7s, 1930		97
Detroit Edison deb. 5s, 1931	100½	101
D. C. Gas Co., G. M.—5s, 1913-23		90
D. C. Gas Co., P. L.—5s, 1933		95
Detroit & Sub. Gas Co.—5s, 1929	91	96
Mich. State Tel. Co.—5s, 1924	87	..
By-Prod. Coke Corp.—6s, 1930	..	..

Sales, Week Ended June 7

Detroit Edison 7s, 1930, 9,400 @ 96.
Detroit Edison 7s, 1929, 1,000 @ 93¾.
Detroit Edison 7s, 1928, 100 @ 95½.
Mich. State Tel Co. 5s, 1924, 2,000 @ 87½.

Sales Bank Stock

5 Dime Bank @ 280.
Listed stocks, 25,098 shares.
Unlisted stocks, 102,299 shares.

TWO D. U. R. DECISIONS

Two decisions, one in favor of the Detroit United Railway, and one against the company, have been rendered in suits instituted in connection with fare increases and the municipal street railway.

In the first case the Michigan supreme court upholds the decision of Judge Mandell to the effect that the sale of part of the $15,000,000 railway bonds to the city sinking fund commission is not illegal and that no injunction can issue. The bonds thus sold have been resold by the sinking fund commission. The D. U. R. contended that the railway commission had no right to use taxpayers' money for the railway.

The second decision dismisses the suit of Pontiac, Birmingham, Farmington, Orion, Oxford and Rochester, brought against the D. U. R. to prevent the charging of split fares in interurban service under the Smith act of 1919. The petitioners for an injunction contended that the Smith act abrogated the franchise requirements.

Digitized by Google

FOREIGN CORRESPONDENCE

We present the following information furnished by Samuel Montagu & Company, bankers, London, under date of May 12 with reference to the business situation in Great Britain:

Bank rate 6½ per cent, since April 28th, 1921. Easy conditions and rates have characterized the money market during the last week and borrowers have satisfied their requirements at from 4¼ per cent—5 per cent, with balances at the close of business obtainable at lower rates. Weekly fixtures continue at 5 per cent. Discounts have been a quiet market, three months bills are quoted 5⅛—5 9/16 per cent. Receipts from Treasury Bills for the week ending the 7th instant totalled £85,543,000 and payments for the same period £81,080,000.

An increase in the gold in hand	Fcs.
A decrease in advances to the state	"
A decrease in notes in circulation	"
Ratio between bullion and notes in circulation	

The Board of Trade returns for April show a substantial shrinkage in value when compared with those for April, 1920, the reduction is partly attributable to the fall in prices and to the dislocation of industry caused by the coal strike, of which the full effects will be more fully reflected in the figures for May.

	April, 1921	March, 1921	April, 1920
Imports	£69,995,504	£93,146,434	£187,154,309
Exports	59,887,585	86,808,981	106,351,693
Re-exports	8,522,662	8,888,005	20,467,419

As compared with April, 1920, the most noteworthy reduction in the imports of raw materials during April, 1921, is in raw cotton, which is less by £28,962,920, and in exports of cotton goods which are lower by £21,376,562. Exports of woolen goods are less by £6,013,120.

	Four Mos. 1921	Four Mos. 1920
Imports	£292,558,274	£697,474,548
Exports	287,654,371	491,795,112
Re-exports	36,771,109	92,567,042

The Department of Overseas Trade gives the following figures, comprising entire notice of increase of nominal capital filed at Somerset House during April, 1921:

1921	Number of Companies	Total increase of capital	Average per company
April	159	£ 5,627,456	£ 40,756
March	149	5,397,286	38,233
February	159	13,407,896	85,401
January	198	10,790,413	54,497
	645	£35,252,552	

The April figures included £1,425,000 for oil, £737,600 for coal, electricity, gas, etc., £512,475 for metal industries, £437,500 for textile and dyeing; for foodstuffs, agricultural and dairy produce, £329,000.

Unfortunately there is no improvement to record as regards the coal strike. Its disastrous consequences are being increasingly felt, more factories are closing down and great numbers of workmen are being thrown out of employment. It is stated that not less than 100,000 tons of foreign coal are lying in the Thames. It is not surprising that many industries are giving increased attention to oil as a substitute for coal.

BANK OF FRANCE RETURN

The return of the Bank of France for the week ending today shows the following changes:

	12th May, 1921	6th May, 1921
Gold	261,000 Fcs.	3,569,707,000 Fcs.	3,569,481,000
Silver	250,000,000 "	28,450,000,000 "	28,700,000,000
Bills	91,159,000 "	38,741,680,000 "	38,232,839,000
Ratio		14.99%	14.90%

The Economiste Francais gives the figures for French foreign trade for the first quarter of 1921 as compared with the corresponding period of 1920:

Imports	1921	1920
Foodstuffs	Fcs. 1,168,417,000	2,571,375,000
Materials for industry	2,690,850,000	4,292,402,000
Manf'd goods	1,420 040,000	2,513,783,000
	5,329,307,000	9,377,460,000
Exports		
Foodstuffs	524,429,000	416,566,000
Materials for industry	1,292,911,000	1,071 642,000
Manf'd goods	2,241,041,000	2,798,777,000
Postal packets	369,097,000	220,746,000
	5,428 488,000	4,505,732,000

Excess of exports over imports for first quarter in 1921 is 129,181,000 francs, in same period of 1920 imports exceeded exports by 4,871,728,000 francs.

BANK OF ENGLAND RETURN

	May 4th	May 11th	Increase or Decrease
Rest	£ 3,133,419	£ 3,148,790	+ £ 14,971
Public deposits	15,487,573	14,866,222	— 576,951
Other deposits	125,869 985	113,560,751	— 11,809,234
Government securities	41,467,043	28,188,722	— 12,480,321
Other securities	79,558,234	78,903,586	— 654,962
Reserve	17,278,309	18,044 607	+ 766,298
Note circulation	129,528,225	128,768,840	— 759,595
Coin and bullion	128,357,634	128,383,247	+ 5,213
Proportion	12.3 per cent	14 per cent	+ 1.7 per cent

CURRENCY NOTE RETURN

	May 4th	May 11th	Increase or Decrease
Issued	£ 7,467,576	£ 6 929,472	— £ 538,104
Outstanding	226,298,805	225,599,085	— 699,530
Bank of England notes	19,450,000	19 450,000	—
Gold coin and bullion	28,500.000	28,500,000	—
Silver coin	3,000,000	3,000,000	—
Ratio of gold and Bank of England notes to currency notes outstanding	14.28 per cent	14.29 per cent	+ 0.02 per cent

MORTGAGE INVESTMENT BANQUET

Salesmen of the Michigan Mortgage Investment Company, Lansing, held a meeting and banquet at the Hotel Kerns, June 3, with Glenn R. Munshaw, president of the corporation, as master of ceremonies. This corporation is capitalized at $2,500,000 and is one of the largest in the state, with several thousand stockholders. It was reported that the last issue of stock is being subscribed for liberally, being pro-rated among the stockholders.

$90,000 STOCK SALE ON

The Prodncers & Consumers Company, Cheboygan, recently incorporated for $400,000 and approved by the state securities commission, this week began the sale of $90,000 of common stock. The concern will handle farm produce and dairy products direct from producer to consumers in Cheboygan and in Detroit.

NEW INVESTMENT BANKING HOUSE

The H. Widre Company is a new investment banking house which has just opened offices at 504 Congress building, Detroit.

BUSINESS GAINS 10 PER CENT

President J. C. McCullough, of the Auto Owners' Insurance Company, Lansing, reports that the first half of the year has shown an increase in business of about 10 per cent. The company has more than 500 representatives in the state.

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg. — Phones Cherry 8640

We solicit your inquiries

Motor Stocks

Wm. A. Neer & Co.

Members Detroit Stock Exchange

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

LEWIS G. GORTON

Stocks and Bonds

1418 Majestic Building, Detroit, Mich.

Member of Detroit Stock Exchange

LISTED AND UNLISTED SECURITIES

STANDARD OIL CAPITAL INCREASE

To facilitate the purchase of the Midwest Oil & Refining Company and provide stock to be sold to employes on the co-operative ownership plan, the stockholders of the Standard Oil Company of Indiana have authorized an increase in the capital from $100,000,000 to $140,000,000.

RELIEF FOR SAGINAW-BAY CITY

The Saginaw & Bay City Railway has obtained from the city councils of Saginaw and Bay City agreements whereby Saginaw is to vote on a rides-at-cost franchise and take measures to eliminate direct jitney competition, while Bay City is to eliminate jitney competition and relieve the company of the cost of paving between its lines.

Digitized by Google

Michigan Bankers in Convention

(Continued from Page 4)

commerce, and we will increase that activity just in proportion as we relieve business of the tax burden under which it is today struggling. We must not forget that reasonable relief from taxation still leaves business with problems which will require constructive genius for their solution.

As to Foreign Trade

"Our foreign trade situation is one which calls for immediate and thoughtful effort on the part of our bankers and business leaders. The unsettled balance of trade in our favor of upwards of four billion dollars is becoming a menace rather than an advantage. Based largely on short term credits, a large part of which have gradually worked their way into our banks, we now discover that these are not being liquidated and a large part of this vast balance is fast becoming a fixed and permanent loan. The term 'frozen credits' has been given commercial and industrial loans based on over-extended stocks and inventories, but it may to be applied to the large foreign credits which are being carried by the banks in our principal ports of entry. There are only two possible ways of liquidating these obligations; one by such increase in our imports and decrease in our exports as to throw the balance of trade against us; the other, by establishing long term credits abroad through the War Finance Corporation, or through the establishment of foreign trade financing corporations under the Edge act. That we have come to a deadlock in our exports, especially of manufactured products, is evidenced by the storing of vast supplies of our merchandise on wharves and in custom houses throughout South American ports and the Far East. Very considerable amounts of this merchandise have been refused by the consignees which will entail large losses by American manufacturers. How to bring order out of the chaos now existing is very largely a problem of American finance. Because of our position today as world bankers, we have a responsibility which we must assume, whether we invite it or not. There are 30,000 banks in this country, and the most effective way to handle this foreign situation is by pooling their interests. The Federal Reserve Act, through the Edge law, which is an amendment thereto, offers the opportunity for banks to join together in the organization of banks to engage in foreign banking business. There are seven such banks in operation today, with an aggregate capital fund of thirty-five million dollars, dealing in short term credits only, and the Foreign Trade Financing Corporation is being organized with $100,000,000 capital to deal in long term credits.

"It would be better to solve this problem by the extension of credit, thus enabling Europe to relieve us of our surplus products of raw materials, and add to their own productive power. This would tend to keep trade and industry moving, both here and abroad, and solution of the world's ills of today can come only through production, and every agency which will tend to promote industry and increase production is a part of the work which should have our unqualified support, and will be to our undoubted benefit.

"America may not have sought the commanding position which she now occupies in world finance. That she has attained it, and that it has brought with it a distinct responsibility to American bankers, is a fact which we cannot for one minute overlook. That responsibility does not rest on a few, but must be shared by every American banker if he is alive to his full duty.

"America is no longer isolated. It never has been and never will be sufficient unto itself. For thirty years we have exported one-half of our cotton, one-third of our copper, one-fifth of our wheat and one-eighth of our forest products. To cut off those exports would mean bankruptcy to the South, the closing of our copper mines, 80-cent wheat and stagnation in our lumber industry. The present very noticeable check in our exports of these products has brought about conditions which should bear forcible evidence of what further is in store for us if we do not make it possible for Europe to take the surplus products of our farms, mines and forests.

"What is true of raw materials also applies to that vast field covering the production of American industry. Our manufactured goods, covering a wide range, have found an ever increasing market abroad and American products are known in every quarter of the globe. We need these foreign markets. In fact, industry as a whole must have those markets or limit its production correspondingly lessen its employment of labor.

Michigan's Position

"To what extent the depression of the last six months is due to the contraction of our exports abroad would be difficult to determine, but that those exports during the last four months have been but little over half the total of the corresponding months of 1920 is a fact, and a fact which cannot be disconnected with the slowing down of industry in this country and the curtailment of employment. Michigan is far removed from the seaboard, but it has a very intimate relationship to this problem. Detroit is a port of entry, and with one per cent of the population it has during the last year contributed five per cent of the country's exports. The product of Michigan industries reaches every civilized country in the world. Our imports have come from every corner of the earth. We have but to refer to some of the simplest daily needs of all our people to realize the interdependence of the nations of other, and in many cases, distant lands. Our tea from China, coffee from Brazil, china from England, linens from Ireland, glass from Belgium, are only a few of the innumerable articles of import which enter into our daily life. On the other hand, the market abroad for our products has increased six-fold since 1912. The war has brought about tremendous and far changed condition, but whatever may be its cause, we find ourselves today the biggest factor in the world's trade, and we could not, if we would, evade the tremendous responsibility which goes with that new relationship.

"The Great War, because of its very magnitude, required more than four years for its settlement. The problems growing out of that war for the same reason will take many years for their solution. In fact, the generation in which we move will not see the world returned to a normal condition. After previous world wars years elapsed before even the strongest recovered from their effects. We were impatient over the war's delays; we are impatient over the delays in reconstruction. We can rest content at this point, however: that each day, each month and each year will record a condition of betterment. It is now two and one-half years since the Armistice, and we seem to have made slow progress; yet if we could make a true comparison between conditions as they exist today, socially, as well as economical, and conditions as they existed two and one-half years after the Revolution, the War of 1812, or the Civil War, we would recognize that we have little cause for complaint, and we would have renewed faith in our institutions and in the ultimate justice and reward which comes from right thinking and the adherence to high ideals, whether it be on the part of an individual or a nation."

William J Gray, chairman of the educational committee of the Association, told the bankers that a series of talks on the fundamentals of banking had been prepared by the American association which were being prepared for distribution to all the banks, and stated that it was the committee's desire that wherever possible these papers be used by bankers on all occasions where the school children could be reached.

Mr. Drum's Address

Herbert F. Johnson, Kalamazoo, chairman of the committee on taxation; cited the dangerous tendency of legislatures to add to tax burdens at a time when the public was calling for decreased expenses, and gave it as his personal opinion that unless the business men of the country paid careful heed to the tax increases, troubles would speedily develop which were likely to make the past business troubles nothing in comparison. It was his recommendation that the business now dangerously near becoming a law at Lansing should be considered in this light by the Association. The matter was referred to the resolution committee for action.

The principal address of this session came next, John S. Drum, president of the American Bankers' Association, and also president of the Merchants' Trust Company of San Francisco being the speaker. He opened by supporting vigorously the sentiments expressed by President Slater in regard to the duty which every individual owed to the country to make a careful analysis of the present business situation with the object of determining what each could do individually to solve the newest world problem which has become our legacy by the war. He followed this introduction by a comprehensive review of the part which foreign trade played in the business life of our country before the war, pointing out that the natural flow of our surplus products and goods to Europe was counterbalanced to a large degree by large imports and invisible items of credit settlements which took care of themselves without much concern to us. Following which he drew a picture of the upsetting of this automatic equilibrium by the war and explained with unusual clearness how normal relations one with another became reversed or entirely changed until we reached that point where three or four billions of unpaid exports got lodged in our Eastern and other seaport banks. Then eventually came the crisis due to the complete dislocation of the machinery for the exchange of goods in the normal way until "the foreign world *could* not buy and the domestic world *would* not."

Following a review of the effects of the shutdown last year, Mr. Drum made it plain that the cost of production must come down to permit our normal economic flow to proceed. He is of the opinion that all basic agricultural products this year will be handled at a profit because of the lowered costs to the farmer, but stated that so far deflation had not been equitable to all classes and therefore more adjustment must follow, for which additional time, patience and effort would be required.

But notwithstanding the ill effects evident these several months of deflation, and the unevenness thereof, he says "we are going down naturally" and that "the inexorable law of economy will grind this thing out whether we like it or not, slow but sure." And after showing how the problem of reviving foreign trade was much different and more difficult now than formerly, he pointed to the only available solution, namely, the process of investing freely abroad. He advised his hearers that Europe might soon offer securities guaranteed jointly by private individuals, municipalities and even by states, which would be available in exchange for our surplus natural products and goods, and which, if we accepted through the

Digitized by Google

medium of debentures issued by the Edge act banks, would readily open the door to the return of prosperity. In conclusion he made the pointed query: With Michigan's surplus of manufactured goods and its bountiful excess of exportable raw and natural products, "is it not the duty of Michigan to take the lead?"

A. B. A. Meeting

Returning to routine Association business matters, President Steley announced the members of the nominating committee, which are as follows, with the first named as chairman: Wm. T. Moore, J. Edward Roe, E. N. Smith, W. T. Phelps and J. C. Hicks. On the resolutions committee he appointed Gerrit J. Diekema, W. F. Gallagher and Gus Hill, and on the auditing committee, Irving H. Baker, L. Z. Caulkins and Russ Jenks.

Members of the American Bankers' Association got busy following the regular session and after most minute instructions from Chairman Diekema proceeded to elect, a la James T. Keena, (1) a member of the Executive Council to succeed Dudley E. Waters; (2) a vice-president for Michigan to succeed Mr. Diekema; (3) a member to serve on the nominating committee, and (4) an alternate member of the latter. The chair appointed Gus Hill, Herbert Johnson, A. J. Maynard, Charles Adams and William Warmington as a committee to nominate members for the four offices and simultaneously with their appointment they made their report and the ayes had it in a walk, the same being as follows:

Member of Executive Council, Vernon T. Barker, president, Home Savings, Kalamazoo.

Vice-president for Michigan, John W. Haarer, vice-president and cashier, City National Bank, Lansing.

Member to serve on nominating committee, Walter G. Nicholson, too well known to waste type on.

Alternate member on nominating committee, Paul J. Ulrich, Mt. Clemens, ditto.

Delegates from the Upper Peninsula who are accustomed to cold breezes and several from Detroit who don't ordinarily take off their B. V. D.'s until July, plus several newspaperman and other convention encumbrances, partook of a pleasant ride on the Britannia to Wyandotte and Ecorse. A free ride is always good, was a guessing contest concerning a gold fish bowl full of pennies. Miss Gertrude Cramer, daughter of Otto P. Cramer, cashier of the Holland City State Bank, was the lucky one who became thereby the winner, the actual number in the bowl being 2,254. Some guesses were as low as 350 and one was 10,000. Miss Kramer was awarded the bowl and the pennies therein as the prize, which was presented by Robert B. Locke, who made a masterful presentation speech and incidentally pointed out that no doubt Miss Cramer's accuracy in estimating (she being an employe in her dad's bank) was due no doubt to the fact that her dad's bank is a member of the Federal Reserve. Side line commentators allowed that Locke had thus advanced a new reason for membership.

Detroit banks worked the convention Monday in two shifts. The night crowd held the meetings at the Statler and night shift went on the boat ride, except President Staley and a few others, who doubled.

Tuesday's Proceedings

At the Tuesday morning session Allen Walker, of the Guaranty Trust Company of New York, substituting for Willis H. Booth, who had been scheduled to speak, gave the bankers a most lucid explanation of the foreign trade situation and pointed out why we as a nation must either develop outside markets for our surplus or change our whole domestic scheme of living. Hal H. Smith, who followed, took issue with Mr. Walker, declaring that we should give first attention to home problems and the ethics of dealing with our fellow men before going feverishly after outside business. Mr. Smith declared most emphatically that if getting foreign trade meant impairment of the standard of living of the American workingman, he was in favor of making foreign trade secondary.

Unfortunately, the counsel of the Association rather missed the point stressed by Mr. Walker and thus confused two issues in the minds of his hearers, both of which are vital to the best interests of the nation and not necessarily conflicting. Nevertheless Hal Smith's arguments in favor of a more careful inquiry into whether our ethics of living and our ethics of business treatment of one another were well taken. He also went into the theory of taxation and pointed out inequalities which have cropped out in late years and emphasized the necessity of maintaining equitable taxes assessed according to benefits received, and of preserving to all the people the right of private property.

Mr. Smith referred to the unfairness of the proposed income tax under consideration at Lansing and traced the theory of taxation back many years, showing that income taxes seldom hit all classes alike. He estimated that exclusive of school taxes about 90 per cent of taxes go to maintain property which all the public gets the use of, and that the support and cost of maintaining taxes is not paid by the individuals who use it in proportion to the use and benefits they receive therefrom.

The increasing tendency of city and government to go into competition with private enterprise was deplored by the speaker, who pointed out that when an investor buys a tax exempt municipal bond which is put out by cities for the purpose of building roads, etc., the investor unconsciously is encouraging more government in business than the reverse.

Mr. Locke Speaks

At the afternoon session the bankers heard Robert B. Locke, of the Detroit branch of the Federal Reserve Bank, whose address was entitled "The Present Day Bankers' Responsibility to the Bankers of the Future."

Mr. Locke expressed the opinion that fully 90 per cent of the future bank executives of the country are at present in the employ of the banks, and endeavored to bring home the existence of a duty to see that these employes receive the right kind of training in banking.

"The greatest word in the development of young bankers is 'why,'" he said. "The 'why' of yesterday is not the 'why' of today under changing economic conditions, and the capable bank clerk should keep in touch with the reasons therefor, so that when his time comes to assume part of the management of the bank he will be abreast of the times."

Mr. Locke then reviewed the change of thought among bankers regarding this important subject since the American Institute of Banking was organized, and gave some interesting facts about the growth and achievements of the Institute.

Ruston Rasumussen, former editor of the Oriental Review, Bombay, India, reviewed the political situation in India and gave his hearers some views which were refreshing. He said: "I am no apologist for Great Britain and neither is the Indian government a heaven on earth, but on the whole the British rule has been a blessing to my country." He added that those who painted a picture of British autocracy and frightfulness in India were wrong; that during the war England withdrew all its troops from India and had the people wished to secede that they had a splendid opportunity at that time; that Great Britain had transformed a country that three centuries ago was constantly in internecine strife into a land of peace and content, which was an achievement without parallel.

"India's answer to those who talk of Indian hate for England," he said, "was 1,200,000 Indian soldiers in the British army during the war and a gift of one billion dollars from the Indian treasury."

Professor David Friday, of the University of Michigan, gave one of his usual fascinating

(*Continued on Page* 34)

Old Glory is now on the Seven Seas

AMERICAN SHIPS ARE AVAILABLE FOR YOUR OCEAN VOYAGE

New combination Passenger and Freight Ships, Fast, Luxurious Steamers.
Key number beside ship's name indicates operator shown bottom of column.

EUROPE

Queenstown, Boulogne and London

From New York.

June 7—July 12—August 16—September 20—Old North State (159).
June 28—August 2—September 6—Panhandle State (159).

Bremen and Danzig

From New York.

May 28—July 13—August 30—Hudson (159).
June 8—July 23—September 7—Susquehanna (159).
June 15—July 28—September 14—October 20—Potomac (159).

Naples and Genoa

From New York.

June 30—August 13—September 24—Pocahontas (159).
June 6—July 20—August 31—October 12—Princess Matoika (159).

Plymouth, Cherbourg and Bremen

From New York.

June 22—July 30—August 24—September 28—America (159).
July 30—August 27—September 24—George Washington (159).

SOUTH AMERICA

Rio de Janeiro, Montevideo and Buenos Aires.

From New York.

June 8—Acoma (91).

FAR EAST

Honolulu, Yokohama, Kobe, Shanghai, Manila, Hongkong

From San Francisco.

May 28—Golden State (105).
July 23—Empire State (105).

Yokohama, Kobe, Shanghai, Hongkong, Manila

From Seattle

June 18—August 27—Wenatchee (106).
July 9—Silver State (106).
July 30—Keystone State (106).

HAWAII, PHILIPPINES, EAST INDIA.

Honolulu, Manila, Saigon, Singapore, Colombo, Calcutta

From San Francisco.

June 11—Wolverine State (105).
July 14—Commonwealth State (105).

COASTWISE AND HAWAII

Havana, Canal, Los Angeles, San Francisco and Hawaiian Islands

From Baltimore

June 11—Buckeye State (68).
July 16—Hawkeye (80).

80 Matson Navigation Co.
120 Market Street,
San Francisco, Cal.
26 South Gay St., Baltimore, Md.
91 Munson Steamship Line.
67 Wall Street, N. Y.
71 Broadway Green 3300.
105 Pacific Mail S. S. Co.
10 Hanover Sq., N. Y.
Tel. Bowling Green 4630.
621 Market St., San Francisco, Cal.
106 The Admiral Line.
17 State Street, N. Y.
Tel. Bowling Green 5625.
L. C. Smith Bldg., Seattle, Wash.
159 U. S. Mail S. S. Co., Inc.
45 Broadway, N. Y.
Tel. Whitehall 1200.

U. S. SHIPPING BOARD
Washington, D. C.

Digitized by Google

Plowing With Pen and Ink

(*Continued from Page 10*)

was drawn, particularly for a large amount, the bookkeeper was notified and the transaction recorded. What he proposed to do was to prevent the immediate entering of the withdrawal he intended to make.

He entered the bank and drew $4,500, explaining that the business deal had been consummated. Then he went outside and called the teller who paid him on the telephone and, impersonating a relative or a hospital attendant, notified the teller that a relative had been seriously injured in an automobile accident.

The result was, if the crook's expectations worked out, that the teller suffered a serious metal disturbance and complete banishment of immediate details concerning his business. The teller called a substitute, forgot to mention the withdrawal of $4,500 from an account and hurried out. As he left, the crook re-entered the bank, and presented another check for $4,500. Reference to the books showed the account to be equal to or over the amount of the check and the second check was honored. In this case the bank was victimized for $4,500, while the crook doubled his stake.

Much the same method is used in bond thefts and sneak thieving in banks. It is a good thing for the average banker to assume that every hour of the day there is at least one crook standing around in his bank watching an opportunity. In large banks where guards are used, loitering is impossible but the clever crook does not need a great deal of time to survey the general interior of a bank. What he is looking for is loose money or bonds lying within easy reach.

This stunt was worked in a Detroit bank: Two men entered. One stepped to the cage of a receiving teller to deposit some money and get a bank book. The other approached another receiving teller and discussed the details of opening an account. On the counter near the first teller, who happened to be a woman, was a package of bonds. The second man finished his conversation, went out to a nearby telephone and called the woman teller. The woman used the telephone near her, but the conversationalist on the other end complained that he couldn't hear, so she went to another phone some distance away. The crook who was talking to the other teller slipped the package of bonds inside his coat and left the bank. His bad to be nimble-fingered and at the same time keep the other teller's attention diverted, but he succeeded.

Many persons know how difficult it is to cash checks if they happen to be a stranger in a city, or to a bank, whether they are honest or not. The crook also knows that and often he plans for weeks to build up identification against the day he intends to put through his worthless paper.

T. J. Mowery, who has been working banks and individuals since 1910, with occasional vacations in prison, makes a specialty of the cashier check scheme. He will open accounts at different banks in a city for weeks his checks will be passing back and forth through these banks. When he has established identity he will put through cashiers' checks made out to "cash" and depart with the proceeds. Sometime ago he bought Liberty bonds with a hogus cashier's check.

Another method used to obtain Liberty bonds gratis is the bank letter scheme. The operator will deposit some money in a bank and study the tellers carefully. If possible also he will make the acquaintance of an official of the bank. When conditions seem to be right he will go to the bank and buy Liberty bonds, depositing a check for collection, explaining that in a day or so he will have his bank in some other place send a cashier's check on his account. Later he goes to the bank and asks if there is a letter for him. There is such a letter and from it he takes a cashier's check and "pays" for the bonds. This scheme was successfully worked on one bank and the crook obtained a $1,000 Liberty bond and seven $100 Liberty bonds.

Larkin J. Flannigan, using the names of Wallace, Sharp, Birchfel and Farnsworth, has worked thirty-one banks from New York to San Francisco successfully by representing himself to be an official of a corresponding bank. One job netted him more than $9,000. He knows banks, bank officials and banking practice and usually uses drafts to which he signs some bank officer's name.

The check-kiter often is a check thief as well. He may obtain employment where he believes he can steal a check book or perhaps checks that have been made out. He may forge checks or he may merely raise them. One operator of this character always obtained employment as an elevator boy and robbed mail boxes. One pair of crooks, a man and woman, made considerable money before they were caught. The woman obtained employment where she could steal checks, which she turned over to her pal to raise or fill out and sign with the name of her employer.

Fake telephone calls, faked letters on printed stationery, stolen checks, pay vouchers and a host of other facilities and materials are used by forgers. Ed Farden worked a bank near Detroit with a bogus check drawn on a regular voucher form with all the necessary signatures. On it was printed: "For back pay of differential of 5 cents per hour in accordance with the United States Railroad National Agreement Rules." It was drawn on a bank in Denver, Colo., against the Colorado & Southern Railway Company and signed by the shop superintendent. All the names were clever forgeries.

The American Bankers Association maintains a protective department and employs the Burns agency to handle its cases throughout ths country. Other banks employ the Pinkerton agency and many use the services of both. The following cases are taken from the records of the Burns agency:

Pretended business transactions often pave a smooth road to the confidence of bank officials and the money drawer. Of course the operator must be plausible, know the subject he is dealing with and have some ready capital to display or use. The operations of a Jew and an Italian working together illustrates this method. One visits some retail store and offers to sell merchandise below the prevailing market price. This operator usually has a business card of some well known wholesale or manufacturing concern. The prospect of buying staple goods below the market quotations interests the storekeeper.

If he buys he is asked to furnish payment for at least part of the order in the form of a check to be sent with the order to the firm. Should the buyer refuse to make such payment, the operator asks for a check in return for cash. If this swap is made the operator turns it over to his partner, who is the "scratcher," and the check is raised to the highest amount it will stand, and cashed. All the operators wanted was the signature. If the buyer will not fall for the check trick, then this pair of crooks will actually deliver the goods ordered, trusting to getting a check which they can raise. Sometimes the check is not presented at a bank, but at some other store. It all depends upon the "lay of the land" whether the operators work a bank or some individual.

What is known as the "directory swindle" has been worked successfully in many cities. The operator, who is well-dressed and a good salesman, visits one or more banks with a sample directory, a volume of easy reference and a handy thing for banks to have. It contains names, addresses and telephone numbers of persons and firms with which the banks are doing business constantly.

The swindler informs the banks that all he wants is to get their aid as distributors, and that he proposes to sell advertising space outside of the banks and then either give the books to the banks gratis, or sell them at a nominal figure. Having obtained the approval of the banks, the operator proceeds to sell advertising where he can, cashing checks where currency is not paid to him. If possible and not too risky the operator will raise the checks. No directory is published and the advertisers are out whatever they paid in.

Another method frequently used usually involves the purchase of an automobile. The operator goes to a dealer, shows a card of a business concern he pretends to represent, and which is usually prominent enough to attract attention, and negotiates the purchase of a car. The operator then goes to a bank recommended by the automobile salesman or dealer, uses his name as reference and deposits $100 or so in cash. Later he presents one or more checks drawn on a bank some distance from the city in which he is working, and signed either by an official of the firm he claims to represent, or by some bank official. These checks are bogus as is the automobile deal. Identification was all the operator desired.

One crook has a scheme whereby he visits a prominent hotel and lets it be known he is a revenue officer hunting down narcotic peddlers. He makes it a practice to get acquainted with some young fellow to whom he offers a job as revenue officer. If the man seems to want the job the operator explains that it is necessary to get a complete history of the applicant, which should be written out and signed. If the history is provided, the operator visits the applicant's home and supplies himself with all the information possible, especially concerning the financial standing of the family. With this information and an original signature the swindler is able to forge one or more checks, often trusting to his new-found friend for the necessary identification before presenting the forgeries.

Digitized by Google

MOTORS—GENERATORS

REWOUND
REPAIRED
OR
REDESIGNED

Westinghouse Guarantee
of one year against defective
workmanship or material.

Westinghouse
Electric & Mfg. Company
Service Department
1535 Sixth Street, Detroit, Mich.

MORE of Michigan's great industries insure with the Michigan Mutual than with any other single insurance Company.

Yes, there is a reason.

Ask for it. A postal will do

Every policy is non-assessable

Every policy shares in savings

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit Michigan

Home Office: Cherry 2629 Grand Rapids: Lawyers and Industrial Bldg. Hospital: Cadillac 2670

Even the movies furnish a lead for the clever forger. For instance, one worker visited a city as the manager of the Fox Film Company and announced that scenes were to be taken there for a serial. Some local talent was to be used, and contracts were made with young women in the city. Having established identity, the operator then presented cashiers' checks signed by an official of the film company. When the operator was out of sight and sound the checks were discovered to have been forged.

Alexander F. Johnson, alias Donald Hammond, representing himself as the son of a wealthy man, and looking the part, sent a forged order from Boston, Mass., to Lawrence, Mass., for several thousand dollars' worth of Liberty bonds, saying in the order that he would come after them. Later he visited the Lawrence bank, presented his credentials and obtained the bonds from an employe who was none too keen. No bonds were ordered by the man impersonated and the bank lost heavily in the deal.

A crude but successful scheme was worked by a journeyman tailor who made it a practice to seek employment in some tailoring establishment and remain long enough to form a partnership, the purchase of which was to enable him to use the partner's name on forged checks.

Henry Ford's name is synonymous with wealth and opportunity and James Edward Francis Barter, alias James R. Blake, alias J. D. Barker, used it to good effect representing himself to be Mr. Ford's secretary. His scheme was to "scrape" acquaintances in hotels with any likely victim, create confidence by promising valuable tips on Mr. Ford's numerous enterprises, and use the friendship thus made as a means to cashing forged checks. He opened an account in Boston and cashed phony checks on a Detroit bank. This operator was arrested in a New York hotel just as he was about to be entertained at the theater and later at dinner by an unconscious accessory.

Another variety of the same scheme was worked in a Detroit hotel by one of Mr. Ford's unofficial secretaries, who gained the ear of a hotel guest from up-state and unloaded considerable "inside stuff" about Ford stock, the nature of which aroused the guest's cupidity to the extent that he entrusted some hard cash with his affable friend to invest in Ford securities. Apparently the secretary must have forgotten about his promise in the confusion of his secretarial duties, for the "gull" never has received the gilt-edged stock.

William Manchester, snappy business man with more business to do than you could shake a stick at, blew into Trenton, Mich., and called at a bank to get the names of building contractors. He did not over-play the part, either. Then he looked up the bank's real estate man and arranged to buy two lots. He stayed long enough to establish confidence and get the real estate man's help in cashing a few worthless checks on a Detroit bank.

T. J. Mowery and Thomas H. Sheppard were a clever pair of actors until they were cast for parts in the chain gang. Mowery took up his abode in Tulsa, Okla., and Sheppard established himself in St. Louis. Mowery brought suit against Sheppard for $10,000 and hired lawyers to handle the case. The plan was to get a settlement out of court, to which end the lawyers worked so successfully that Sheppard gave in and sent his checks for the $10,000, which were cashed. They were worthless, of course, but the details of how they were able to get away with such a bald trick would be most interesting, if obtainable.

Impersonation is basis of all forgery but often the crook carries this impersonation further than mere duplication of handwriting. Beard J. Dupree, alias Mortimer A. Katz, young and good looking enough easily to pass for a fast young scion of good family, had it all figured out that, inasmuch as he could not be a real son of wealth, he would pretend to be one. He deposited money in a San Diego bank, and, learning that the bank had a branch at Coronado, he telephoned to the branch, representing himself to be an official at the main office. He told the manager of the branch that a wealthy depositor named Dupree had a son who was "going the pace," and had considerable money in his own right, but that he would appreciate it if the branch would not honor the boy's check for more than $3,000 at a time.

Later the swindler appeared at the Coronado branch, identified himself as Dupree, the pace-making son, and said he was going to put one over on his dad and draw out some money. Dupree drew a trifle less than $3,000 on a forged cashier's check and got away before the trick was discovered.

Digitized by Google

3 Phase-60 Cycle Generators

	KVA	Speed
1	40 Westinghouse, 3-phase, 60 cycle generator, rev. field to Skinner steam engine 220 or 440 volt	300
1	50 Gen. Elec., rev. field, 440/480 v.	1200
1	50 Gen. Elec., rev. field, 240 or 480 v., to New York Safety steam engine	300
1	55 Westinghouse, revolving field, 2300 v., to McKeen steam engine	257
2	60 Electric Machinery, rev. field, 2300 v.	900
1	75 Ridgeway, revolving field, 220 volt, to Ridgeway steam engine	300
1	75 Crocker-Wheeler, rev. field, 2300 v., to McKeen steam engine	275
1	100 Gen. Elec., rev. field, 240 or 480 v.	900
1	100 Westinghouse, revolving field, 2200 v.	900
1	150 Gen. Elec., rev. field, 2200 v.	900
1	200 Gen. Elec., rev. field, 2300 v.	600

Would YOU buy a SECOND-HAND ELECTRIC MOTOR at ANY price? If you KNEW it to be as good as new? Write us your inquiries.

GREGORY ELECTRIC CO. Second-hand Electrical Motors Bought, Sold and Exchanged. In business since 1892. 10th and Lincoln Streets Chicago, Ill.

Leaders are men of recognized standing among men in their calling.

Does your P. A. command such respect?

Purchasing Agents' Association of Detroit

Publicity Office 19 Garfield Building Glendale 5919

The Bellefontaine Bridge and Steel Co.

Fabricators of STRUCTURAL STEEL

Main Office and Works, Bellefontaine, O. Detroit Office, Ford Bldg Cadillac 6858.

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

WANTED, FACTORY MULE,

either electric or gasoline, with one or two alers; state price and condition. Address ox C. C., Michigan Manufacturer & Financial Record, 611 Free Press Building, Detoit, Mich.

CHILE COPPER REPORT

Gross operating revenue of the Chile Copper ompany and the Chile Exploration Company the year ended December 31, 1920, is reted as $17,712,020. In 1919 it was $10,350,. The surplus is $151,999 but after certain ustments a deficit of $349,718 is reported

(*Continued from Page 31*)

talks and interjected ome predictions, to the delight of the bankers.

The Association adopted resolutions: (1) opposing a state income tax as likely to "promote extravagance instead of conserving expenditures;" (2) advocating limited trust powers for state banks, and (3) urging bankers to exhibit the same spirit of unselfish helpfulness and co-operation which animated them "during the darkest hours of the World War." Three thousand five hundred dollars was subscribed by the bankers for the relief of the family of Undersheriff Harry Worden, who was killed during the capture of bank bandits who held up the Farmers State Bank, Grass Lake.

Bice Elected President

Officers elected for the coming year are:

President, E. S. Bice, First National Bank, Marquette.

First vice-president, H. H. Sanger, National Bank of Commerce, Detroit.

Second vice-president, B. P. Sherwood, Grand Haven State Bank.

Secretary, Mrs. H. M. Brown, Detroit.

Treasurer, J. Edward Roe, American State Savings Bank, Lansing.

Counsel, Hal H. Smith, Detroit.

Members of the Executive council for two years: Everett Whitney, Traverse City State Bank; V. W. Tourje, Alpena County Savings Bank; O. W. Riches, Exchange Savings Bank, Mt. Pleasant; R. C. Stone, St. Johns National Bank; George Wiley, Wayne County and Home Savings Bank, Detroit; Frank G. Evans, Central National Bank, Battle Creek, and C. B. Edwards, First State Bank of Swartz Oak.

The bankers of Marquette invited the Association to hold its 1922 convention in that city and their invitation was accepted. Comment was to the effect that a boat ride would be indulged in on this occasion.

The agricultural commission of the Association, after reviewing the success of the Michigan State Farm Bureau, commented as follows in its report:

"In all our efforts to help the farmer, we have been confronting the very persistent fact that we need the farmer far more than he needs us. Agriculture will continue, no matter what happens to other branches of industry. It is true that at the present time the outlook in some respects is discouraging, because agriculture is being affected by the abnormal conditions which have affected business in general. But we need have no fear for the future of agriculture in this country. Agriculture will not only continue but it will be profitable, because if the world is to have a sufficient and continuous supply of food, it must pay prices which will yield to the farmers a proper reward.

"Michigan bankers are fully alive to the fact that their prosperity rests upon the prosperity of the farmers, and we feel sure they can be depended upon to join any practical plans of co operation which may be presented to them, whether originated by the commission or by the farmers themselves."

Plans Presented

The concluding feature of the convention was a playlet, in which the cast was as follows:

Speaker—Ben Vernor, cashier Merchants National Bank, Detroit.

C. D.—Albert Werner, Merchants National Bank, Detroit.

Miss Savings—Alex. Thompson, Merchants National Bank, Detroit.

Loans—F. J. Maurice, Federal Reserve Bank, Detroit.

Bank Examiner—Geo. L. Bott, Discount Department, Merchants National Bank, Detroit.

Ghost (John Skelton Williams)—J. G. Baskin, Federal Reserve Bank, Detroit.

It ran like this:

Enter Mrs. Commercial Deposits. (Tall and very thin.)

Speaker (bowing)—Have I the pleasure of your acquaintance?

Mrs. C. D. (stiffly)—I am Mrs. Commercial Deposits.

Speaker—Mrs. Commercial Deposits, I am so glad to meet you. Do you live in the city?

C. D.—Yes, I reside in the Financial District.

Speaker—How exclusive! Won't you sit down? You do not look well. You appear thin.

C. D. (ignoring the request)—Thin! I am wasted away! I am suffering from reconstruction.

Speaker—That must be that new disease called Fiscitis, which I understand is the antithesis of Gastritis. (Sympathetically) My dear woman, how much have you lost?

C. D.—At least 25 per cent.

Speaker—Oh, dear me! you are in awful shape.

C. D.—Eminent authorities assure me I will soon see marked improvement.

Speaker (feelingly)—I am sure you will. Why, hell! They cannot always be wrong.

Miss Savings Deposits runs in and grabs her mother's skirt.

Speaker—Why, who is this?

C. D.—This is my daughter, Savings Deposits.

Speaker—Miss Savings, I am delighted to meet you. (Looking at her closely) Is she on a diet, too?

C. D.—Yes, she is trying to subsist on unemployment.

Speaker—How terrible!

C. D. (sadly)—She seems to grow worse daily.

Speaker—Why don't you give her "Easier Money Pill?" That is very nourishing and palatable.

C. D.—I have tried to get that for the last four months, but although its virtues has been promised daily, it never comes.

Speaker—Why don't you try the F. E. store? I am sure their stock is never exhausted.

C. D.—Who runs the F. E. store?

Speaker—A group of men called Financial Editors.

C. D.—I will go there tomorrow.

Speaker—Why not today? Tomorrow will be another story. (Turning to Miss Savings) What is the name of your dolly?

Sav.—Profits.

Speaker—"Profits"—what a lovely name!

Sav.—Yes, my uncle named her. He says it means so much.

Speaker—Why how is that? (Takes the doll from her and holds it up) Because she is so small?

Sav.—Yes, that is it. Her full name is B. D. Profits.

Speaker—B. Y. D. Profits? Abbreviated Profits?

Sav.—No, No. B. D. Profits, Bank Deposit Profits.

Speaker—O-oh. Who is your uncle?

Sav.—He is a rich banker and has banks in Grand Rapids, Lansing, Saginaw, Flint, Battle Creek and Kalamazoo.

Speaker—How did he come to think of that name?

Sav.—He came home one night looking all tired out, and when I asked him to name my dolly he looked at her and said, "Call her Profits, B. D. Profits."

Speaker—Has she grown any since?

Sav.—I think she has, but uncle says "No!" very positive like. Look, Mama, there is Auntie! (Runs to her and takes her hand.)

Enter Mrs. Loans.

Speaker—Why, why, who are you?

Mrs. Loans—I am Mrs. Loans.

Speaker—Mrs. Loans, I am more than glad to meet you. You look so well-nourished.

Loans—Yes, I am a bit uncomfortable. You may not believe it, but I study reducing daily. I only wish I could change places with some of these theorists.

Speaker—Have you seen a doctor?

Loans—Yes, I wait on him constantly. He is the noted Dr. McDougall of Chicago, and has a branch office in Detroit. His assistant here is Dr. Locke, late of Boston.

Speaker—I have heard of him. I understand in the state they think he is somewhat brusque—a bit outspoken. Judging by the bone he pulled, he must be an osteopath.

Loans—No, not an osteopath nor a homeopath, but an honest-to-goodness allopath. He prescribes awful doses for me, and although he believes me I soon regain all I have lost. His great cry is restriction.

Speaker—Restriction! Restriction of what?

Loans—Restriction of loans.

Speaker—Impossible! How heartless!

Miss Sav.—Oh, Mama, look—a poor blind man.

C. D.—(Turning to Mrs. Loans.) Why, it is the Bank Examiner all terribly bound he is!

Speaker—Conditions are certainly terrible. Here we have (pointing to east in turn) reconstruction, unemployment, inflation, and now blindness. (Turning to Bank Exsaminer) How did you lose your sight.

Bank Ex. (sadly)—Searching for a 2 for 1 statement.

Speaker—How very sad! And the task so hopeless!

Bank Ex.—They give me no hope. My present boss is most kind, but—becoming greatly agitated—rises—listens intently—and says, "Who do I hear coming?"

Miss Sav.—Look! Look! A Ghost! Oh, Mamma, hurry. (Drags her mother from the platform. Loans helps the Bank Examiner and they all hurry from the room. The ghost follows with stealthy tread.)

Digitized by Google

Constructing Equipment

TOOLS AND SUPPLIES AT REASONABLE PRICES—
SUBJECT TO PRIOR SALE—STANDARD MAKES
AND IN FIRST CLASS CONDITION.

We are winding up our work in this territory and will sell at a sacrifice the following

Air Compressors—Ingersoll-Rand, 6x6.
Boilers—40-70 h. p.
Cars—Standard gauge flat; Kalamazoo Push; 24-in. Kopel double truck flat.
Conveyors—Woods belt sand and gravel; Alvey-Ferguson roller gravity.
Cranes—Brown hoist 15-ton, extra buckets; booms; outrigging.
Hoists—37 h. p. Flory; 30 and 37 h. p. Lidgewood; Clyde No. 106 steam.
Lumber—No. 2 yellow pine 4x4, 4x6, 2x8.
Mixers, Concrete — ½ yd. Smith tilting; No. 1 Jaeger.
Mixer, Mortar—3 Buckeye gas-driven.
Pumps—3-in. Suction, gas-driven diaphragm; Knickerbocker 4-in. suction, gas driven, on trucks; No. 1-8 Gilbert & Barker, gas-driven; Novo; 10 h. p. 4-in. centrifugal on truck.
Office Equipment — Flat-top desks; typewriter desks; card files; Burroughs adding machine, hand and motor-driven; comptometers; typewriters: L. C. Smith and Underwood; check-writers, etc. Stromberg time clocks and equipment.
Steel Reinforcing—½ in. to 1¼ in. square and round.
Towers—Insley 100-ft. heavy steel, booms; hoppers; chutes; frames; gates; ladders.
Tractors—1-30-70 h. p. 10-ton Holt caterpillar.
Trailers—Troy No. 3 reversible extension type; troy 2½-yd. bottom dump.
Trucks—G. M. C. 2 and 3-ton dump; 1½ and 2-ton stake.
Woodworking Equipment — Saws, tables, etc.
Miscellaneous — Small tools and stores stock, nails, etc.

FOR DETAILED INFORMATION AND PRICES
COMMUNICATE WITH

Du Pont Engineering Co.

Clark Ave., South of Michigan. Phone West 2650

THE JOSEPH L. SKELDON ENGINEERING COMPANY

Power Plant Engineers and Contractors

Ames Single Valve, Four Valve and Unaflow Engines
Water Tube and Tubular Boilers
Pumping Machinery
Electrical Machinery

We design and build general power plants.

Detroit Office
1156 Penobscot Bldg.
Phone Cad. 6941

Cleveland Office
876 Kirby Bldg.
Phone Main 3764

General Offices and Shops
Toledo, Ohio.

Convention Combings

The new state banking commissioner, Hugh A. McPherson was on hand Monday afternoon and acquired one or two new friends. Only reason he didn't make more new friends was that everybody seemed to know him already. Fine chap.

S. S. Roby was conspicuous by his absence.

Henry Robinson and Ray Maynard each underfook to represent solely the East Side and West Side of Saginaw, respectively.

Boyce Dansard won a brown derby twice on 934.

Some played 943 by mistake, and lost.

Fred S. Case, Sault Ste. Marie, greeted many old friends and made the trip a double header by taking in the Michigan Pikes Association meeting Sunday. Fred is president of the latter and signed up several bankers for the July tour around Lake Superior.

Ben Vernor, of the Merchants National, was chairman of the entertainment committee and showed rare form. He was ably assisted by Mac Browning; George B. Judson, who wasn't there Monday; Sam Kingston, T. W. P. Livingstone and Laurence P. Smith.

The Grand Rapids National City scored its sixteenth successive homer when it distributed its splendid 1921 Michigan bank directory to the delegates.

Former Senator William Alden Smith and former Governor Sleeper were both in attendance, the former of the two formers looking ten years younger than formerly.

It was the unanimous opinion that this convention was a record-breaker in all respects—attendance, enthusiasm, inspiration, education and fun.

Ben Vernor, chairman of the entertainment committee, composed a little skit anent the present business situation which was acted out on the ball-room platform to the great delight and amusement of everyone except financial editors.

The note-books given out by the Dime as souvenirs proved not only attractive to look at but exceedingly useful to those who kept track of lucky numbers. At times it looked as if every banker was a reporter, judging from the number who were jotting down figures and comparing notes.

Tuesday developed additional lucky numbers as follows: 962-1116-1056.

Jack Daly, of the First and Old, said 934 looked like a meeting of the bond men's club at times.

K. Z. Potter, vice-president of the Jackson City, came down Tuesday with Mrs. Potter, but his father, N. C., was detained at home looking after his new poultry ranch.

W. C. McPhail got the prize for long distance dancing.

Doc Newland was there. Doc Newland is a former Detroiter but is now a New York banker. He granted interviews to several of the papers but in the main he maintained his characteristic seclusiveness. Said he had nothing to say concerning relief for the Near East but hazarded a conservative guess that New Yorkers would find much relief by attending Michigan bank conventions. Doc opened a new account in Jackson, and thus enlarged his par list.

Twenty Years in the Life of Charles E. Mitchell

(*Continued from Page* 11)

Company, which concern was making rapid headway when the National City Bank offered him the position of vice-president of the National City Company, an organization engaged in the sale and purchase of securities.

Again Mr. Mitchell seemed to consider connections with the largest banking institution in the country as offering greater opportunities than the buiness he was in, and he sacrificed a larger income and business independence to take the secondary position in the National City Company. This concern occupied small offices when Mr. Mitchell joined it, but in less than six months he had influenced its expansion and improved its service to such an extent that the National City Bank turned all its bond work over to the company.

It is said that Mr. Mitchell was one of the first men in the country make the merchandising of investment securities an independent and important business. At any rate he developed the National City Company to the point where it had 50 offices in the United States, 1,500 employes, 10,000 miles of telephone and telegraph lines and representation in all the important European countries. This achievement of a man still in his youth, vigorous and extremely popular, made him the one man to succeed James A. Stillman as president of the National City Bank.

Mr. Mitchell is described as a methodical, democratic and dynamic personality, able to impregnate others with his boundless energy. Those who have worked with him declare that his influence spreads throughout any organization he is connected with. He has understood the value of good health as essential to success, and one of his methods of keeping fit is to walk five miles daily to his office. A certain portion of each day is devoted to his two children, Rita, a girl of eight, and Craig, a boy of four. He loves home life, is fond of golf and gardening.

A friend who visited his home found his young son with a pair of work gloves on and covered with soot and grime, following the furnace man in the prosecution of his duties. Mr. Mitchell remarked that he was training his boy to like work and dirt so that he would not grow up a snob because he lived in Fifth avenue

Digitized by Google

A Foreign Advertising Adventure

(Continued from Page 8)

the results seem to justify our decision.

Quite regardless of its merits from a propaganda standpoint, the simplicity of our copy plan commended itself from a purely practical standpoint. In the first place, it permitted considerable condensation where only limited space was available. It was not so complicated but what it could be embodied in the kind of simple, direct phraseology that was most likely to be comprehended by the average reader. It combined the minimum of possible complications when the question of translation came up. Let me say that our copy, also, has undergone changes and modifications from time to time. The general idea, however, has always remained the same.

With the list and the copy out of the way, the size and extent of the campaign came up for consideration. In this, too, our decision was based on our practice in domestic advertising. We have always been believers in regular and continuous advertising, as opposed to variable and irregular advertising. Our foreign campaigns have always been consistent and regular. We have taken the amount of money available for advertising in any given country and spent it in the largest, consistent, regular campaign that it would buy, the amount of money available limiting the maximum size of space; common sense and the determination of what was necessary to command attention limiting the minimum size of space. For example, generally speaking, we prefer one half pages in a monthly publication to six full pages. This is not an entirely good example, because other considerations might affect our procedure; but I am sure that you get the idea.

So much for the fundamentals of our present plan of foreign advertising and what preceded and led to it. But there are other little side issues that are almost as important as the fundamentals themselves. Take the matter of what constitutes eligibility in a publication for inclusion in our list. We have found that, considering the limits of a modest appropriation, the best results are obtained from publications of general circulation, locating their circulation, insofar as may be, among the classes most likely to purchase our goods. This is in the nature of advertising first principles and requires no elaboration. Where general publications of proper character are not available, we are driven to something more local. We have no objection to the more localized publication, such as newspapers, except that the use of them usually involves the expenditures of a great deal more money than is available. More of them have to be used. While they may carry our message closer home, and spread it more liberally, we cannot afford, nor do we need in normal times to cultivate our foreign market thus intensively and extensively.

We must be borne in mind that we are not producing goods exclusively for the foreign market. A certain volume must of necessity be maintained at home. The intensity of our foreign merchandising must be determined by the quantity of our goods that we decide to allot to the foreign field.

A foreign advertising appropriation is not an easy thing to determine. We are not entirely satisfied with our method; but this is it. We base our total advertising appropriation, domestic and foreign, on the amount of goods we plan to produce in a given year, influenced and modified by the amount of sales resistance we expect to encounter, and we allot to the foreign field, generally speaking, an amount in proportion to the number of units we plan to sell abroad.

There is one question which may be in the minds of some of you, the answer to which I did not consider in its proper place because it seemed to break the continuity of the discussion, and that is this: "Are you not, by financing your big foreign advertising campaign out of your own pocket, encouraging your foreign distributors to lie down on their end of the merchandising job?" We are, unless steps are being taken to counteract the influence. Those steps are being taken. We are telling our foreign distributors that our advertising in their respective territories is in the nature of general reputation-building propaganda, such as we carry on in this country in our magazines of general circulation; and that they, too, like our domestic distributors, must see to it that their immediate local markets do not remain uncultivated. We are suggesting, and that suggestion is rapidly developing into a demand, that they spend in their territory a sum equal, if not greater, than we spend in that same territory. While our advertising is opening up and developing their market in a broad, general way, their advertising should be cultivating and re-cultivating that same market. We are meeting with a marked degree of success and I predict that when things open up again abroad in a big way we shall be able to do infinitely more than we have done in this respect.

—An address before the recent National Foreign Trade Convention in Cleveland

"Among Those Present" at the Convention

(Continued from Page 4)

Mr. and Mrs. Grant J. Brown and Miss Brown, H. C. Moore, John S. DeCamp and Mr. and Mrs. Allen T. Smith, Flint; Mr. and Mrs. Charles A. Burr and Mr. and Mrs. Fred J. Cronie, Warren; Frank H. Clement, Petoskey; J. F. Hofstetter, Frankfort; John Ryan and Joseph N. Runkin, Bad Axe; E. G. Liebold and Herman Kalmbach, Dearborn; Mr. and Mrs. W. J. McCaren, Mr. and Mrs. David Crorey and Mr. and Mrs. W. C. Vivian, Carsonville; A. B. Armsbury and W. A. B. Bushaw, Marine City; H. M. Thurston, Muskegon; P. F. Nierearth and Harry W. Procter, Evart; Mr. and Mrs. C. A. Price and F. J. Jennison, Marquette; Mr. and Mrs. H. A. Williams, Ann Arbor; Mr. and Mrs. Peter C. Pardee, Reese.

Mr. and Mrs. W. H. Beach, Mr. and Mrs. Otto P. Kramer and Miss Gertrude Kramer, Holland; Mr. and Mrs. J. Edward Roe and Mr. and Mrs. W. K. Prudden, Saginaw; Mr. and Mrs. E. J. Muir, Rockford; Mr. and Mrs. H. E. Fletcher and Mrs. G. V. McCandless, Sault Ste. Marie; F. Boonstra, Mr. and Mrs. C. J. Den Herder and Mrs. O. Vander Veld, Zeeland; Mr. and Mrs. R. L. Ford, Goodrich; S. A. Graham, A. D. Bennett and William D. Smith, Port Huron; George A. Newman and William P. Pearson, Fowlerville; Charles B. Carver, Elk Rapids; V. W. Tourje, Alpena; F. W. Scott and W. H. Chesley, Pittsford; Mr. and Mrs. O. U. Bauer and Mr. and Mrs. James H. Means, Ecorse; Mr. and Mrs. C. A. Curtis, Mr. and Mrs. Martin Fuoss, L. E. Fairbanks and Miss Wicks, Saline.

E. P. Allen, Traverse City; Mr. and Mrs. Charles C. Green, Miss Williams and Mr. and Mrs. E. R. Morton, Battle Creek; James McColl, William H. Learmont and Miss Aileen Learmont, Yale; Mr. and Mrs. G. E. Everingham, Sebewaing; Mr. and Mrs. W. S. Lambertson, Belding; Mr. and Mrs. W. T. Phelps and Mr. and Mrs. C. C. Smith, Marshall; J. McNair Arndt and Louis Wean, Carol; Mr. and Mrs. E. L. Cornwell, Sadie Greenfield, C. P. Rowe and H. P. Holser, Flushing; Mr. and Mrs. Edward S. Bice and Mrs. E. Stanton Bice, Marquette; Mr. and Mrs. G. W. Teetle and Mr. and Mrs. Charles Van Keuren, Pinckney; Charles R. Ferguson, Almont; Paul L. Ahlgrim, Burr Oak; Mr. and Mrs. Robert F. Gauss, Mr. and Mrs. Arthur L. Krieger and Mrs. Howard C. Lawrence, Lake Odessa; Mr. and Mrs. Lynn P. Miller, Shepard; Mr. and Mrs. H. Fisher and Mrs. M. L. Betts, Hopkins; Arthur E. Wilson and F. L. Townes, St. Johns; Vernon T. Barker and Bessie C. Pinkerton, Kalamazoo; Mr. and Mrs. E. L. Estes, Mendon; Mr. and Mrs. Fred S. Cross and Mr. and Mrs. J. H. Standart, Allegan; Mr. and Mrs. R. E. Schumacher, Albion; Mr. and Mrs. E. F. Horning and Mr. and Mrs. Bennett C. Root, Manchester; Miss Jean M. McCauley, Wyman R. Speer and Mr. and Mrs. Alfa R. Sayre, Flushing; Mr. and Mrs. Paul V. Bretz, Carson City.

Frank G. Evans, Battle Creek; Mr. and Mrs. George Crook, Ithaca; Hugh A. McPherson, Howell; J. N. Conway, Lansing; Edward T. McLachlan, River Rouge; R. M. Halliday and R. L. Bentley, Stanton; Mr. and Mrs. Carl H. Washburn, Alma; A. W. Ramsay, Cheboygan; Thomas J. Anketell, Harold M. Blossom and Fred T. Donner, Sandusky; Mr. and Mrs. George Billbrough, Remus; C. D. Towne, Elk Rapids; R. K. O'Hara, Chicago; W. W. Cooke, Clayton; Mr. and Mrs. Paul J. Ullrich, Mount Clemens; Mr. and Mrs. Gus Hill, Port Huron; Mrs. Helen M. Brown and Mr. and Mrs. George Donaldson, Detroit; Prof. David Friday, Ann Arbor; Allen Walker, New York; Mr. and Mrs. Rustom Rustomjee, Bombay, India; John N. Korpela, Munising; Lee Berridge, Dryden; Mr. and Mrs. D. S. Goodyear, Hastings; Isaac McKillen, Imlay City.

Mr. and Mrs. L. E. Bedell, Romeo; F. E. Van Alstyne, Wyandotte; Mr. and Mrs. James H. Runciman, Mr. and Mrs. Oscar M. Allen and Mr. and Mrs. William S. Barrett, Williamston; Fred W. Weatherhead, Harrison; Mr. and Mrs. Gerrit J. Diekema and H. J. Luidens, Holland; Mr. and Mrs. George M. Stellwagen, Wayne; Mr. and Mrs. B. P. Sherwood, Mr. and Mrs. H. F. Horbeck and N. Robbins, Grand Haven; Mr. and Mrs. L. Waiz, Ann Arbor; L. O. and T. A. Bloomer, Boyne City; Mr. and Mrs. Fred Bilbrough, Six Lakes; Mr. and Mrs. Frank H. Brown, Brooklyn; Henry Pelgrim, Holland; Mr. and Mrs. A. T. Kidder and Mr. and Mrs. George A. Lehman, Royal Oak.

Mr. and Mrs. Edward J. Foster, Grass Lake; Mr. and Mrs. Ernest F. Goodwin, Ypsilanti; Mr. and Mrs. Karl M. Barbour and Mr. and Mrs. Fred C. Ballard, North Branch; Mr. and Mrs. R. E. Tobias, Adrian; A. T. and H. S. Donaldson, F. J. Schutt, William H. Flory and H. J. McGirl, Mount Clemens; Mr. and Mrs. Henry McCormack and Mr. and Mrs. W. A. Stahl, Ithaca; Fred S. Case, Sault Ste. Marie; Charles E. Rigley and Mr. and Mrs. W. S. Cooper, Owosso; Mr. and Mrs. John C. Hicks and Miss Hicks, St. Johns; Miss Marion Packard and Miss Verna Rowe, Flushing; Mr. and Mrs. James H. Kerr, Algonac; William A. Kramer, Three Oaks; A. G. Bishop, Mr. and Mrs. G. E. Merrill and Mr. and Mrs. E. P. Hopkins, Flint; L. S. Hillman, Grand Rapids; Mr. and Mrs. R. A. Packard, Jackson.

Digitized by Google

Willmarth & Morman
GRINDERS

Brand New at Special Prices

No. 78 Full Automatic, Wet Power Feed Surface Grinder---$800.
No. 3 Full Automatic, Wet Power Feed Surface Grinder---$800.

These Grinders are Brand New, Late Style, Complete with all Standard Equipment and on our floor for immediate delivery, f. o. b. Detroit, Michigan.

The Above Machines Carry the Factory Guarantee

Riverside Machinery Depot
251 ST. AUBIN AVE. DETROIT, MICHIGAN

Consumers Power Wins Grand Rapids Suit

An attempt on the part of the city of Grand Rapids to hold the Consumers Power Company to certain advertised rates not provided in a city ordinance failed when Judge M. L. Dunham, in superior court, Grand Rapids, denied the city's application for an injunction restraining the company from putting new rates into effect. One question was whether an ordinance intended to regulate the exercise of a franchise granted by the state constituted a franchise, and another was whether the company's advertised rates, not provided in the ordinance, nevertheless should hold under the ordinance.

Judge Dunham ruled that the ordinance was not a franchise and there was no provision in the ordinance making the advertised rates obligatory.

In 1907 the Grand Rapids-Muskegon Power Company, now the Consumers Power Company, provided for a low power rate with a minimum of $1 and an eight-cent straight lighting rate in a regulating ordinance. The ordinance was passed by the city council of that year but a few objectors petitioned for a referendum vote, which was taken at the same time the company advertised that it would try out a schedule of rates of eight cents for the first thirty hours, six cents for the second thirty hours and four cents per kilowatt for all power exceeding the second thirty hours. Special rates were made on power.

The attention of the voters was called to the advertised rates, rather than to the eight-cent straight rate provided in the ordinance upon which the citizens were voting. The company continued to charge the advertised rates until 1918, at which time the costs of producing power became so heavy that the company notified the city council that the eight-cent straight lighting charge in the ordinance would be adhered to.

The city threatened to cut the street car fares if the company changed its lighting charges, and as a cut in fares would have been more disastrous than the advantage to be gained by increasing lighting rates could overcome, the company withdrew the proposed increase. In July, 1920, the company again notified the city council of the need of an increase in rates and also of more power facilities. The council granted increases in lighting and power rates, but later rescinded them. The company then notified the city that it would return to the eight-cent straight charge provided for in the 1907 ordinance. The city immediately filed application for an injunction.

The fact that the company refused to have the trial rates of eight, six and four cents included in the ordinance, but merely advertised them as voluntary with the company, while the ordinance provided for the eight-cent flat rate, Judge Dunham accepted as evidence that those rates were not covered by either a franchise or any ordinance.

ESTABLISHING TRADE RELATIONS

Trade relations for Michigan manufacturers and European customers, as well as for exporters seeking Michigan markets, are to be established through the efforts of Samuel J. Hoexter, Detroit, who will sail in July. He will visit Germany, Austria, Holland, Sweden, Norway, Belgium, Szecko-Slovakia and Denmark.

Mr. Hoexter is head of S. J. Hoexter, Inc., Detroit, and has been working to establish business in products classified under the mechanical trades. He is working to build up imports on products that will not compete with American manufactured goods. He now represents European producers of small tools, hardware novelties, industrial chemicals, dental and surgical instruments and watchmaking instruments. He will be able to arrange for importation of all kinds of products needed here, the supply of which was interrupted by the war.

Mr. Hoexter said recently that England and France were already well established in the business centers of their former enemies and that sentiment must be set aside in planning reestablishment of trade.

11½ WAGE CUT ACCEPTED

Employes of the Lansing city water and electric light board have accepted a reduction of 11 per cent in wages, believing this to be in accordance with the decrease in the cost of living. The Lansing municipal power plant has been paying the highest wages of any such plant in Michigan except those of the Detroit Edison.

DOW REPLIES TO COUZENS

Replying to Mayor Couzens' suggestion that rates on steam and electric power should be reduced, Alex Dow, president of the Detroit Edison Company, informs the mayor that the company's books are open for inspection at any time and the city officials can see for themselves whether a decrease in rates is possible at this time. Under an existing ordinance the council has the right to fix rates on heating, but as it has not done so, the rates announced by the company are legal, Mr. Dow says. Access to the company's books never has been denied the city authorities, Mr. Dow reminds the mayor.

BRYANT ELECTS PAGENSTECHER

The board of directors of the Bryant Paper Company, Kalamazoo, has elected Felix Pagenstecher, general manager, to the position of president, succeeding the late Frank H. Milham. Mr. Pagenstecher will continue to perform his former duties and it is stated that no other changes in personnel will be made.

Digitized by Google

New Corporations

FOR WEEK ENDED JUNE 4, 1921

Wyrick Register Corp., Detroit; to manufacture, buy, sell and otherwise dispose of and deal in autographic registers, adding machines, etc.; Carl Carda, Mrs. Mary Hammurmann, 4240 Belvidere Ave., Fred Blaskal, Detroit 100,000

Union Co-operative Auto Service, Detroit, to sell gasoline, oils, automobiles, accessories and repair tires, automobiles and batteries; Paul J. Podolski, 8203 Moran St.; Peter H. Sundeman, August W. H. Gruman, Detroit 50,000

River Garage, Inc., Detroit; to maintain and operate buildings and garages for garaging, etc.; Frank H. Sloman, 155 Chicago Blvd.; Harry A. Sherndfelin, Edward A. Lovely, Detroit 50,000

Blue Mountain Lumber Co., operations at Timbo, office at Saginaw, to purchase, lease and hold lumber and convey timber lands and timber; Joseph A. Marx, Saginaw; Abe Lincer, Saginaw, Curtis A. Brothers, Timbo, Ark. 90,000

Mount Clemens Beverage Co., Mount Clemens; to manufacture cereal beverages and sell the same; George Tudworth, Mount Clemens, Charles B. Steck, 819 Howard Bl., Rodney A. Waterburg, Detroit 36,000

State Mutual Insurance Co., Flint, to buy, sell, trade and deal in all appliances, medals, fixtures and everything necessary in insurance; Hastings rods; William T. Lewis, Lansing; George Walker, Flint, Theodore Morehouse, Fenton 10,000

Marlette Oil & Gas Co., Marlette, to buy, sell oils, gasoline, and automobile accessories; Roy Abel, A. G. Admms, George Alexander, Marlette 18,000

Port Huron Press, Port Huron; to publish newspapers, books and other periodicals; general publishing; C. R. Oslus, Charles R. Oslus, Jr., Dr. A. H. Cole, Port Huron, Mich. 100,000

Regenerator Co., Detroit; to manufacture, distribute, buy and sell at wholesale and retail regenerators, carburetor heaters, etc.; Robert D. Newell, 407 Blaine Ave.; Frank T. Armstrong, G. E. Sayre, Detroit 15,000

Commonwealth Finance Corp., Detroit, to conduct general banking business for purchase and sale of stocks, bonds, etc.; Charles Sawyer, 160 Euclid Ave.; W. N. Parker Holden, David U. Hemle, Detroit 10,000

Watts Property Management Co., Detroit; renting, leasing, managing and maintaining real estate; to buy and sell real estate; George, Phyllisia, May, John D. and Willis Watts, 2065 W. Grand Blvd., Detroit 10,000

Simmons, Detroit, sale, who'esale and Retail, of candies, sweetmeats, soft drinks, tobacco, magazines, etc.; Rowe Bell and Russell J. Simmons, 146 Grand River Ave., Clarence Carr, Detroit 5,000

Gasoline Service Corp., Adrian, to buy and sell mineral oil and its products, Ella J. Moreland, Mary E. Moreland, W. H. Alexander, Adrian 25,000

Mayville oil & Gas Co., Mayville, to buy and sell gas and oil and automobile accessories, Edgar B. and Lloyd A. Cartwright, Jessie Coffee, Mayville 20,000

Commerce Realty & Investment Co., Monroe; Odette Parmentier, to purchase, hold, operate and sell securities and real estate, H. B. Beaver, Markle and Sidney Aves., J. H. Evans, A. A. Klinger, Detroit 30,000

Commonwealth Sprinkler Co., Grand Rapids, to manufacture, buy, sell, deal in, fit, repair, install and erect fire protection equipment; Fred D. Vos, John T. O'Brien, Freda A. Bosse, Grand Rapids 20,000

Engineering Specialties Co., Detroit, to manufacture, purchase, sell and exchange mechanical goods; Neville & Maclachlan, 2629 Ins. Exc.; Frank J. Wadecker, Floyd M. Walker, Detroit 25,000

Grand Chemical Products Co., Grandville and Grand Rapids; to manufacture and sell chemical products; H. A. Underhill, Grandville; Jacob M. Cohn, Stanley L. Burnett, Grand Rapids 30,000

Detroit Washing Machine Corp., Detroit; to manufacture, buy, sell or otherwise deal in washing machines, parts and accessories; Ruy J. Corrigan, Ada Corrigan, 55 Glendale Ave., Anthony B. Eggert, Detroit 500,000

Merchants Garage Co., Detroit; to conduct a garage; Frank E. Hunt, 1746 Kent general garage and automobile; Field Ave.; Paul W. Beals, Clara M. Hunt, Detroit 35,000

George F. Koppin Amusement Co., Detroit; purchase, sale, conveyance, leasing, owning, holding and dealing in land and buildings of every kind; George F. Koppin, 102 Stimson Place; John Covelesakie, Helen Schaeffer, Detroit 150,000

Ithaca Oil & Gas Co., Ithaca; to buy and sell at wholesale and retail kerosene, gasoline and lubricating oils; Guy C. Boyd, George Whitman, B. M. Coffin, Ithaca 35,000

Marx Stores for Men, Detroit; purchase, sale, tailoring and repairing of men's and boys' clothing; Ben; L. Marx, 81 Peterboro St.; Milton M. Alexander, Theresa Alexander, Detroit 10,000

Collins Asphalt Shingler & Paper Co., Morenci; to manufacture, buy, sell and deal in, wholesale or retail, all kinds of asphalt shingles and prepared roofings; W. H. Gates, William L. B. Collins, C. E. Cottrell, Morenci 20,000

CHANGES OF NAME

Zink & Young, Inc. (name changed to Keystone Stucco Co.), Detroit 10,000

INCREASES

Auto City Oil Co., Detroit, from $10,000 to 40,000

Angle Steel Stool Co., Inc., Otsego, from $50,000 to 85,000

Home-Maid Hosiery Mills, Bay City, from $15,000 to 40,000

Yellow Taxicab Co., Detroit, from $30,000 to 220,000

Sturgis Steel Co-Cart Co., (name changed to Sturgis Go-Cart Co.), Sturgis, from $500,000 to 2,150,000

Clairing Tool Co., Detroit, from $50,000 to 100,000

NOTICES OF DISSOLUTION

Reynolds Motor Car Co., Mt. Clemens 400,000
Bogardus-Ashley Grocery Co., Oxford. 6,500
Sol & Louis Gittleman Co., Lake View. 15,000

WILCOX JOINS MICH. INVESTMENT

Frank H. Wilcox, Jackson, who for the last seven years has been vice-president and manager of the W. B. Reynolds Company, with offices in Jackson, Flint and Detroit, has been elected vice-president of the Michigan Investment Company, Detroit. The latter is a corporation formed to take over the business of the Lambrecht-Kelley Company and its officers and directors are closely associated with the American Loan & Trust Company. For the last three years Mr. Wilcox has been handling Detroit property of the W. B. Reynolds Company and in his new connection will have charge of the real estate department.

F. H. WILCOX

SCOTT BILL FAVORABLY REPORTED

The Scott bill exempting Great Lakes shipping from certain provisions of the La Follette Seamen's Act has been favorably reported by the committee on merchant marine of the House of Representatives. This bill permits two watches instead of three where the run is twelve hours or less; two watches for the deck crew and three for the firemoon where the run is twelve to sixteen hours, and three watches for runs of more than sixteen hours. Ships on runs of six hours or less are entirely exempted from the provisions of the act. The percentage of able bodied seamen of the deck crew is reduced from 65 to 50 per cent, certificated lifeboat men are permitted and the season is extended to run from May 1 to October 15.

Dividends Payable

Company	Rate	Payable	Stock of Record
Advance Rumely, pfd.	1¾% Q	July 1	June 15
Allied Chemical, pfd.	1¾% Q	July 1	June 15
American Car & Foundry, com.	$3.00 Q	July 1	June 15
American Car & Foundry, pfd.	$1.75 Q	July 1	June 15
Chandler Motor Car	$1.50 Q	July 1	June 30
Commonwealth Finance Corp., pfd.	$3.50 s a	July 15	June 30
Commonwealth Finance Corp., com.	$1.00 Q	July 15	June 30
Commonwealth Finance Corp., com.	50 cts extra	July 15	June 30
D. & C. Navigation	2½ Q	July 1	June 15
Detroit Edison	2½ Q	July 15	June 30
E. I. DuPont de Nemours, com.	2% Q	June 15	June 4
E. I. DuPont de Nemours, deb.	1½% Q	July 25	July 9
Federal Mining & Smelting	1½ Q	July 15	June 21
Fisher Body, Ohio, pfd.	$2.00 Q	June 10	May 31
General Electric	$2.00 Q	July 15	June 8
General Electric	2% & stock	July 15	June 8
Grand Rapids, Trust	3% & s. a.	June 30	.....
Hupp Motor Car Corp., pfd.	1¾% Q	July 1	June 20
Jordan Motor Car Co.	1½% Q	June 30	June 10
Montgomery Ward, pfd.	1¾% Q	July 1	June 20
Parke-Davis	2% cash	June 30	June 20
Parke-Davis	2% cash	June 30	June 20
Republic Iron & Steel, pfd.	1¾% Q	July 1	June 17
Railway Steel Spring, com.	$2 Q	June 30	June 17
Railway Steel Spring, pfd.	1¾% Q	June 30	June 7
Standard Oil, N. J., com.	$1.25 Q	June 15	May 27
Standard Oil, N. J., pfd.	$1.75 Q	June 15	May 27
Sears Roebuck, pfd.	$1.75 Q	July 15	June 15
Sloss-Sheffield, pfd.	1¾% Q	July 1	June 15
Standard Oil (Ind.)	$2.00 Q	July 1	June 15
Union Carbide & Carbon	$1.00 Q	July 1	June 8
United Light & Railways, pfd.	1¾% Q	July 1	June 15
Westinghouse Elec., com.	1½% Q	July 15	July 1
Worthington Pump, "A"	1¾% Q	July 1	June 20
Worthington Pump, "B"	1¾% Q	July 1	June 20

The Dupont-Motor Co. Company has declared the quarterly dividend on the preferred stock due at this time.

The American Chicle Company has deferred action on the quarterly preferred stock dividend.

The Chandler Motor Car Company has reduced its quarterly dividend from $2.50 to $1.50 a share. In connection with the action of the directors of the company, President F. C. Chandler issued the following statement:

"In our opinion, the last ten months have been the most trying in the automobile business. There has, however, been considerable improvement during the second quarter of this year.

"It has been our policy since organization to pay dividends consistent with our earnings, always having in mind the necessity of maintaining a strong cash position. We enjoy such a position today and in order to maintain it, the directors have ordered a dividend of $1.50 per share. When normal business conditions shall have returned, the company will undoubtedly pay dividends commensurate with its improved earnings."

The International Harvester Company announces the reduction of its dividend rate on the common stock from 7 to 5 per cent. In the course of a statement the company says:

"Through the action of the directors in dropping the rate to 5 per cent, the holders of this stock are brought back to their prewar rate of return. This 5 per cent dividend on the common stock amounts to only about 2.9 per cent, on the whole amount which holders of this stock have invested in the business, and this lessened cash return comes at a time when money is worth more than in pre-war days, the current bank interest rate being 7 per cent."

HIGHWAY CONVENTION DATES

The annual convention of the Michigan State Good Roads Association will be held in Lansing August 30 and 31 and September 1.

PROSPECTING FOR OIL

Financed by a Detroit concern in which P. A. Thrasher, Detroit, is interested, Fidwell Brothers, California, have begun prospecting for oil in Markey and Foster townships, Roscommon and Ogemaw counties.

Digitized by Google

JUN 21 1921

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Univ. of Mich. Grad. Library

Volume 27

Number 25

Fifteen Cents a Copy

Five Dollars a Year

Michigan's New Corporation Act
How Increase Bond Distribution?
Container Cars for Quick Delivery
Maintaining Our Merchant Marine

(Financial Section Starts on Page 22)

DETROIT, JUNE 18, 1921

Entered as Second Class Mail Matter at the Post Office at Detroit, Mich.

ESTABLISHED NINETEEN HUNDRED SEVEN

Digitized by Google



Illustrating a dash type radiator, designed and built for KELLY-SPRINGFIELD TRUCKS.

DEPENDABLE service under *all* reasonable conditions has built for Long Cooling Systems a world-wide reputation for efficiency.

For nineteen years they have been reliable factors in the success of many of the most famous cars and trucks.

Our capable Engineering Department is prepared to design radiation systems for any automotive unit, or to correct imperfections in those already in use.

This department is at your service.

LONG MANUFACTURING CO., DETROIT, MICHIGAN

Pioneer Makers of Cooling Systems for Gasoline Engines

LONG COOLING SYSTEMS

The Recognized Standard for Tractors, Trucks and Motor Cars.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Michigan's New Corporation Act

A Digest of Changes Made by the 1921 Legislature, Together With an Official Ruling on Report Dates

FOLLOWING the enactment of the recodified corporation act by the Michigan legislature, John L. Lovett, general manager of the Michigan Manufacturers' Association, asked for an interpretation of the clause providing for the filing of reports. The law specifies that such reports shall be made in July or August for the year ended June 30. If this provision were enforced, corporations would be put to great expense in closing their books and filing returns, either after the fiscal year already had been closed, or before the regular time of closing. The interpretation made by the attorney general, and approved by Governor Groesbeck, provides that these returns may be made on the corporation's closing date nearest to June 30, and that reports already made for the fiscal year will be accepted.

The following digest of the changes in the Michigan corporation act, as enacted by the 1921 legislature, has been prepared by the Michigan Manufacturers' Association:

I

All corporations shall hereafter be incorporated under this act, unless expressly excluded. This act requires the articles of incorporation to state expressly under which section of Chapter 1, Part 1, such corporation intends to proceed. Manufacturing and mercantile corporations will proceed under Section 1, which provides for corporations carrying on any lawful business for pecuniary gain.

II

The term "capital stock" as defined shall be construed as meaning "capital stock as provided for in the articles or amendments thereto and shall not include surplus funds or undivided profit."

III

The articles of incorporation require the giving of the addresses of the main business offices, both in Michigan and outside of the state. This is more definite than the old provision in Compiled Laws, Section 9018, Paragraph 3, which said: "the principal place or places at which its operations are to be conducted." No name shall be used which will imply that it is a banking, insurance, surety or trust company.

IV

The total authorized capital stock is not limited in its amount, as under the former statute authorized capital stock was limited to $50,000,000. If non-par value stock is to be issued, the number of shares, if any, of this stock must be stated in the articles of incorporation. The value of non-par stock must be $1.

V

The articles of incorporation must now contain the names and addresses of the officers and directors chosen by the incorporators to act for the corporation for the first year, or, if no such officers have been elected, the name of the representatives or attorney in fact, authorized to act for such incorporators.

VI

The articles of incorporation shall be made out in triplicate and sent to the Secretary of State, where the original, after approval shall be filed. Upon the return of the other two properly certified articles, one will then be filed with the county clerk. The filing, franchise and certifying fees required by law shall in all cases accompany the articles.

VII

A foreign corporation having a similar name to another foreign corporation will not be precluded from using the same if the name of the locality is attached.

VIII

A corporation must maintain an office in this state but it is still provided that the meetings of stockholders and directors may be held without the state.

IX

The first meeting of stockholders shall be held not more than 60 days from the filing of the articles. No notice or waiver of this meeting is required as provided before under Compiled Laws, Section 9019 and Section 11330.

X

Any corporation may at any general or special meeting of the stockholders, with the consent of three-quarters of its capital stock, sell and convey all its property to any other corporation formed under the same or any similar law, and no notice is necessary as was formerly required for such a proceeding but the law now requires notice of the sale to be filed with the Secretary of State thirty days thereafter.

XI

The act provides, in Chapter 2, Part 2, Subdivision 2, under Sections 3, 3, 4, 6, 7 and 8, for the consolidation of corporations. Such consolidation may be effected between two or more corporations organized under this or any general law of the state by a vote of three-fourths of the legally issued capital stock of the corporation, at any meeting of the stockholders called to consider the question of consolidation. Notice must be sent by registered mail of such meeting, postage prepaid, to each stockholder, at least thirty days prior to said meeting. Special attention should be paid to these sections in view of any pending consolidation.

XII

As formerly provided, any corporation organized for pecuniary profit may purchase or hold shares of stock of other corporations having purposes similar to those of the purchasing corporation, organized under laws of this or any other state. The act now gives a statutory right to the corporation owning such stock of another corporation to hold the office of director and exercise the rights of an individual stockholder.

Upon the adoption of a resolution to extend the corporate life for a further term of thirty years, it shall be the duty of the president and secretary to make, sign and acknowledge in triplicate new articles, to which shall be appended a copy of such stockholders' meeting, certified by the secretary and verified by his oath and filed as required by this act for original articles.

XIV

This act provides that a voluntary dissolution may be effected by the stockholders without court proceedings but this right voluntarily to dissolve will not affect the right of any of the parties to accomplish the dissolution as provided in Compiled Laws, Sections 12563-13577.

XV

Within ten days after any corporation shall issue any of its capital stock in payment for property, it shall file a sworn schedule of such property with the Secretary of State. Any corporation may issue part paid stock in payment of property conveyed to it in which case the articles, and any certificate or statement required by this act to be filed with the Secretary of State with reference to the value of the property so conveyed, shall clearly state the number of shares so issued and the amounts credited upon such shares as partial payments thereon, in addition to the other statements with respect to such property's cash value. Such shares, so issued, shall be subject to such further call for the balance thereon due as may become necessary to the corporation or to its creditors as in other cases.

XVI

A provision permits the directors of any corporation to require bonds of such of its officers or employes and in such amounts as may be fixed and determined by such board.

XVII

The office of chairman of the board of directors is now specifically mentioned in the statute. One person may hold any two offices but those of president and vice-president. It is also provided by statute that an executive committee may be appointed when there are more than five directors. The wording of the Compiled Laws, 1915, Section 9023, is changed from "the directors may have the power to fill in a vacancy.....for the current year" to the following: "such appointees shall hold office until their successors are appointed at the next succeeding election."

XVIII

Amended articles shall be filed in the same manner as the original articles.

XIX

Every corporation under the laws of this state is required to keep a correct list of all its stockholders who are residents of this state,

Digitized by Google

together with a statement of the number of shares held by each stockholder, at their agency or office in this state, and such list shall be open at all times to the inspection of the Secretary of State or local assessing officer for the purpose of obtaining copies or other information required for public business. The failure to keep such a list is now a misdemeanor only and will not work a forfeiture of the charter. A transfer book need not be kept.

XX

Any exemption allowed in regard to the holding of the annual meeting of the corporation will not relieve or excuse any corporation from making and preparing a report of its condition and fiscal standing, which shall be made annually in the month of July or August, showing the condition of such corporation on the 30th day of June.

XXI

The preferred stock shall at no time exceed two-thirds of the authorized capital stock. This provision formerly read "shall not exceed two-thirds of the actual capital paid in." Shares of common and preferred stock shall be of the denominations of $10 or some multiple of $10 or of $25, but not more than $100. The amount paid in must now be 10 per cent of the subscribed capital instead of the authorized capital.

XXIII

Preferred stock may now be converted into common stock, bonds or other security, when formerly it was convertible into common stock only.

XXIV

In providing for the issuance of preferred stock the corporation may further provide that such stock shall, in addition to the dividend fixed therein, also participate with the common stock, in such proportions as the stockholders may agree upon and provide for in the articles, in any dividends which the corporation may at any time declare after there shall be declared and paid upon the common stock "for the current year" a rate equal to that paid upon the preferred stock. The phrase "in such proportions as the stockholders may agree upon and provide for in the articles" is a change from that in Compiled Laws, Section 9050, as amended 1917, which read: "which the corporation may at any time declare."

XXV

Certificates of preferred stock shall state the amount such stock is entitled to receive on account of such preference from the surplus assets of the corporation.

XXVI

If for any reason said corporation ceases business or becomes insolvent after payment of all liabilities and debts, the remainder of the assets shall be applied first in payment paid dividends due thereon, and the balance divided among holders of the other classes of stock as their interest may appear. "Among holders of the other classes of stock as their interest may appear" is a change from the of all stock preferred as to principal and uniformer provision in Compiled Laws, Section 9050, Amendment 1917, which read: "and the balance divided pro rata, share and share alike, among the holders of the common stock."

A two-thirds vote is required instead of three-fourths vote to amend the articles of association.

This act makes provision for the issuance of shares of non-par value other than preferred stock having a preference as to principal without any nominal or par value. Attention is called to the provision of this act relative to the issuance of shares of non-par value. This will be found in Part 2, Chapter 2, Subdivision 2, Sections 6, 7, 8 and 9. Nothing in these sections in regard to the issuance of such stock will exempt any corporation or the holders of such shares from complying with the provision of the Act known as the "Securities Act."

XXVIII

When a corporation increases or decreases its capital stock, the president or secretary shall make a certificate thereof and this certificate must show what amount of the total authorized stock after such increase has been subscribed. This is a substitute for Compiled Laws 9018, Section 9, Amended Act 254, 1917, which provides that at least 50 per cent of the total authorized stock must have been subscribed.

XXIX

Under the sections conferring on the corporation the power to borrow money, mortgage property or guarantee the debts of corporations, it is provided that a purchase money mortgage will not require the consent of two-thirds of the capital stock of the corporation.

XXX

The act makes special provisions for industrial stock. This stock may be sold to the employes of the corporation upon consideration of such faithful or continued employment as may be fixed by the voting stockholders. It is provided in this section that the corporation, with the consent of two-thirds of the capital stock, may authorize the expenditure of not to exceed 10 per cent per annum of its surplus capital for the purpose of providing for the social, moral, physical or educational welfare of its employes; and with the consent of all the capital stock, such amount may be increased to 25 per cent of such surplus. The statute expressly requires the directors to exercise good faith in their management.

XXXI

The stock of every corporation shall be deemed personal property and shall be subject to provisions of Act No. 103, Public Acts of 1913, known as the Uniform Transfer Act.

XXXII

The act provides that the Secretary of State shall compute or determine the amount of the franchise fee to be paid by foreign corporations before their admission to the state. Such corporation may be heard by a Board of Appeals as to the computation.

XXXIII

By-laws need not be filed with the county clerk. All articles, amendments to articles and all annual reports shall first be filed with the Secretary of State and copies there certified by him shall be filed with the county clerk.

XXXIV

All corporations organized for pecuniary profit shall file annual reports in July of August instead of January and February, showing the condition of the corporation June 30 instead of December 30. This report must contain the necessary information for the computation of the annual franchise fee. This report need not show the number of shares held by the officers and stockholders. The report shall be signed by the president or vice-president and the secretary or assistant secretary of the corporation, instead of a majority of the directors. The filing fee is changed from 50 cents to $2 and must be accompanied by the annual franchise fee.

XXXV

Any corporation whose act of incorporation has been repealed is subject to this act but the corporation shall have all its power and rights under the old acts and now mode of operation is to be imposed upon any existing corporation. A reincorporation or a renewal of corporate life can be accomplished only under the provision of this act.

Cogswell, Founder of American Solvay, Dies

ONE of the best known industrial enterprises in this country, and one which contributes essential materials to many other industries, is the Solvay Process Company, a corporation maintaining plants in Syracuse, N. Y., Hutchinson, Kas., and Detroit. The company takes its name from a process for obtaining soda ash from brine, which was developed by Ernest and Ernest and Alfred Solvay, of Couillet, Belgium. The founders of this enterprise in the United States were William B. Cogswell and Rowland Hazard. Mr. Cogswell, for many years a prominent figure in the mining and engineering professions, died at his home in New York, late last week.

The operations of the Solvay Process Company in the United States have been marked by a succession of triumphs in analytical chemistry and the salvaging of valuable commercial by-products from the one source—brine obtained from subterranean wells.

Soda ash was first produced commercially in 1800 by a crude and expensive method known as the Le Blanc process. As early as 1811 scientists were experimenting in an effort to develop a process more economical and efficient, but it remained for the Solvay brothers to find the key to the problem and originate an apparatus for the manufacture of soda ash by a reaction of ammonium bicarbonate and salt brine. This was in 1863. The first plant for commercial production was established in 1865 in Couillet. In succeeding years other plants have been built in Belgian manufacturing centers.

In 1881 William B. Cogswell and Rowland Hazard acquired the American rights to the Solvay process and built a plant which was established in Syracuse, where an abundant supply of salt brine was and continues to be found. From a small beginning, the Syracuse plant has been developed gradually until it occupies many acres of land on the shores of Lake Onondaga, where for miles great mounds in terrace formation and composed of the waste material from the retorts furnish evidence of the enormous amount of valuable products taken from salt water by the Solvay process.

Later, plants were established in Hutchinson, Kas., and Detroit, where also the prevalence of brine encouraged salt making. These plants have grown almost as rapidly as did the parent plant at Syracuse.

The soda ash industry belongs to that class of manufacturing which depends for its growth upon chemical research, and is almost as great in its own way as is the coal tar industry. To many manufacturers of other important products it assumes the importance of a key industry. While the principal product of the Solvay Process Company is soda ash, from this intermediate come caustic and modified sodas, calcium chloride, causticized ash, bicarbonate of soda, salt, paper pulp, limestone, all of which the Solvay plants manufacture.

These various by-products are used in the manufacture of soaps, chemicals, textiles, glass, enamelware and baking powder, and in oil refining and metal cleaning. Caustic soda is used in soap, mercerizing, the compounding of cleaning fluids and other chemicals. Calcium chloride is used in refrigerating machines instead of brine, and also as a dust-preventative on highways. Soda ash and caustic soda, known as causticized ash, is used in cleaning milk and soft drink bottles. It is good for cleaning metals before plating or enameling. The limestone is produced in pulverized form for agricultural purposes, and also as a substitute for gravel in the mixing of concrete.

Digitized by Google

How Increase Bond Distribution?

A Problem of Better Salesmanship, Merchandising And Advertising in a New But Profitable Market



—Perry in the Portland Oregonian
AN URGENT CASE WAITING



—Mutchson in the Chicago Tribune
THE GORGE IS OVER



—Harding in the Brooklyn Eagle
SWORDS OR PLOWSHARES

RETAIL BOND distribution today is a very different business from what it was ten years ago or even five years ago. Heavy taxation has driven the large buyer from the market as a purchaser of taxable securities (which is the type of securities with which we are most concerned in this discussion), while on the other hand war time prosperity, the Liberty loan drives and the unusual rates of interest which have prevailed for the last few years, have attracted a new bond buying class, the smaller investor, who is today a very large factor in the bond market.

A canvass of the average sale of the bond distributors here represented would, I am sure, show that their average retail sale of corporation bonds today is $3,000 or less. A similar canvass ten years ago probably would have revealed a figure at least four or five times that amount—possibly more.

Notwithstanding this tremendous change in the market many bond distributors have done little to accommodate their selling methods to present conditions. They maintain a tremendous overhead of expense in the form of elaborate offices, with complicated inside machinery for handling their transactions, and depend for distribution in large part upon the unsupported efforts of high salaried salesmen, who devote much the same time, expense and effort to selling the existing unit of sale as they did ten years ago when the sale and, consequently, the profit were several times what they are today. The expense of bond distribution has, in consequence, been mounting rapidly, which means either that corporations desiring capital must pay more for it to recompense the bond distributor or the distributor must see his already narrow margin of profit decline almost to the vanishing point. Neither is desirable nor necessary; for both alternatives, I believe, can be avoided by facing existing conditions squarely and adapting our methods of distribution to conform to them. The problem may be approached from the angle of (1) Sales; (2) merchandizing, and (3) advertising.

Let us consider them in the order named.

By A. E. BRYSON
Of Halsey, Stuart & Company

which, however, is not necessarily the order of their importance.

The large majority of bonds have been sold, and probably will continue to be, through personal salesmanship. The bond salesman deserving of the name is more than a salesman. He is a financial counselor, well trained, versatile, distinctly above the average—in fact, almost deserving of classification among professional men. He is a product of the $20,000 unit sale of years ago, and if he is to continue to be a profitable distributor means must be found for increasing his productivity. In short, his large unit sale of several years ago must be replaced by several smaller transactions, involving at least the same amount of profit. The old school salesman, in some cases, chafes under conditions which compel his attention to the smaller buyer. Some such are being replaced by a new type of salesman, who knows his subject as well as his predecessor, but who realizes the changed conditions that make more calls and easier effort necessary, and appreciates the necessity of the application of sales methods which have been found productive in other lines.

I am not sure, moreover, but that we shall have to go further. The farmer, for instance, may not be overly impressed by the carefully manicured city man with his precise necktie and carefully chosen diction. Maybe an equally well versed but "nearer to the sod" salesman, who knows the farmer's way of thinking, would assist in solving this difficult although potentially large market. So with the laborer. He may be awed by the pretentious equipage of the bond house and perhaps by that of its representatives. Maybe here a horny handed salesman, who had graduated from the ranks, might get by in this market where the prevailing type of salesman, even if he could be induced to give it consideration, might fail. So, too, with the foreign market, the woman's market, etc. Perhaps salesmen with more intimate knowledge of their requirements could show larger results than are now being attained.

To increase bond distribution I would, therefore, suggest that greater consideration be given to the type of salesmen employed and that more effort be made to adapt them to existing market conditions.

I shall have more to say later as to how advertising can assist in the solution of the sales problem, but at this point let me inject a few thoughts on one form of advertising that will do much to assist in its solution. I refer to correspondence. Aside from advertising well directed correspondence will do more than anything else I know of to increase the productiveness of our salesmen. While I expect to see an increasing volume of sales by mail, I question whether for some time to come any considerable proportion of bond sales will be so negotiated. It is in the field of co-operation with salesmen that correspondence work in bond distribution can be most productive.

Our sales problem today is to make as many of the calls of our salesmen as profitable as possible. While the unit of sale is smaller, the sales resistance to be overcome is about the same as before. We cannot, therefore, afford to use the time of high-priced salesmen in making the same number of calls to sell $3,000 of bonds that he previously employed in selling $20,000 to $30,000. The confidence, however, required on the purchaser's part to buy bonds can be instilled as well through well directed correspondence as through personal salesmanship; thus the number of calls necessary to effect a sale can be cut down through its use. Doesn't it stand to reason that a salesman's efforts can be made more productive if preceded by one or more carefully prepared sales letters, that his next call will be more productive if his last one is followed by a tactful letter, advancing the salesman's case, and that phone calls, an important agency in bond sales, can be made more productive if preceded by a sales letter?

Let us eliminate the foolish, wasteful, broad-

Digitized by Google

scale circularizing, which is also a relic of bygone days when buyers were few and much more experienced than now, and when they were perhaps capable of interpreting the maze of cold facts contained in the average bond circular. Let's hire some real correspondents, choosing them as we do our salesmen for ability in their respective line. Let's write more real and personal sales letters. Let's replace the unprofitable circularizing, which to many buyers has reached the stage of actual annoyance, with more effective and more concentrated sales letters. Let us study the sales-by-mail efforts of commercial lines, and if other means of distribution, which I may discuss later, are not forthcoming, let's reach the small town and country market, which in some sections is now largely closed to legitimate bond investment, as has the mail order house—by correspondence. It can be done with greater thought on the subject and improved correspondence methods.

The Merchandizing Problem

The word "merchandizing" is an overworded term in the commercial field, but an underworded one in the investment field. It has to do with the location of markets and methods of distribution. There was no merchandizing problem in the bond business a few years ago, for the market was then confined to a relatively small number of institutions—banks, fraternal orders, insurance companies, trusts and a few hundred thousand individuals who were known very largely to the various distributors, inasmuch as they were naturally the outstanding men of the community. These buyers were located, for the most part, in the older and more established states. The problem was not one of locating the market, nor of methods of distribution, for the salesmanship was about the only means employed. The problem was simply to break into the market, generally at some other dealer's expense, by getting business which that competitor had previously obtained by cutting in on some other fellow.

I have already indicated that this situation has changed. Actual buyers are now scattered from Maine to California, and potential buyers, because of the increased wealth of the country and the greater facility for distribution of the market with the merits of bonds, exist in every nook and corner of the country. The problem now is how to reach these buyers with profit to the distributor.

Your are familiar with the present distributing machinery. The majority of the large bond houses originate in the large cities, and where the accumulation of funds makes the handling of such transactions possible. These originators may be merely underwriting houses, with no distributing facility—they may be wholesalers, who distribute in large blocks to other dealers, or they may be both wholesalers and retailers. The bulk of bond distribution is among the latter class, those working conjunction with smaller dealers and banks with bond departments, which, by the way have increased in number very rapidly during the last few years.

I have already indicated some of the problems of retail distribution, which while applying particularly to the big city distributors, also have application to the dealer in smaller communities, not so much because of his cost of operation as to his more restricted market and slower turnover of capital.

Granting that a market does exist for bonds wherever there is a surplus of capital over and above the community's requirements (and this includes a very substantial part of the United States today), and granting further that the big distributors and the smaller ones as well, while aware of their larger market, are nevertheless confronted with a problem of cultivating it profitably, how can it be reached, for in it, of course, lies our largest possibility of increased bond distribution? I believe the answer at least in the country districts is, and it is my personal conviction only, through the country banker. The country banker has the plant, the staff, the knowledge of where the market lies in his community; and he ordinarily has the confidence of these potential buyers. Thus the selling expense, which is the problem of the larger distributor in attempting to reach this market, is reduced to a minimum in the case of the country banker. What the country banker lacks, however, is the inclination to undertake the distribution of bonds, because he thinks he is not properly compensated for his efforts; because he may not feel competent to pose as a bond salesman, or because he may have some local mortgages to sell, or for other reasons, which, while are, of course, his principal source of revenue, would suffer if he attempted to do so.

Space will not permit of an extended discussion of this topic, though I believe that any open minded country banker who opposes bond distribution can be convinced of the fact that his arguments are not altogether well founded. He need only look about him—the city banks, which are opening bond departments in an increasing degree, without affecting the growth of their savings deposits, or the experience of thousands of banks in all sections of the country during the Liberty loan campaigns, when despite bond purchases in unprecedented amounts, deposits increased enormously.

There is also another important thought on the subject—that of the banker's responsibility to his community. Bonds in lieu of bond deposits are not in the beginning sufficiently remunerative to make the undertaking one of large profit, still is not the business, as the bank commercial adviser, somewhat obligated to meet the competition of the everpresent blue sky salesman, with something more than negative arguments when he rendering sound banking advice when a customer, anxious to improve his income, questions him about a bond issue offered by a large distributor and he replies "I have no faith in it" as to keep his deposits intact?

For those who are really concerned about ways and means of increasing bond distribution, the country banker offers one of the largest opportunities as well as one of the most difficult problems open to the solution of this question. It is inevitable, I think, that in time he will become a distributor—just how soon depends largely upon the aggressiveness of those whose job it is to get him to see the light. There are some 30,000 banks in the United States, and the profits if all, or a substantial part of them, add facilities for the distribution of sound investments to the other machinery for the distribution of thrift and accumulation which they have offered for years.

Better Analysis Necessary

I have said that a market exists almost everywhere today for bonds, which is broadly true; yet of course, some sections offer larger possibilities than others. While we in the bond business are aware of this, our knowledge is gained ordinarily not through the scientific and systematic study of conditions, depended upon in other merchandizing lines in fixing their sales and advertising policies, but rather to somewhat haphazard and fragmentary information that comes to us from our salesmen or dealer connections and other such casual sources of information. So far as I know, only one investment house has conducted a comprehensive and scientific analysis of the possibilities of its market. To increase distribution, therefore, I suggest that we must, in this important respect, profit by the experience of other commercial distributors with whom our problem is not altogether unrelated.

We must also improve our operating methods, by which I mean the mechanical end of the business; the necessary detail in connection with the recording and handling of the various transactions. You appreciate fully the top-heavy clerical force now necessary to the completion of a bond transaction and the complicated machinery involved, which are in large part the outgrowth of an era which may have warranted such a system, but which today, under changed conditions, is as unwarranted as it is unsatisfactory.

Perhaps the situation is not altogether analogous, but if not, it is primarily due to differences in the customs of the trades, rather than to any actual dissimilarity of the problem involved, but to make my point clearer let us contrast the situation of the buyer of an expensive piece of jewelry with that of a counter purchaser of bonds. With the jewelry transaction, notwithstanding the fact that the profits involved are appreciably larger than on the bond transaction, the delivery machinery is infinitely simpler; with the completion of the sale the transaction is virtually ended, both for the buyer and the seller. The customer hands over his cash, takes his purchase and walks out and the jeweler turns his attention immediately to the next customer. The bond buyer, on the other hand, even in $100 units, probably gets delivery of his purchase the next day and only after the most intricate mumbling of elaborate clerical, recording and delivery machinery.

I am not here to discuss office methods, for my discussion has to do primarily with bond distribution. While I have, therefore, no concrete solution to offer for this situation, since distribution is certainly influenced by such an unsatisfactory situation, I submit the proposition that we must acknowledge the obsolescence of much of our existing machinery and replace it by simpler, quicker, less expensive and more satisfactory methods to meet existing conditions, and to reduce bond buying to a less complicated transaction, both for the buyer and for the seller.

The Partial Payment Plan

One other problem of merchandizing before I leave this topic—that of fitting our product to the purse of our market. It seems trite to say that there is an infinitely larger proportion of people in the world whose monthly surplus is $100 rather than $1,000 and again a much larger proportion whose monthly surplus is $10 rather than $100. While merchandizing in other lines have taken cognizance of this fact, we in the bond business have not to the extent that we should. A majority of all pianos, talking machines, sewing machines, washing machines, gas machines, and, I understand, automobiles as well, are today sold on the installment plan. In short, every facility is offered the man who wants to acquire what he desires on the installment plan, yet equal opportunity is not generally afforded him to acquire what is certainly more nearly an essential—sound interest bearing investments. You may say there is no analogy; the piano merchant operates on a much wider profit, which permits of installment payments, and there is body to your argument. Yet have we, as investment bankers, no responsibility to supplant extravagance with thrift and to thwart the peddler of blue sky securities, who you may be sure will offer terms to suit his buyer's pocketbook? And can we consider only the profit of the first transaction? Is the purchaser's repeat business not worth consideration? Is the advertising value of a walking representative, for such the partial payment plan purchaser is apt to be, of no value? Is he not that because of systematic saving the purchaser will become a larger and more consistent buyer of no moment? Suppose we only break even in dollars and cents on a partial payment plan, and on but the other considerations, a few of which I have suggested, sufficient to make the transaction in reality a profitable one?

We are considering means of widening our market. There is no better means available than through the wide spread adoption of the partial payment plan by reputable bond dealers. It will increase the effectiveness of your advertising, for instead of addressing an audience of perhaps ten per cent of the readers of

Digitized by Google

your advertisements, with a partial payment plan you widen your circle to perhaps 50 per cent, so too with circularizing. Again, suppose your salesmen average twenty calls a day, it is safe to suppose that they will find only four or five prospects with sufficient money on hand to buy outright; yet with the reasonable selection of his prospects, which you expect of your salesmen, it is safe to say that, with a partial payment plan, his chances of doing business with the same twenty men would be increased from perhaps 100 per cent to 200 per cent.

If you want to increase bond distribution and at the same time deal a body blow to the slick salesman of blue sky securities, put in a partial payment plan. Don't worry too much about the profits; consider rather the service which you are rendering and the good will you are establishing, and I venture the opinion that the balance sheet will be on the right side of the ledger at the year's end.

The Advertising Problem

I have saved advertising, the item which is undoubtedly of primary interest to all of you, for the last, and in many ways I regard it as the most important question in the problem of increasing bond distribution today.

The smaller unit of bond sales now prevailing provides the strongest argument for bond advertising that it has ever had. More sales must be made and every sale must be made more easily and more quickly than before if the efforts of our salesmen are to continue productive. More and better bond advertising can accomplish this. Our present advertising methods, while vastly superior to those of several years ago, are still in many respects the corollary of bond distribution methods of the day of the $20,000 unit sale. I need only cite the advertisement offering a new issue of bonds (which constitutes a considerable part of all bond advertising) to make this point clear. Such an advertisement is a cold statement of statistical facts, with absolutely no selling punch; it is addressed almost wholly to the larger and more experienced buyer, who today is not the most important factor in the market. One of the largest single opportunities for increasing the effectiveness of bond advertising lies in this one field of flotation advertisements, which with proper handling can be made to fulfil their present purpose, while at the same time reaching cost, interesting and selling a vast new market, which present methods entirely neglect.

This is equally true of bond circularizing, which ordinarily consists of a formal circular describing in analytical fashion the terms of the issue, and accompanied by an equally uninviting letter. Both are prepared for the large and experienced buyer and both fail miserably to produce under existing conditions. I cite these as two outstanding, vulnerable points in present day bond advertising.

I said what we need is more and better advertising. It is hard to separate two items, but let us consider the question of more advertising first. The amount of bond advertising, considering the volume of the bond business, still remains relatively small, due largely to the fact that we have not sold ourselves and our associates on its true value. Let's get away from the idea that we have to produce a tangible dollar of results for each dollar of advertising expended. With our salesmen confronted with the problem of increasing their production, isn't there more value to giving them proper backing than to attracting a few inquiries and making an occasional direct sale? Is the example of other merchandisers in their generous use of printer's ink of no value to us? Let's advertise more individually and let's bring pressure to bear to get such associations as the Investment Bankers Association of America and the American Bankers Association behind a broad-scale and broad-range advertising campaign.

(*Continued on Page 28*)

Speeding Delivery Of Small-Lot Freight

Container Cars and Motor Trucks Extend Rail Head Service to the Shipper's Door



The upper photograph shows a container car with two large and two small compartments ready for a trip from Chicago to Cleveland over the New York Central Railroad. Below, a motor truck is transferring a cargo of parts, hauled from the factory of the White Motor Company, Cleveland, to a New York Central container car. The shipment was consigned to the Chicago branch of the White Company.

THE LATEST in transportation equipment is the container car. It has been tried out by the New York Central between New York, Cleveland and Chicago and is certain to spread to other shipping centers between which there is a constant exchange of commodities.

The mission of the container car is to expedite delivery of less-than-carload volumes of freight from shipper to consignee. Its use calls for co-ordination of carriers—steam railroads, motor trucks and electric railways.

Vault-like compartments, built to occupy one-third or one-sixth the floor space of a 50-foot freight container car, or one-ninth the floor space of a 66-foot express car, are loaded at the warehouses of shippers, transported by motor trucks to the railroad yard, there lifted by crane to the freight or express car and secured by hooks and steel guides for the next stage of the journey.

Arrived at their destination, the compart-

(*Continued on Page 29*)

Digitized by Google

40 Gears in One Operation

Stevenson Multiple Gear Shaper Said to Be Notable Industrial Advance; It Will Be Produced in Detroit



The Stevenson Multiple Gear Shaper as set up at the Indianapolis plant. The cutting operation is confined to the cylindrical casing, beside which George E. Stevenson and his son, George R. Stevenson, are standing. To the left is the power system and the water power equipment.

ONE of the new high production machines which, its believed, will reduce the cost of manufacture of circular saws, spline shafts and certain types of gears, is the Stevenson multiple gear shaper, an invention of George R. and George E. Stevenson, Indianapolis. The claim made for this machine is that it will cut from thirty and forty gears of eighty circular saws in one operation, and that gears now costing in the neighborhood of 66 2-3 cents each can be manufactured and sold for forty cents.

This machine is manufactured by the Stevenson Gear Company of Indiana, a concern capitalized at $10,000,000 and occupying a modern plant in Indianapolis. The Stevenson multiple gear shaper, the multiple grinder and multiple miller are not to be sold to industrial concerns, but the product of these machines will be when there is a market for them.



Set of eight gears cut with Stevenson Multiple Gear Shaper from the following materials: Tool steel, ordinary steel, molybdenum, aluminum, bronze, and fiber. All teeth cut in one operation.

The establishment of a subsidiary company in Detroit is contemplated, the local company to be known as the Stevenson Gear Company, of Detroit, capitalized at $3,600,000, and with the following officers and directors:

President, Richard T. Wingo, Detroit, president of the Superior Machine & Engine Company.

Vice-president, Charles E. Sweet, Detroit, treasurer of the Superior Machine & Engine Company.

Secretary, Simeon McQuiston, second vice-president of the Stevenson Gear Company of Indiana.

Treasurer, George W. J. Linton, Detroit, vice-president and cashier of the American State Bank.

Directors, George E. Stevenson, Indianapolis, inventor of the machine, and secretary of the Stevenson Gear Company of Indiana; Frank C. Sibley, Detroit, attorney and director in a number of industrial concerns; Elmer D. Johns, Indianapolis, treasurer of the Stevenson Gear Company of Indiana.

According to the public announcements from the Indiana plant, George E. Stevenson, who has been a gear manufacturer for several years, has been endeavoring to perfect a machine powerful enough to produce a large number of gears at a time, and cut them accurately enough to meet with the requirements of the automotive and other industries making use of gears of all kinds. It is claimed now that the machine has been perfected and the manufacture of gears will be conducted on a large scale.

The multiple gear shaper is said to be one of the largest industrial machines ever made. It represents a radical departure from any of the gear cutting or shaping methods now used in the automotive industry. The demand has been for gears accurate to one and one-half thousands of an inch. Because of the accuracy required it has been impossible to cut any number of gears at a time. At the plant of the Hudson Motor Car Company the production department has been able to rough out four gears at a time, but has not dared to attempt accurate cutting of more than two gears at a time. If the claims made for the Stevenson multiple gear shaper should survive the tests necessary to prove whether it can produce gears good enough for automotive work, the invention, it is asserted, will be one of the most remarkable and valuable ever conceived in automotive machine engineering.

The criticism made by automotive production men who have seen only the photographs is that, while the machine may turn out gears accurate enough for ordinary machine use, or circular saws, it could not be expected to cut or shape gears fine enough in measurement to satisfy the demands of the automotive industry.

At the Stevenson plant in Indiana, however, the claim is made that so far the machine has produced gears of various types out of materials of various kinds that have withstood every test as to cutting and accuracy. Gears have been cut from molybdenum, fiber, tool steel, ordinary steel, aluminum and bronze.

A detailed description of the machine and its operation is not available, but, roughly, it consists of an iron casing eight or ten feet high in which is set a heavy revolving steel table with a hole in the center as large as the gear blank to be cut. Above and concentric with this hole is a clamping device to which an



View of tool set on revolving table showing cutting tools clamped in place. Adjusting cams can be seen at the outer edge of the table. Depth of cut is regulated by double gears shown at the lower edge of the picture. The arbor holding the gear blanks is forced up and down through the center hole and the cutting tools broach out the gear teeth. A heavy steel cover is bolted over the table.

arbor is fitted. On this arbor the gear blanks are placed. By a reciprocating, vertical motion the arbor containing the blanks is carried up and down through the hole so that the cutting tools come in contact with the work. The clamp and arbor are hydraulically operated.

The cutting tools for gear work are set in channels on the steel table, which is a chuck of unusual proportions and odd design. At the outer edge of the table are cams which anto-

Digitized by Google

matically adjust the cutting tools, while the arbor automatically indexes the teeth by rotation. The whole process is more that of broaching than cutting. The claim has been made that certain types of steel gears used in almost every automobile can be made on this machine at the rate of 300 gears an hour. This particular gear, it is claimed, wholesales for 66 2 3 cents, but produced on this machine and from the same stock, it can be sold as low as forty cents.

The company organized in Detroit is seeking a plant with the intention of beginning production in the fall, but if a factory suitable for this work cannot be found, one will be constructed. The present plan is to put 800 men at work when the plant is ready.

Employment in Detroit Is Better Than Pictured

The report of the Employers' Association of Detroit for the week ended June 7 shows conclusively that recent rumors started and guesses made by uninformed persons, as well as by some who seem only too pleased to circulate unfavorable reports about Detroit, are quite unfounded. While the upward trend in employment has not been for three or four weeks as marked as might be desired, the situation is far from being as dark as some have pictured it.

On June 7 there were employed in the 79 plants, members of the Association, a total of 113,530 persons, as compared with 113,496 for the week of May 31. Thus there were 121 more men on the payrolls. Quite a bit different, this, from the rumored lay-off of several thousands. Even more satisfactory is the statement that of the above total there were only 23,512 men working part time, as compared with 23,135 the previous week. These men were distributed among 27 plants and their average working hours was 31, or one-half hour less than during the week of May 31. There were 93,218 full time workers, or 2,947 more than the previous week.

Considering that the birth mark thus far this year was the week of May 10, when 118,497 workers were on the payroll of the 79 concerns, the decrease since then has been only 4,967.

POSEN'S FIRST FAIR

Following the example of other important European cities, such as Leipzig, Lyons, Brussels and London, the city of Posen, in Poland, held its first exhibition of samples of Polish industry and wholsale trade, May 28 to June 6. According to press reports the event was a success and will become an annual affair. The exhibits were in three groups, as follows: First, machinery of all kinds; tools, nails, screws, mechanical requisites, etc; second textiles, leather goods, articles carved in wood and bone, wicker goods and furniture, glass and porcelain goods and earthenware, fancy goods and toys; articles made of rubber, celluloid and bark, fancy boxes, Christmas tree ornaments, stationary, printed pictures, books, musical instruments, watches and clocks, photography, jewelry, building line, ornamental line, and, third, metal goods, household and kitchen utensils, lighting appliances, cooking stoves, brushes, painters' tools, rope, twine, foodstuffs and drinks, chemical, pharmaceutical and technical goods, surgical and cosmetical instruments and perfumes and toilet goods.

COPPER SALES EXCEED OUTPUT

According to the American Metal Market, approximately 100,000,000 pounds of copper were delivered in May—60,000,000 for domestic use and 40,000,000 for export. Production during the month is reported as aggregating 50,000,000 pounds.

STRAIGHT LINE METHODS

Balanced Business

No sales department, however well organized, can operate successfully with indifferent buying and producing facilities. Production on the other hand, however efficient, becomes overproduction, if not balanced by capable selling. Balance between departments must back up co-operation if waste, unnecessary overhead, shut-downs, are to be avoided.

Balanced Business, which means Better Business, is almost wholly dependent on sound Accounting Methods. Timely and dependable Facts and Figures from every department are the balance wheels—the executive's surest guides. All intelligent progress, broader missions, co-ordinated strength, larger profits — depend upon them.

And that Facts and Figures may more quickly and clearly tell the executive their vital story—Graphic Charts, the moving pictures of your business.

ERNST & ERNST

AUDITS—SYSTEMS
TAX SERVICE

DIME BANK BUILDING, DETROIT
304 NATIONAL CITY BANK BLDG., GRAND RAPIDS

NEW YORK
PHILADELPHIA
BOSTON
PROVIDENCE
WASHINGTON

CHICAGO
MINNEAPOLIS
ST. PAUL
ST. LOUIS
KANSAS CITY

CLEVELAND
BUFFALO
PITTSBURGH

CINCINNATI
INDIANAPOLIS
TOLEDO
ATLANTA
RICHMOND

NEW ORLEANS
DALLAS
FORT WORTH
HOUSTON
DENVER

STRAIGHT LINE METHODS

Digitized by Google

Maintaining Our Merchant Marine

Bare Boat Charter Basis, With an Early Revision Of Our Navigation Laws, Are Two of the Essentials

By JAMES A. FARRELL
President, United States Steel Corporation

"POLICY" is perhaps a misleading word to use in connection with the development of American shipping; from first to last the impelling force of that process has been the dictates of necessity. The future of our merchant marine development is at stake and its present position is the outcome of haphazard efforts to deal with a problem the requirements of which necessitated from the beginning a settled policy and a well defined purpose. Having inherited a legacy which has brought about an almost complete cessation of governmental as well as individual effort to obtain for American ships a share of our sea-borne commerce, it is necessary to consider the underlying forces and premises which have caused this condition, one somewhat analogous to our government's identification with the operation of our railways. Although it is unlikely that anything effective can be accomplished for the time being, during the present world wide depression, for which there is no precedent in the history of shipping, for the months of the fleet, there remains about 4,000,000 dead weight tons of ocean-going tonnage owned and operated by private capital.

The signing of the Armistice, November 11, 1918, found us with a fleet of 16,000,000 dead weight tons built and under contract to be delivered, constructed largely on a cost plus basis, which encouraged inordinate costs and put a premium on high overhead expense. Aside from their cost, the steel ships were well constructed and with a few exceptions compare favorably with the work of the best builders in any country. While we may only surmise what will ultimately become of the wooden ships which were built in a period of the dictates of military necessity, and in response to the appeal from our associates for ships and more ships, the fact remains that our steel ships are fine examples of the skill of American mechanics, and with a broad and enlightened maritime policy should prove useful in shaping the future of American shipping.

Equal Competition Necessary

A plan which will enable American ships to compete on terms of equality with those of foreign flags. Efforts were made after the armistice to induce the Shipping Board to sell a large portion of the fleet to foreigners (Congress having enacted a law forbidding the alienation of American vessels without the consent of the Shipping Board). For a period extending into the year 1919 an opportunity existed to dispose of a large portion of the fleet at prices bearing a fair relation to a moderately depreciated cost. At that time our competitors abroad had no advantage in cost of building and only a slight advantage in cost of operation. Not having taken advantage of this opportunity, the Government "missed its market" and, it is estimated, lost a chance to realize at least $500,000,000, a sum representing the difference in the market value of the tonnage of steel ships which could have been sold at that time and the appraised value today. Meanwhile foreign governments were obtaining large loans in the United States a portion of which was expended in the acquisition of foreign tonnage and in the placing of orders for new tonnage in other countries. Materials entering into the construction of ships were, as always, considered a commodity of commerce and were exported, but not so the finished ship; otherwise shipbuilding would have been stimulated and employment given our labor. Later, when the embargo was lifted, conditions had changed and opportunity had vanished. While the valuation that must ultimately be placed on the ships will bear no relation to their original cost, it is questionable whether under present conditions any considerable tonnage could be sold except at a sacrifice which is not warranted, pending a revival of business in foreign markets, and considering the nominal cost of maintenance laid up, and further considering that the world is over-supplied with tonnage and that there will be no demand, except for certain special types, until the present supply is absorbed. Any revival in the world's trade should find us with the necessary mechanism to protect our exports and facilitate their expansion.

The Problem

We should have ready also as a national security an adequate navy auxiliary in case of need. The necessity of a merchant marine to supplement our navy was realized at the outbreak of the World War and the United States should never again be placed in the position it was at that time, when it found itself without sufficient ships to support its army and navy, not to mention the necessity from an economic standpoint of maintaining our trade with neutral markets.

Readjustment of values is obviously necessary due to the fact that the present involved status of shipping is the outcome of unrestricted development begun in the emergency of war and expanded by continued exigencies, regardless of price or deliberate thought of subsequent economic results. Approximately 2,300 ships were so provided, of which 800 were put in service immediately following the Armistice under a no-profit agency agreement whereby the Shipping Board acted as commission to the operator without risk or liability to the latter. As will be remembered, ocean freights were abnormally high and the extremely liberal terms induced many to enter the business whose inexperience brought about a riot of extravagance in all branches of the shipping industry, and for this we are paying the penalty in inflated charges for ship repairs, wharfage, stevedoring, fuel, supplies, crews' wages, etc.

With this background of the forces and factors involved in the situation, serious consideration must be given to the problem of maintaining our merchant marine. It hardly requires much reflection and calculation to figure that even with a temporary improvement in ocean freights the world's idle tonnage cannot be absorbed under three years. All maritime nations are affected; counting England, France, Italy, Belgium, Japan and the Scandinavian countries, approximately 7,000,000 tons of carrying capacity are laid up out of a total of 60,000,000 tons (of which 5,000,000 tons is still under construction). In normal times, had there been no interruption of the natural growth of trade this tonnage would be largely employed; but because an economic metamorphosis has taken place as the result of the war and the ordinary processes of trade have been unbalanced, it will require time to build up the economic structure.

It might serve a useful purpose to onselves and the world to bring about an international conference of the maritime nations to stabilize the shipping situation, on the theory that one part of the world cannot be crippled economically while the rest is prosperous. The finances of Europe and other countries are in a chaotic condition, while the United States is prosperous. An international laying-up program on the basis of relative percentages of tonnage owned, and conference rates on a parity from all countries, would largely solve the problem by limiting the total tonnage of ships in employment to the cargo available. While this plan would appeal to practical ship owners the world over, intervention on the part of a maritime balance of nations would probably surround this economic principle with a maze of entanglements which would destroy the main purpose to be achieved; although the accomplishment would make a practical contribution to the promotion of peace.

There are many importers and exporters in this country whose desire does not seem to be to support an American merchant marine on an equal basis. It would be no great hardship for the majority of the American importers to pay a fair rate on their imports, nor for some of the American exporters of bulk commodities to sell their goods on a C. I. F. basis, thereby controlling the ocean freight and allowing American ships a reasonable freight rate. The great mass of foreign tramp tonnage will regulate the ocean freight rates for American steamers as long as our producers sell their products F. O. B. American shipping ports. This is not an appeal to patriotism, but an appeal to reason, since our producers cannot know their markets nor the laid down parity of their competitors' prices unless they include in their sales price the cost of their goods, the insurance and ocean freight to ultimate destination. It is hardly enough to maintain our ships on the seas against propaganda and disparagement largely by our own people, without forcing rates to a ruinous level by unfair means. It is up to American producers to support our shipping in this crisis; our merchant marine is an all-American proposition; co-operation should take the place of merciless competition. Producers of all kinds of materials of industry and soil, as well as capital and labor, should not only realize the possibilities of our merchant marine but the necessity for its maintenance, and the fact that in supporting it they are adding to our commercial prestige and national welfare. The maintenance of regular sailings of combined passenger and freight steamers between the United States and foreign ports is necessary for prompt carriage of the mails, express matter and merchandise. American travelers should give the American passenger vessels the same consideration that shippers should extend to the cargo carriers.

Trade Route Policy Impracticable

It is time to recognize the fact that the policy of the Shipping Board since its inception, of endeavoring to build up trade routes from every Atlantic, Gulf and Pacific port to practically every port in the world, is expensive and impracticable despite the claims that the abandonment of this policy would bring forth in

(Continued on Page 30)

Digitized by Google



Greater Production

Is the result of installing "Milwaukee" Milling Machines.

With the double overarms, constant speed drive, automatic lubrication, one piece box section column, box section solid top extended bearing knee, strong table and saddle, 18 speed changes, 12 feed changes in either direction, the great accuracy, small floor space required, and heavy cuts that can be taken, greater production naturally results.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

Motor Price Cuts Continue; Business Reports

A FEW MORE passenger car makers and one of the largest producers of motor trucks have joined the ranks of the price-cutters during the last few days. The latest reductions range from a mere $15 or $20 to a trifle of $1,100 to $1,900.

Indications are that business is improving. In some sections of the country there is no marked betterment; general advices have it that in the East, especially, sales are better. Quite a number of the automobile manufacturers have received visits from many of their dealers or distributors and the latter have placed orders for a fair number of cars. It cannot be said, however, that because distributors order cars this means actual sales to the public. In some cases at least 50 per cent of these cars have been actually bought or ordered by prospects, while the other half has been taken by dealers in order to have a fair amount of stock on hand for immediate delivery.

Here are some of the facts gathered from the press or from other sources as affecting the automobile situation.

As soon as the Nebraska Buick Auto Company, Omaha, Neb., heard from the Buick Motor Company that prices would be cut, it called a special meeting of its dealers. It is announced that about 300 came to Lincoln to attend the meeting. The result was that after learning the new prices the dealers placed orders for 151 cars. On the following day three dealers ordered thirty-two additional cars and eighteen more machines were ordered by individual dealers, making a total of 201 cars ordered at the new prices, and all for immediate delivery. The Nebraska Buick company further advises that on the last day of May 75 carloads of

By MARC BRAUN

Buicks were shipped to it from the factory and that another trainload was to follow within a week.

In commenting upon the situation one of the officials said: "Nothing indicates more plainly that the merchant and public are only waiting reasonable reductions on all merchandise, and when these come they will buy as usual and the entire business world will move forward in the steady way it did before the riotous times during the war. 'Bring your price down and we'll buy,' seems to be the slogan of merchant and buyer alike."

Sales of Ford cars on the Pacific coast, not only are good but the future is looking very promising, according to Controller F. H. Merrill, of the William L. Hughson Company, San Francisco, Cal., Ford distributor. While in Portland, Ore., and after having visited Seattle, Wash., he said he had been favorably impressed with business conditions in the northern metropolis, at least insofar as the automobile trade was concerned. The Seattle branch of the Hughson company, which started to handle Ford cars only last December, is now near the lead in sales among the entire Ford sales organization on the Sound. This condition refers to the latter part of May—that is, before Ford prices were reduced.

Concerning the Ford business in Portland, Ore., the six Ford distributors in that city announced a few days ago that during the period from January 1 to May 20, nearly 50 per cent more Fords were sold and delivered than during the corresponding period in 1920. The totals were respectively 1,212 and 851. There were at that time, May 20, some 335 cars ordered and still to be delivered. As for the whole state of Oregon, Manager S. A. Stellwagen, of the Portland Ford branch, stated that each month since January had shown an increase over corresponding months in 1920 of from 40 to 62 per cent.

According to a report from the East, the business of the Ford Motor Company's New York branch during May was the biggest in the history of the company. From the assembling plant at Kearney, N. J., 500 cars a day are shipped out, while two months ago 300 cars were leaving the plant daily, says the Wall Street Journal.

Regarding the business of the Packard Motor Car Company of New York the same paper said a few days ago: "This company, which is a sales subsidiary of the parent organization at Detroit, reports continued improvement in business. Sales and deliveries in May were substantially better than the previous month and thus far in June shipments have been more than twice those of the corresponding period of May.

"Truck business, which with many companies is practically stagnant, is particularly good with Packard. In the first seven days of June the New York branch delivered 24 trucks, as compared with twelve in the first seven days of May. The situation in the New York district probably is somewhat better than in most other sections, although Packard business throughout the country as a whole is improving."

Announcement was made by the H. H. Franklin Manufacturing Company, Syracuse, N. Y., that since the price cut of June 1, deliveries to Franklin dealers have increased 100 per cent.

(Continued on Page 32)

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.
J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

GENERAL MOTORS' SHOWING

Although production with the various subsidiaries of the General Motors Corporation averages only 45 to 50 per cent of capacity, sales show a constant growth, according to the Wall Street Journal, which says:

"Sales have shown a steady increase since the first of the year. Sales volume in dollars and cents for the first five months of 1921, as compared with the corresponding months in 1920, a banner year, were as follows: January, 24 per cent; February, 43 per cent; March, 54 per cent; April, 75 per cent; May, 72 per cent. Recent cuts in prices have greatly stimulated sales for the various units of the corporation. Even at the most drastically reduced prices these sales show a profit. Total sales for April and May amounted to about $35,000,000 for each month.

"Since the high peak which the General Motors Corporation inventory reached last fall, it has been reduced by about $85,000,000 from $217,000,000 to $159 000,000. The latter figure, according to operating executives, is but little above the amount of inventory which the Corporation should carry to transact a normal business.

"The Corporation's loans at present amount to about $70,000,000. Cash in banks amounts to about $44,000,000. The Corporation has accounts in 186 banks throughout the country.

"The net earnings, after all charges for both April and May, were more than $5,000,000 for each month, thus showing earnings for two months nearly in excess of the amount—about $6,250 000—required to pay the 7 per cent and preferred stock dividends for the entire year."

FRANKLIN PROFITS $775 000

The board of directors of the H. H. Franklin Manufacturing Company, Syracuse, N. Y., last week declared a common stock dividend of 50 cents a share, payable July 11 to stockholders of record June 30, 1921.

Profits for the first five months of 1921 are estimated to be in excess of $775,000, after taxes. Over this same period, 4 317 Franklin cars were sold, the retail value of which aggregated $14,500,000. June business has started out favorably, with 100 per cent increase in deliveries reported by Franklin dealers throughout the country for the first six days of the month (as compared with the corresponding period in May), this impetus following closely the drop in prices June 1. The Franklin factory continues to operate at 100 per cent capacity, or at the rate of 40 cars a day—a schedule which has been maintained steadily since February 10

NORDYKE & MARMON CHANGES

The Nordyke & Marmon Company, Indianapolis, Ind., announces the following changes in its personnel: A. R. Heinkel and H. G. Shafer, who were respectively treasurer and secretary of the company, have been promoted to be vice-presidents; former Assistant Treasurer H. L. Purdy is made treasurer, and Sales Manager H. H. Rice becomes secretary. The new sales manager is H. H. Brooks, while A. J. Rogers, advertising manager, becomes assistant sales manager.

A NEW PACKARD CARBURETOR

An invention which, combined with the "twelve" is said greatly to increase gasoline mileage, is announced by the Packard Motor Car Company in connection with its Single Six cars. It is a new style carburetor designed to give automatically a mixture which meets the needs of either heavy or light pulling. It is known as the "two stage fuel" carburetor.

"This new carburetor meets one of the most serious difficulties which has stood in the way of high gasoline mileage," says H. W. Peters, general manager of the Packard-Detroit Branch. "The ordinary carburetor gives entirely satisfactory service either when a car is idling or when it is pulling wide open, as on a heavy grade. But to do this it must provide a mixture which cannot be made materially leaner without loss of power on heavy pulls, or stalling when idling. Unfortunately for economy, about 90 per cent of all driving is neither idling nor heavy pulling. So for this 90 per cent the carburetor must give too rich a mixture.

"The two-stage jet carburetor takes care of this situation automatically. It gives the rich mixture when it is needed fully as well as the old style did. But in ordinary driving a leaner mixture is given without any attention from the driver. This is accomplished by having two jets, and the one for the richer mixture is placed so far above the medium speed jet that it will not work during ordinary running, but responds perfectly to the high suction from the engine which is created by a heavy pull.

DURANT CARS BEING ASSEMBLED

With about 200 men employed, rapid progress is being made by the Christman Construction Company on the Ver Linden assembly plant for Durant Motors, in Lansing. The force is steadily being increased and it is expected that between 700 and 800 men will eventually be engaged. Some Durant cars are now being assembled at the Long Island City plant and it is expected that they will be on the market by August 1. The machine is to cost less than $1,000. Local dealers are to be appointed soon. Of the 6,000 Durant stockholders in the United States, 300, or about 5 per cent, live in Lansing, according to G. N. Murchey & Company.

SHIPPING 125 OLDSMOBILES DAILY

Charles H. Tucker, Omaha, Neb., former sales manager for the Olds Motor Works; C. F. Batcheider, Macon, Ga.; R. V. Ramsey, Kansas City, and H. C. Dunn, Boston, distributors of Oldsmobiles, have returned to their respective territories after spending a few days in Lansing with Guy Pessley, sales manager. Business was reported to be good, especially for Oldsmobile Fours. The stock in the local plant is cleared out daily by shipments, which average 125 a day.

PINTLE HOOKS MADE STANDARD

Motor Truck members of the National Automobile Chamber of Commerce at their annual meeting adopted pintle hooks as standard equipment. Where such hooks are attached to motor truck or tractor frames they should be of the United States government type, according to the recommendations. The hooks should be so mounted that the axis of the drawbar head is located both vertically and horizontally approximately in the center of the frame of the chassis. It is necessary therefore that means be provided for fastening one end of the safety chain to the rear end of the motor truck chassis frame; the clevis is to be located directly under the axis of the drawbar head, or as near to this position as possible.

The position taken by the Trailer Manufacturers' Association of America was that it was not necessary for the truck manufacturer to place a spring behind the drawbar head or pintle hook on the motor truck. In substantiation of this the Association stated that trailers

Digitized by Google

made by reputable manufacturers have a starting and stopping spring in the drawbar or trailer head, which is of proper length and strength; any additional springs furnished by the truck manufacturers would therefore give too much spring action and cause the trailers to bump the truck. In the interests of better protection of the truck frame and driving mechanism, truck manufacturers, however, are urged to equip their drawbar heads with springs according to the recommendation adopted by the national chamber.

ANIBAL JOINS COLLINS

B. H. Anibal has resigned as chief engineer of the Cadillac Motor Car Company, Detroit, to become associated with R. H. Collins, former president of the Cadillac, in the new corporation Mr. Collins will head. Mr. Anibal is among the best known automotive engineers in the country and a number of the new engineering features found in the various Cadillac designs since 1911 were the result of his work. Previous to joining Cadillac, Mr. Anibal was with the engineering department of the Olds Motor Works, Lansing.

FIRESTONE PROMOTES HESS

Appointment of John D. Hess, Jr., as manager of pneumatic tire sales, with headquarters at Akron, is announced by the Firestone Tire & Rubber Company. Mr. Hess' advancement with the Firestone company is characteristic. Starting nine years ago as salesman at Detroit, he has successfully filled the position of branch manager at Cleveland, special representative to truck manufacturers, district manager on the Pacific coast and assistant to the western sales manager.

MEXICO CITY'S FIRST SHOW

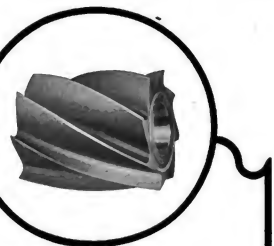
An automobile show, the first ever held in Mexico City, is reported to have been very successful. It was practically an American show, for very few European machines were on display. Among the cars shown were the Auburn, Cadillac, Cleveland, Chandler, Apperson, Chalmers, Bonr-Davis, Dort, Franklin, Essex, Overland, Moon, Haynes, Studebaker, Ranger, Franklin, Mercer, Lexington, Kissel, Lonestar, Premier, Willys-Knight, McFarlan, Gardner, National, Maxwell, Hudson and Mercedes. In addition to these passenger cars models there were shown Service, GMC, United States, Wichita, Ranger, Federal and L. M. C. trucks. In the tractor section there were the Titan, Hart-Parr, Ranger, LaCrosse, Case and Oilpull. On the first day, it is said, thirty-two passenger cars and six trucks were sold.

AGENCY ADDS THREE NEW MEN

In order to give direct personal service to a growing number of clients, Campbell, Blood & Trump, Detroit advertising agency, has added Gage Tremaine to its staff.

Mr. Tremaine has long been an outstanding figure among his profession in Detroit. He enjoys the advantage of several years experience as a salesman, which, coupled with his extensive study of merchandising practices and investigations of marketing conditions, gives him comprehensive grasp of the problems of distribution. He was a member of the McJunkin Agency, Chicago, and of the advertising department of the Postum Cereal Company before coming to Detroit. Here he conducted a business paper advertising agency in the Free Press building for four years, after which he became secretary of the Brotherton-Knobie Company. This position he resigns to take up his new duties.

The steady growth of the business of this agency has also led to the addition to its copy department of A. A. Levenseller and George E. Post. Mr. Levenseller has had broad experience in selling and in handling advertising detail. He joins the agency from Frederick Stearns & Company. Mr. Post, a former newspaper man, comes from the Lincoln Motor Company, where he has been editing the company house organ, the Lincolnian.



Why Speculate on Cutters?

Cutter speculation should have no place in the shop that requires accurate uninterrupted production.

The real money-saving method is to buy recognized cutters that have made good both in service rendered and quality maintained.

Fifty years as manufacturers of cutters is a sound foundation that makes you realize that

Brown & Sharpe Cutters

are not a speculation but a paying investment. Paying in dividends that your shop requires—higher quality and greater production.

Our catalog should be in your file.

May we send it?

Brown & Sharpe Mfg. Co.
Providence, R. I.

Brown & Sharpe
Cutters and Hobs

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon
Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS
Hardened and Ground Parts
INQUIRIES SOLICITED
The Machine Specialty Company
ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
483A Woodward Ave.
NEAR WARREN
Commercial and Portait
Rush Work Given Special Attention
Glendale 10

MAIN 1491
SPRUNK ENGRAVING CO.
Commercial Artists and Engravers
700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

National Cartage Assn. Cruises Aboard Noronic

[*By Staff Correspondent*]

ON BOARD THE STEAMER NORONIC, June 15.—Two hundred delegates representing 3,000 motor truck and team operators opened the nineteenth annual convention of the National Team & Motor Truck Owners' Association on board the Steamship Noronic, with addresses of welcome from Michigan and Detroit representatives, Monday evening. A four day series of business sessions, interspersed with a generous program of entertainment, featured the cruise.

For two years the Association has been going through a process of reorganization, which will be completed when the 1921 convention adjourns by giving its officers tasks to do that will make for radical expansion and development.

E. Foster Moreton, president of the Detroit Transportation Association, hosts of the convention, opened the first session with an address of welcome on behalf of the D. T. A. Maj. Ralph Duff, secretary to Governor Groesbeck, greeted the delegates on behalf of the State of Michigan, and John Atkinson spoke for Mayor James Couzens, of Detroit. F. J. Abel, of Buffalo, president of the national association, responded for the visitors.

Following the reports of officers, as the first business of the convention proper, Wayne Dinsmore, Chicago, secretary of the Horse Association of America, delivered an address on "The Horse as a Short Haul Moneymaker," which led to a storm of discussion.

Mr. Dinsmore prefaced his remarks by declaring they were the result of a survey made in more than 50 American cities.

"The horse and the motor truck each have their place," he said, "and the man who makes money from their use knows when the field of each leaves off and the other starts.

"I maintain that the horse is far more economical as a transportation unit than a truck for short hauls or for extended city hauls where stops are frequent.

"A horse can be put into haulage work when he is upwards of three years old. After he is five or six he is at his best, for a continuous period of time, with proper care, until he has been in service for twelve years in all. Before the time he is put at work on trucking he has done light duty on a farm. After he has served about six years on heavy duty he is still good for several more on lighter work. No motor truck can show such a low ratio of depreciation or can compare in maintenance."

Secretary F. L. Henk reviewed the work of the Association for the last year and outlined the plan along which the Association could make the best progress. He recommended the development of long distance hauling business as a standard unit of the business, urging the members to study their field and make the most of this element of their work. He opposed store door delivery as putting the rail roads into the cartage business and said that it was being fostered as a scheme to sell equipment in a field already overcrowded. More education along cost lines was urged.

President Abel reviewed the nineteen years of the Association and predicted a happy future for it.

Cargo insurance was the principal subject for discussion at the evening business session on Tuesday. C. M. Carter, of the Detroit Insurance Agency, outlined some new varieties of coverage created by the development of motor hauling.

According to all signs, Joseph X. Galvin, Chicago, now first vice-president, will be elected national president. There is also every indication that F. L. Henk, Detroit, will be retained as national secretary.

Wednesday the cruisers were taken through Georgian bay, with a stop-in in the afternoon at Owen Sound. They were welcomed by the Board of Trade of that city. In the evening there was a masquerade party.

The business men of Owen Sound turned out to welcome the convention and drove the delegates over the city's beautiful parks and hills. There was golf and special entertainment for the ladies.—FISCHER.

MEMBERSHIP DRIVE PROGRESSES

[*By Staff Correspondent*]

LANSING, June 13.—Good progress is being made in the campaign for membership by the Michigan Highway Transportation Association, which recently was organized and has established headquarters in Lansing.

Captains have been appointed to direct the work in different counties, and these will select committees of assistants. These captains and their territories are as follows: F. H Stevens, Jr. (Saginaw), Gratiot, Midland and Bay counties; F. H. Henk, managing secretary (Detroit), Wayne, Oakland and Macomb; E. H. Hopperstead (Muskegon), Ottawa, Muskegon and Newaygo; H. G. Beach (Jackson), Jackson and Washtenaw; W. G. LeStrange (Mount Pleasant), Isabel, Montcalm, Mecosta and Clare; W. G. Stones (Hillsdale), Hillsdale and Branch; Henry Wellman (Hastings), Barry and Allegan; O. L. Aiden (Benton Harbor), Berrien and Cass; E. F. Raseman (Kalamazoo), Kalamazoo, Van Buren, Calhoun and St. Joseph; E. O. Pickens (Adrian), Monroe and Lenawee; L. J. Flannagan (Marquette), Upper Peninsula; E. M. Radcliffe (Grand Rapids), Kent and Ionia; Charles Foster (Cadillac), Wexford, Lake, Missaukee and Oscoda; Henry H. Stevens (Flint), Genesee, Shiawassee, Lapeer, Tuscola and the Thumb district, and H. H. Hardy (Lansing), Ingham, Eaton and Clinton counties.

H. H. Stevens, chairman at Flint, has offered to give a box of high grade cigars to the captain turning in the most members by July 1. Each captain is to send in the application blanks together with the $10 fee direct to the office of the secretary, H. H. Hardy, in Lansing. A record will be kept and a daily report made to the chairman at Flint.



America's Headquarters for
Second Hand Electrical Machinery
Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.
CHICAGO, ILLINOIS

Digitized by Google

CROSS-STATE HIGHWAY PROPOSED

Willard M. Bryant, Kalamazoo, was in Lansing last week to promote his fourth and latest good roads plan. This is a state highway from lake to lake, which he wishes to see authorized by 1923, and named the Rogers highway in compliment to Frank E. Rogers, state highway commissioner. Mr. Bryant proposes that this road start at Port Huron, where Mr. Rogers began his career as a road builder while city engineer there, and proceed to Mount Clemens, Pontiac, Howell, Mason, Charlotte, Hastings, Allegan and on to the Lake Michigan shore. Eight counties would be served, the road would pass through an important agricultural section, and would be a direct east-and-west route only a trifle less important than the Detroit-Chicago highway. Mr. Bryant's first big vision. His second was the Victory highway and third, the Colgrove highway. All these three are in a fair way of being realized, Mr. Bryant said.

NEW VAN AT LANSING

The Fireproof Storage & Transfer Co., Lansing, is boasting an unusually large and striking truck van for both local and long distance moving. The body was built on a 2½-ton Packard chassis by the Hulet Top & Body Company, Detroit. It is painted yellow with a display of the firm's name.

BRYANT BILL DEAD

Among the bills which died with the extra session of the legislature last week was the Bryant measure for the licensing, taxation and regulation of persons, firms and corporations engaged in the transportation of persons or property by motor vehicles as common carriers on the public highways. This bill was reported out favorably by the committee on highways and was debated in the Senate. However, no action was taken, so the measure passes out.

As a result, the bus and truck men of the state are breathing easier. In case the bill had progressed very far they were prepared to fight it. H. H. Hardy, secretary of the new Michigan Highway Transportation Association, declares that the Government now taxes the trucking companies 3 per cent, and with the additional 5 per cent suggested in the Bryant bill, it would have made an 8 per cent tax on the business. In addition, there would have been a heavy bond to pay for. In many cases such legislation, he said, would drive firms out of business.

IRON MOUNTAIN TO ESCANABA

The Iron Mountain-Escanaba bus line, Quinnesec, Mich., is now in operation, the two vehicles ordered for the purpose having been received. The route is from Escanaba to Iron Mountain and return over the following route: Escanaba, Ford River, Bark River, Harris, Wilson, Spaulding, Hermansville, Loretto, Norway Qainnesec and Iron Mountain. The trip is scheduled to take three hours one way.

ITALY WELL "BUSSED"

Italy is said to be one of the most completely "bussed" countries in the world. A recent map brought out by the Fiat Automobile Company, Turin, the largest automobile manufacturing concern in the country, shows that at the beginning of 1921 there were 452 bus lines using the Fiat buses alone, these routes covering a total of 9,965 miles. It is not stated how many other bus lines there are, but it is estimated that fully another 100 may be added to the above total.

REGULATIONS IN FLINT

The city council of Flint has decided that jitney buses cannot be operated on streets having street car lines, the object being principally to relieve traffic conditions on these thoroughfares.

The jitney men vigorously protested the action of the council. The ordinance, which went into effect June 16, provides that to operate a jitney bus in the city a person will have to file with the city clerk the route over which he proposes to run, specifying terminals and hours of operation, and not until it has been approved by the council will he be allowed to operate. Violations are punishable by a $100 fine or imprisonment in jail for 90 days.

A great motor

THE truth gains ground in these days of sane thinking, that the six-cylinder motor has, after all, no real equal in power, flexibility, balance, accessibility, endurance, low repair expense—that is, in all-around merit.

WINTON SIX

Especially is this proved in the Winton Six. Fourteen consecutive years devoted by the Winton Company to the manufacture of sixes exclusively have brought exceptional results. There is one of the world's greatest motors in every Winton Six car. Shown anywhere at your convenience. Call or telephone for demonstration.

GEORGE H. ZUVER CO.
4465 Cass Avenue Glendale 4605

INTRODUCE YOUR PRODUCT ABROAD

Sell direct or establish agency connections in

Germany, Austria, Czecko-Slovakia, Holland, Belgium, Norway, Sweden, Denmark.

A personal interview will make clear to you how you must organize your business for foreign markets, or will assist your foreign department in locating new markets.

Mr. Samuel J. Hoexter will sail for Europe in July and is open to add a limited number of names to the list of those he represents.

S. J. HOEXTER, INC.

416 East Montcalm Street, Detroit.
Phone Cadillac 7611.

Potsdamer Str. 45,
Berlin W.

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO—7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITED—6:50 a. m. and every two hours to 4:50 p. m. To Lansing, 6:50 p. m.

JACKSON EXPRESS—7:50 a. m. and every two hours to 7:50 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

LEWIS G. GORTON

Stocks and Bonds

1413 Majestic Building, Detroit, Mich.

Member of Detroit Stock Exchange

LISTED AND UNLISTED SECURITIES

The Bellefontaine Bridge and Steel Co.

Fabricators of
STRUCTURAL STEEL

Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6889.

TRANSPORTATION NEWS

Rail :: :: *Water*

Lansing—At a meeting of the directors and stockholders of the Michigan Northern Railroad Company, in Lansing, last week, it was decided to reorganize the movement for a rail line from Lansing to Midland and Bay City and again present the matter to the Interstate Commerce Commission. New financial and moral backing was offered the company by H. G. Bacon, Sterling. Representing the towns of Sterling, Malperidge, Secor, Prescott and other northern sections, Mr. Bacon tendered rights-of-way and stock subscriptions if the company would project the line north from Midland to the Sterling district. This would touch a rapidly growing agricultural section and get in touch with the Detroit & Mackinac and Michigan Central above Bay City. The engineers reported that the road could be built now for from 45 to 60 per cent less than a year ago.

Another meeting will be held soon.

Washington—The Wyandotte Southern Railroad is a common carrier and as such is entitled to participate in joint rates with other common carriers or have its rates absorbed on interstate shipments, according to a decision published late last week by the Interstate Commerce Commission. The Wyandotte Terminal Railroad is held not to be a common carrier.

Detroit—R. J. Maclean, chairman of the inland waterways committee of the Detroit Board of Commerce, says that the Scott bill amending the LaFollette Seamen's Act probably will be reported favorably soon in Congress, and that it will be so worded as to be satisfactory to all interests concerned in Great Lakes transportation. Mr. Maclean believes the amendment will make possible the reestablishment of routes recently discontinued.

Grand Rapids—Announcement is made by A. K. Zwald, general agent for the Crosby steamship line, that daily service has been started between Muskegon and Milwaukee, and that connections will be made with the Grand Rapids, Grand Haven & Muskegon interurban trains.

Sault Ste. Marie—According to the report of General Superintendent L. C. Sabin, of the Soo canals, freight carried through the locks totaled 6,155,063 tons in May, as compared with 8,421,210 tons in May, 1920, and 10,566,326 in May, 1919. The number of vessel passages was 1,515, of which 1,127 passed through the American canals. Two million three hundred and three thousand three hundred and sixty-nine tons of soft coal were carried up the lakes and 214,776 tons of hard coal were brought north. Only 3,215 tons of copper and 18,562 thousand feet of lumber were carried through. Oil, upbound, figures in the total with 63,261 short tons; stone, 74,660 tons. Twelve million six hundred and nine thousand four hundred and sixty-nine bushels of wheat passed east bound, and grain other than wheat, 12,431,593 bushels.

Lansing—The Michigan Aero Service, Lansing, opened its business here Saturday, June 11, by giving eight-seeing tours, inaugurating passenger carrying. H. P. Ayres and Jack Burns piloted the two machines in use. The company will have ten flying machines in service by June 25, motors and frames being in transit for eight additional planes.

Two New Michigan Cars; One of Them a Steamer

Maurice Bollstrom, St. Louis, Mich., has been demonstrating in Lansing his new front-drive automobile, the power being applied to the front rather than the rear wheels. The machine was built largely from standard units but it incorporates a number of new features, the chief of which are the MB Puildrive axle, the MB Staffeldt universal and the MB Nohle trail axle.

These three power transmissions will be manufactured in quantity, according to the plans of Bollstrom and the company he is organizing, for sale to automobile manufacturers who want to use them in their models. The company also plans to build complete cars in all models incorporating the new features.

Among the advantages claimed for the inventions are roadability, passenger comfort, lack of body sideway when rounding curves, maximum amount of pulling power, less skidding liability, absence of mechanism back of the power plant, floor level with running board, any length of wheel base, lower slung body with same road clearance, and effective brake control of the front wheels.

The test car looks much like an ordinary automobile except that the motor sits somewhat higher atop the front axle, and tonneau is slung lower and the rear wheels extend somewhat farther back behind the body.

When sufficient progress has been made, the question of a site will be taken up. It is possible that Lansing will be selected. Mr. Bollstrom twelve years ago, following his perfection of the four-wheel drive principle, helped organize the Duplex company, then located at Charlotte.

The experimental steam automobile being manufactured by the Kirchen Machine Company, Lansing, was completed this week. The car is backed by Lansing financial interests and it will probably be made in Lansing. If approved by the capitalists back of the project, the Kirchen company will be authorised to proceed with manufacture, and this will mean expansions in the factory.

According to Otto J. Kirchen, president of the company, the car will weigh less than 2,000 pounds. It will be somewhat similar to the Stanley. The cost of the machine has not yet been determined. However, it is said the cost of operating the car by steam will be about one-fourth that of a gasoline automobile, while a speed of 150 miles an hour can be obtained.

The Kirchen Machine Company has just turned out 50,000 new Reo pistons, which will be sold on the open market. This piston is 22 ounces lighter than those now used in Reo cars. Besides doing a large local business, the company has received many orders from Howell, Jackson, Grand Rapids and other Michigan communities.

PROMOTIONS IN WILLS PLANT

C. H. Wills & Company, Marysville, manufacturers of the Wills-Sainte Claire car, have placed Richard L. Frost, formerly superintendent of the final assembly department, in charge of all factory departments, and Charles F. Morgana in charge of engineering and designing.

ZIMMERSCHIED'S NEW DUTIES

K. W. Zimmerschied, General Motors Corporation official, has been appointed president of the Toledo Chevrolet plant, to succeed Thomas W. Warner, resigned. Mr. Zimmerschied retains his other General Motors connections.

Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

The Babcock & Wilcox Co.
85 Liberty St., New York
Established 1868

Water Tube Boilers
Babcock & Wilcox
Stirling
Rust

Steam Superheaters
Chain Grate Stokers

Michigan District Office
411-412 Ford Building
Detroit



THE NEW CINCINNATI INTERNAL GRINDER
meets all requirements with
ACCURACY AND SPEED

THE MOTCH & MERRYWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT
CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google



THE eighth world wonder is the workman who really enjoys and prides in his work. We have him. In fact we have many just like him. How do we do it? By a system which recognizes merit and rewards initiative.

The benefit of such a system is soon reflected in the low cost of our work.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

MILLER-YORK

Ohio & Michigan Coal Co.

Miners and Shippers of Coal

LONE STAR

Mined at Blair, W. Va., C. & O. R. R.

BEST FOR { Gas and By-Product / Glass Plants / Excellent for Steam

BLACK HAWK SPLINT

Mined at Big Creek, W. V., C.&O.R.R.

FOR { Malleable Iron Plants / General Steam Purposes

Low Ash *High Heat Units*

Detroit, Michigan Main 4064

AJAX PATTERN WORKS, Inc.

Manufacturers of High Grade
Wood and Metal Patterns

Service Our Motto

Cherry 6451 Main 6402 — 690 Fort St., E. DETROIT

McMullen Machinery Company

Everything in Shop Equipment

GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Mount Clemens—The city of Mount Clemens has declared its intention to pave Crocker boulevard during the present season and Harrison township will extend the pavement on the same thoroughfare a distance of two miles to Lake St. Clair. This pavement forms the connecting link of paved highway between Detroit and Mount Clemens via Jefferson avenue and Lakeshore drive.

Mount Clemens—The contracts for paving Grand avenue and Leander and Clinton streets were awarded Thursday to Will C. Hartway, representing the Willite Company. Grand Avenue and Leander street, treated as one job, was let for $45,206.35, and Clinton street for $25,661.15. The construction will be of two-inch Willite surface, with six-inch concrete base. The city commission favored brick or asphalt block but all bids on this type of construction were above the estimates.

New York—The George A. Fuller Company announces that its unfinished work, April 30, 1920, amounted to $32,602,898.06; that work taken in during the year ended April 30, 1921, totaled $33,711,801.58 and that work completed during the year amounted to $47,129,475.85. This left unfinished work April 30, 1921, of $19,185,213.79.

Detroit—According to John J. Comerford, president of the Detroit Lumber Company and chairman of the Board of Commerce housing committee, which is conducting an investigation of building conditions in Detroit, has issued a statement in which he says that at a closed conference between members of the committee and representatives of the state banks of the city, late last week, the bankers said they were anxious to lend money to persons desiring to build their own homes but that they desired to eliminate speculation in such building. Mr. Comerford's statement reads:

"Figures were quoted showing that the financial situation in Detroit is not so bad as many have thought. The banks have been lending and will continue to lend money to build homes which they think are not likely to fall into the hands of fly-by-night speculators. In making such mortgages, however, the banks use their own valuations of the property involved. We did not learn the average difference between the prevailing market value of property and the bank valuation."

Another meeting of the committee was to be held Wednesday of this week.

Pontiac—Eight firms have submitted bids on the construction of 1,050 feet of 33-inch sewer, 2,514 feet of 30-inch sewer and ten manholes. The bids were as follows: Halpin & Watts, Toledo, $96,846; Foley & Riley, Chicago, $102,613; Liberty Construction Company, Detroit, $100,308; George Pontarelli, Chicago, $100,425; R. L. Oakley, Detroit, $126,494; Pitt Construction Company, Pittsburgh, $100,235; Manson Company, Cleveland, $121,282, and Moreno Burkham Construction Company, St. Louis, Mo., $128,717. The award will be made shortly.

Flint—During the week ended June 4 there were 82 applications for building permits, entailing an expenditure of $344,554. Of the total, 35 permits were for new buildings.

Detroit—The list of general contracts and sub-contracts let during the week of June 9 by contractors and architects includes two schools, a number of residences and stores, alterations to the basement of the Central Savings Bank and some minor jobs. The list of projects in the hands of architects as furnished to the Detroit Builders and Trader's Exchange includes a four-story 29-apartment building; a brick and stone 53-apartment building; a brick, steel and stone 12-apartment building; a brick and steel storage house; a reinforced concrete market building; an eight-story and basement club house and some smaller jobs.

Lansing—The city fire department has been granted $27,239.97 by the council ways and means committee for the erection of a building on the lot owned by the city, the structure to contain the new fire alarm system that the board of fire underwriters declared necessary.

Detroit—The total number of permits issued during the week ended June 11 was 331, involving an expenditure of $1,531,240, as compared with 307 permits involving $3,417,973 for the previous week and 626 permits and cost of $1,664,140 for the corresponding week in 1920. Of the 331 permits issued last week, 241 were for new buildings and the cost of these structures is estimated at $1,256,300.

Lansing—The Lansing branch of the Worden Grocer Company, which was destroyed by fire, last week, with a loss of nearly $300,000, will be replaced by a modern plant on an even larger scale. The site for the structure has not yet been selected, according to President Guy W. Rouse and Vice-President R. J. Prendergast, Grand Rapids, where headquarters of the company is located.

BLACK & DECKER PRICE GUARANTEE

The Black & Decker Manufacturing Company, Baltimore, Md., manufacturer of portable electric drills, electric valve grinders and electric air compressors, has sent to its jobbers notice that present prices are guaranteed for the remainder of the year. In the course of the announcement the company says:

"In the last seven years the total increase in the prices of Black & Decker products has only been 38 per cent.

"In the same time the average advance in machine tool prices generally, including portable electric tools, has been about 150 per cent.

"A reduction of 45 per cent would be necessary to bring machine tool prices generally down to the same basis as the present Black & Decker prices.

"It is doubtful that machine tool prices generally can ever get as low as within 38 per cent of the 1914 prices. Even the most optimistic economists predict that when all commodity prices are finally stabilized the new level will be at least 25 per cent higher than 1914."

HASKINS JOINS SEELYE-BROWN

The Seelye & Brown Advertising Agency, Detroit, announces that L. O. Haskins, vice-president and general manager of the Powrlok Company, Cleveland, manufacturer of the Powrlok differential, has become associated with the agency.

Mr. Haskins is well known throughout the automotive business. For a number of years he was located in Detroit as assistant general manager of the O. & S. Bearing Company. He left this company to go into service, during the war, and rose to the rank of major in charge of production and inspection of motor vehicles in the Chicago district, and was stationed in Detroit. Since the war, Mr. Haskins has been associated with the Willys group of interests. He is a member of the Society of Automotive Engineers.

MICHIGAN SCREW CO. PICKS UP

Business of the Michigan Screw Company, Lansing, has taken a spurt and the company is now on about a one-third basis. The increase in the Chevrolet schedule has helped.

Digitized by Google

1922 New York Motor Show In Madison Square Garden

The twenty-second annual New York automobile show of the National Automobile Chamber of Commerce will be held in Madison Square Garden, the location of the first exhibit, in 1900, according to an announcement made a few days ago following a meeting of the directors and officers of the N. A. C. C. The Chicago show will be held in the Coliseum.

Decision to hold the next New York show in the Garden was due principally to the fact that the Grand Central Palace, the scene of recent shows, is to be remodeled into an office building. It is probable that an overflow exhibit will be staged in the Sixty ninth Regiment Armory, which is within a block of the rear entrance of the Garden.

The National Chamber elected five directors, as follows: A. J. Brosseau, New York, International Motor Company; A. R. Erskine, South Bend, Ind., Studebaker Corporation; Alvan Macauley, Detroit, Packard Motor Car Company; Wm. E. Metzger, Detroit, Columbia Motors Company; R. E. Olds, Lansing, Mich, Reo Motor Car Company.

Officers elected include: Charles Clifton, Buffalo (Pierce-Arrow Motor Car Company), president; Roy D. Chapin, Detroit (Hudson Motor Car Company), vice-president; C. C. Hanch, Indianapolis (H. C. S. Motor Car Company), second vice-president (Passenger Car Division); Windsor T. White (White Motor Company), second vice-president (Motor Truck Division); A. J. Brosseau, New York (International Motor Company), secretary; H. H. Rice, Detroit (Cadillac Motor Car Company), treasurer; Alfred Reeves, New York, general manager.

President Clifton and Director William E. Metzger are the veterans of the board. Col. Clifton and Mr. Metzger have been serving the manufacturers from the start, Mr. Metzger going on the board eighteen years ago.

LANSING FOUNDRY IMPROVEMENT

Following a period of inactivity, production at the Lansing Foundry Company plant is improving rapidly, according to Lyman Covell. The plant is running five full days a week, with forty per cent capacity basis. Good sized orders are being received and employes are being added.

HUPP'S POSITION

The Hupp Motor Car Corporation, Detroit, has cleaned up the last of its bank loans and now has no debts except current bills, says the Wall Street Journal. The company has also carried through a plant expansion program through expenditure of around $2,000,000. Though Hupp had its share of high priced materials at the close of 1920, these have been worked off and the corporation is now purchasing for present consumption. The recent price reduction stimulated dealers' sales throughout the country. Operations now are not far from normal, being at the rate of 2,000 cars monthly. The plants were recently shut down for several days to permit sales to catch up with the output. When need arises, this policy will again be adopted.

UNITED ENGINE CO. BUSY

President Charles L. Sprinkle, of the United Engine Company, Lansing, reports that business is good and on a 100 per cent basis, with the export trade very satisfactory and prospects bright for continued prosperity.

VIM ON 20 PER CENT BASIS

The Vim Motor Truck Company, Philadelphia, which has been taken over by the Standard Steel Car Company, Pittsburgh, is operating at about 20 per cent of capacity, turning out fourteen trucks a day. Harold B. Larzelere, vice-president and general manager, will continue in that capacity.



A Machine Tool Service Station

In Detroit
where so many Warner & Swasey turret lathes are operating
a Service Staton is imperative,
so we put on at 5928 Second Boulevard.

Two practical men are there to serve you—
Men who know Detroit and its vicinty
and who know Warner & Swasey Turret Lathes,
C. S. Stilwell, Manager, and Wm. B. Pope.

Turret lathes of each size are on exhibit there.
You can buy one right off the floor if you like,
and equip it with tools from the stock we keep there,
or you can buy tools for the machines you have.
Our tools are adaptable to any make turret lathe.

Come and look us over—or telephone us.

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.		
Branch Offices:	Detroit	5928 Second Boulevard
	Boston	Oliver Building
	New York	Singer Building
	Buffalo	Iroquois Building
	Indianapolis	Lemcke Annex
	Dayton	Mutual Home Building
	Milwaukee	Sycamore Building
	Chicago	618-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN
Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, JUNE 18, 1921

Let the Utilities Alone

AS THE DATE of primaries for election to public office become proximate the candidates are getting ready to bait the corporations so that they may excite the interest of the populace and give them to understand that they are working for the best results. It is only a few months since the telephone industry in Michigan was saved from what seemed imminent disaster by the action of the Public Utilities Commission in making an advanced and profitable set of rates throughout the state. It is not very long since the Detroit City Gas Company was given an advance. About a year ago the street railway company in Detroit was allowed an extra cent as a result of a court agreement upon a showing that it was losing money. Saginaw had riots over its street car affairs; Grand Rapids gave its electric supply company some concessions; but now some politicians are seeking to cut them off, and so on and so forth down through the entire line of Michigan cities.

The success of industry and a program of good living in this state depends more today than at any other time upon proper service from the public utilities companies. That proper service cannot be rendered unless utilities companies are themselves permitted to make a profit. They cannot do it upon a loss because their surpluses have been exhausted and losses can no longer be sustained. Moreover, they are yearly asked for a higher quality of service and for a more thorough extension of their services into the communities in which they are located. Time was when the service of gas companies and electric railways did not extend through more than the business district and on long routes to the edges of the city. Today there is a demand for a general diffusion of the service of gas and electric companies and of closer contact between the railway lines and the homes of the people. All of this calls for a greater overhead, and generally a growing disproportion between gross income and gross investment.

We observe that the mayor of Detroit, who has several utility problems on his hands, has undertaken a new one; that he is endeavoring to procure a cut in the telephone rate, the result of which, if it be accomplished, can only be to reduce the quality of service and reduce the pay of thousands of employes of that corporation. Most of these utilities companies are natural converters. They do not create a service out of nothing and peddle it broadcast without very great help. They are among the largest employers of labor in this state. Telephone companies combine plant with the energies of operatives to produce service. Railway companies combine plant with the turning of coal into power and with the services of operatives to produce service. Electric light and power companies turn coal into energy which may be transmitted by wire, using the minimum of employes, while the aggregate of their employes is very many. Gas companies simply distil coal as raw material and distribute the gaseous product of the operation to users of gas service, selling their by-products in the public market. They are distinctly manufacturing concerns turning over raw material and the use of plants and the services of men and women to the public for a return upon the capital invested.

They have been permitted to go through very hard times since 1917; indeed earlier than that those of them that used the services of men and women and consumed coal were the victims of the high prices incident to that period of the war which preceded our own entrance into it. Practically since 1914 and until 1919 their complaints for additional revenue were not entertained. Their income was fixed by law or by regulation, and law had to be changed or public regulation applied before they could get what other manufacturers were getting in the way of increased prices for their services and their product.

In the case of the telephone industry we have lately been experiencing a betterment of conditions in Michigan as a result of the availability of larger income. That income has not been enjoyed so long that more than one-half year of its results have been noticeable in the earnings of the company. Yet with this encouragement the operators of these concerns in Michigan have discounted the future, have coaxed capital into their service at high interest rates and have been endeavoring to give the public a better and more uniform service for its money.

When general business is dull all the instruments which are available for the doing of business should be in the best condition. It doesn't make much difference when business is very good whether the long distance telephone service is efficient or not, because one is not so competitive for new business then as he is in the kind of times we are going through now; but in this kind of times it is absolutely essential that every method of transportation and communication and every domestic service which is handled in the gross by the public utilities companies should be at its best and that its operators should not be distracted between the question of giving good service and the other question of getting the money to pay for it.

Never before were the public utilities companies of Michigan deserving of such generous treatment as they are at the present time. They have no printing presses in the back room to turn out new $2 bills with which to pay their shortages. They must earn it from the public, and the portion of the public which is most interested is that which is engaged in commercial and manufacturing ventures. First of all, any diminution in the revenues of corporations of this kind must be followed by unemployment of a very large number of their operatives, and the Lord knows there is enough unemployment just now. Next, they must give a service which will be attractive and useful to the consumers of their services, if for no other purpose than to remove from the public mind additional causes of discontent. Again, they are in a very high market for money. Their extensions have been held up for years. If they are not permitted to earn high enough income to pay the higher interest rates, they cannot obtain the money for extensions.

The metropolitan city of Detroit always sets the fashion for a tax upon the utilities, because ambition to hold political jobs is always the greatest in that city, the jobs being so much more worth the holding. It is sincerely to be hoped that the attempt being made to reduce all utility rates as a question in the campaign of a candidate for office in the metropolitan city will not be imitated in other cities of the state, nor prove successful in the metropolis. These "birds" who run for public office want to make campaign funds out of other people's money but their own, and the easiest money to campaign and the easiest money to campaign on seems to be the income of the public services. Now, that money is just as necessary to industrial success and to permanent prosperity as is the money of manufacturers, and sensible people in the city of Detroit and state of Michigan will turn their thumbs down on the public performers who are anxious to ruin the public service in order that they may climb into public office.

Reducing the Motor Waist Line

IT WAS only a short time ago that the staunchest executives among the motor manufacturers ridiculed any possibility of business being benefited by price reductions. The president of

Digitized by Google

one of our important companies only two weeks ago stoutly defended the continued holding on to 1920 price schedules and a decided "not until we have to" attitude was clearly discernable in his remarks. His reasoning then was that those who could afford new cars would buy regardless, and that those who had "gone on strike" would not be converted by price concessions. And he argued further that as each successive maker cut his prices the limited buying power would flow temporarily to the newest price cutter, only to flow away from him when another over-anxious manufacturer made still further bids for the hand of the capricious purchaser.

It was a strange coincidence, therefore, that the gentle revival in the motor industry came during the period when prices were fairly evenly maintained (March and April) and that a perceptible slowing down appeared simultaneously with lowered prices. And those of the school of thought to which belongs the motor car company president referred to above took great delight in saying, "I told you so."

But events of the last ten days have rather unsettled some of these gentlemen of the old school. There is too much activity around the plants which got into line early, to make converts to the old idea, and the reappearance of new cars of several makes on our streets immediately following the price reduction has had an enlightening effect all around. Thus it is not at all surprising to hear a man high up in the automobile manufacturing business say, "Some of us have learned part of our lesson and the rest of us are trying to learn in a few months of depression what the steel industry learned by experience with many years of ups and downs."

This brings the thought, when we stop to ponder over it, that this is in fact the first experience with continued falling prices the automotive industry has encountered. Small wonder, therefore, that many of the leaders have conducted themselves like hens being shooed from dry gravel into a pond. Of course, Henry Ford was the first to try out the new surroundings, but in the automobile world his company is neither fish nor fowl and the fraternity never considers him when dipping into the economics of the the thing.

Nevertheless, in examining the swift changes that are taking place in the industry one can not avoid encountering the query: "How is the loss in gross income being offset?" To answer this, one must not only consider lower wages, materials and other costs, but must take a trip through some of the plants. He will see here and there an entire room filled with expensive furniture but devoid of anything human except perhaps a few filing girls. Where two $10,000 officials once held forth, there is now only one. Where it was formerly considered necessary to drive cars through to Buffalo on the eastward journey, some now wait for the boat lines, according to one shipping official, to save several dollars per car. In another instance a former advertising chief who was paid $10,000 a year has been replaced by the former assistant at $4,000 a year. These illustrations are only a few of the total which will come to the eyes or ears of him who seeks the answer. It is in this wise that those concerns foremost in the industry are beating the devil around the stump.

The vice-president of another corporation, an adequate description of which would be equivalent to stating its name, says: "Do not draw conclusions about the industry to hurriedly." He promises that when his concern gets through cleaning house, the public is going to have confidence in it equal to that now lodged in the U. S. Steel Corporation.

Business has felt these changes in motor car prices in a peculiar way. They have been an unmistaken signal to the restaurant man, for example, to get in line—which he has done with alacrity—and a fairly nourishing meal is now obtainable for less than fifty cents. Hair cuts are plentiful at twenty-five cents, with clothes at one's own figure, almost. Not so with shoes and rents, but the latter problem is taking care of itself better than anyone thought possible a month ago, although the operation is leaving many landlords who bought property during 1920 as shorn of net income as a sheep after the clip. In one instance, which was related by the secretary of the Bankers Trust Company, Detroit, it appears that a flat building previously returning a gross income of $2,300 a month is now rented for $1,700, and much of two months rent is past due. When the owner was asked if he could not get the overdue rent by chattle mortgages on the tenants' furniture, he replied that he had rather take the loss than be the cause of two or three suicides. Such is the effect of the price toboggan on the real estate situation. Nor are there renters waiting any more to move in where others are moving out. Whereas a year ago Detroiters going to the lakes for the summer could rent a flat for which they paid $100 a month to a summer tenant for $200 a month, desirable sub-lessees are not plentiful at the price of the first lease.

Incidentally, while the trend continues downward as to prices of all things except taxes, a new spirit of old fashioned confidence in the existing scheme of things is slowly springing up. The writer walked out Michigan a few evenings ago and mingled with a crowd being harangued by a socialist street orator. Men were drawing in and out of the throng, and it was decidedly refreshing to hear several comments such as, "old stuff" and "get something new," from some of the men who showed by their appearance that they were the very workingmen whom the speaker sought to "edify."

Two weeks ago a man who wholesales spark plugs said he was practically out of business except for his Ford account. This week he took back his stenographer in order to answer inquiries about prices and deliveries. A man who makes door checks, those formidable appearing things which lose their reputation when the garage door is encountered, related an almost identical experience, with the added encouraging feature that he already had orders which would keep him humping until the end of August.

No, the industry isn't dead; it is merely on a diet, and when it gets completely weaned from its war time bill of fare and its waist line is reduced, it is going to give a surprisingly agreeable account of itself.

Short Measure Stuff

SONNET TO A LITTLE HOUSEWIFE

I used to read and listen to Jokes tell
Of royal cooks who took some shortening.
A gooseberry and an egg, and baked the King
A pie that made the old boy rire and yell.
I always thought; That's good. It listens well.
But who believes it? Till you came one Spring
And with canned pumpkin did a marvelous thing.
A pie that simply had no parallel.

I wed you, dear, for sentimental reasons;
The charming what-do-you-call-it in your eye;
Your poppy mouth; your hair; your moody seasons
They save me from all local Lorelei.
But should you fear I plot connubial treasons,
Don't trust to these, my dear—quick, bake a pie!
—Pendello, in the Cleveland Plain Dealer.

• • •

GET A SERUM TO FIT THE CASE

Somebody is always taking the joy out of life. Now comes a state health department official who says that the typhoid prophylaxis administered to the boys when they were mustered into the service has worn off and they should all be given another shot in the arm. We are willing to bet ten years of the health officer's life that most of the bucks who took that quart of serum at one session won't be storming the medico's tent for another pumpfull.

• • •

It would appear that our Ed. Denby made a little home rule for Admiral Sims.

• • •

More than two weeks now and Germany hasn't come out with a new proposition about the indemnity.

• • •

Vacation time
Is here and oh,
I wish I had
Some extra dough

• • •

Talking about a period of depression and deciding when it will end is about as fruitful as calling the Kaiser names was before a certain November 11.

• • •

Work for the night is coming, else you will have to get on the night gang.

A. F.

Digitized by Google

F I N A N C I A L

Business Really Is on the Mend

By PHIL S. HANNA

BUSINESS is gradually getting well." This allegation was tried out on several friends this week —a motor manufacturing company official, a garage proprietor, a banker, a retailer and a blue sky promoter. You may inquire, why ask a blue sky man about business prospects? The answer is that he usually gets closest to the man with loose money. But first of all we of Detroit are interested in the financial health of the motor manufacturers and surely cannot fail to heed signs of betterment notwithstanding the action of the stock market.

So it was distinctly encouraging to hear the banker say: "The M——company now has more than half a million in cash and will soon be out of danger. Its bills are being met in a creditable way and another month as good as the last two weeks will see many of the old accounts taken care of." Continuing, this banker said: "The H——company owes very little in the way of bank loans and current bills and it has practically used up its high cost inventory, and the H——company (another concern) while not employing anywhere near its usual force, has paid off the banks, cleared up its inventory and is now in the market buying materials for a production program to start July 1. We received $300,000 'at one crack' from another motor company, so that you can tell your readers that it is our experience that the automobile manufacturers are paying their loans.

The motor company officials said: "Business is getting well because confidence in prices is gradually returning, and while I do not believe in prophesies, I like the way sales are picking up. Some jobbing concerns are beginning to give notes in payment of their accounts that have not done so heretofore, but the ones I have in mind are the lines of business which had fairly good business during the slow months with us last winter."

The garage proprietor spoke differently. At first he said he did a nice business fixing up old cars which people decided to use through the winter rather than buy new ones, "but since the price cuts," he added "we can feel the difference in this line of work. In many respects we have been made the 'goat,' for everybody and his grandfather has hung out a garage sign and the competition is simply fierce."

Nor did the retailer enthuse over the statement, although he admitted that his trade in summer clothes and hats was more satisfactory than he had expected. But here in the man who is sure that business is on the mend, although not in such a way to help his business—the blue sky man, who recited that "people seem to feel for example, that Continental Motors at 5¾ is a better buy than stuff which will pay big dividends." What better encouragement can there be, looking at the broad aspect of the situation, than to hear that investors are picking out stocks of real merit. This means also more money for good bonds, which means more money for retail trade.

It is not yet time to throw off serious restraint but the important thing now is to make sure that we notice the items of improvement as they appear. We are thus able to back up our opinions with particular examples of betterment in business. It is the safe and sane way to keep sentiment free of either unjustified optimism or pessimism. One man armed with facts can thus dispel the gloom of a dozen pessimists.

FISHER BODY STATEMENT

The Fisher Body Corporation's annual statement and report, just issued, reveals some interesting changes in that concern's financial status.

Herewith is presented the comparative income account and balance sheets of the corporation, which includes the Fisher Body Corporation, Fisher Body Company of Canada, Ltd., National Plate Glass Company, International Metal Stamping Company, Terrestrial Manufacturing Company, Shepard Art Metal Company and the England Manufacturing Company.

It is noteworthy that net profits for the fiscal year ended April 30, 1921, were $4,809,000, as compared with $4,367,000 for the year previous notwithstanding the fact that the most recent period includes about eight months of the business depression. Bank loans are reduced $7,895,000, as compared with April 30, 1920, and current assets in proportion to current liabilities are in the ratio of 32 to 11, as compared with a ratio of 45 to 20, April 30, 1920. The net earnings reported are figured after taking $1,645,000 out of income for bringing inventory down to market values.

INCOME ACCOUNT, FISCAL YEARS ENDING

	Apr. 30/21	Apr. 30/20
Net earnings, all sources, after all ordinary expenses, repairs, maintenance, renewals and depreciation	$ 9,203,960 61	$ 6,717,867 22
Less extraordinary expense and losses		
(a) Reduction inventory to mkt.	1,645,000 00	
(b) Appn. to cover loss on Canadian exchange	90,947 10	250,000 00
(c) Expense in cancellation of contracts	86,421 93	.....
	$ 1,820,368 50	$ 250,000 00
Balance	$ 7,383,591 62	$ 6,467,867 22
Less		
Interest on bank loans	$ 372,870 29	$ 358,758 04
Interest on bonds and debs	10,760 21	305,824 40
Dividends on subsidiary companies' stocks		13,940 00
	$ 1,383,630 50	$ 678,522 44
Net earnings before Federal and Canadian taxes	$ 5,999,961 12	$ 5,789,344 78
Less provision for Federal and Canadian taxes	1,190,000 00	1,190,000 00
Net earnings and income	$ 4,809,961 12	$ 4,599,344 78
Assets		
Property account	$ 26,868,142 18	$ 21,720,691 16
Less reserve for depreciation and amortization	6,626,804 56	3,779,690 17
	$ 20,241,337 62	$ 17,941,000 99
Plus good will, value subsidiary companies	2,315,661 76	3,285,379 39
Patents	171,775 20	198,130 86
	$ 22,728,124 64	$ 19,465,020 24
Investments—		
(a) Investments in and advances to affiliated companies not wholly owned	363,285 50	
(b) 3,500 shares corporation common at cost	365,777 92	1,992,911 27
(c) Chevrolet Co. notes (2) due April 1, 1922-25	2,000,000 00	4,000,000 00
	$ 2,729,063 42	$ 5,992,911 27

Who's Who In Michigan Finance

Harry O. Mohrmann, Deputy Commissioner of the Banking Department

Harry Mohrmann is not from Utah. He is another successful product of northern Michigan, although the bankers have sometimes been under the impression that he came from Missouri.

In the fall of 1909 Mr. Mohrmann became a bookkeeper in the First State Bank of Central Lake, where he continued until Messrs. McPhail and Richardson established the Citizens Bank of Ellsworth nearby and he was placed in charge there of. For three years he conducted the affairs of that bank, which involved handling every department of the banking business from sweeping out in the morning to attending directors' meetings. In the fall of 1913 he became assistant cashier of the Charlevoix County Bank, Charlevoix, where he continued until January, 1917, when he became bank examiner at Lansing. In March, 1920, he became chief examiner and on June 15, 1921, was appointed deputy commissioner to succeed J. M. Conway, who resigned to enter a Detroit bank.



H. O. MOHRMANN

Cash in sinking fund, retire preferred stock		$7,711.31
Current assets—		
(a) Liberty loans (see reserves)	$14,206,286.23	$18,119,613.69
(b) Chevrolet Co. notes due June 1, 1921-22	2,440,000.00	12,840,000.00
(c) Customers' accts and notes	6,978,645.17	5,009,997.75
(d) Cash	4,781,055.14	7,901,736.72
(e) U. S. and Canadian bonds		1,570,000.00
	$27,405,986.62	$46,004,932.50
Deferred charges—		
(a) Prepaid taxes, interest and insurance	$ 516,795.53	$ 396,870.90
(b) Organization expense, subsidiary companies	77,661.91	.....
(c) Unamortized expense issuing securities	601,166.36	820,353.16
	$ 1,194,623.80	$ 1,717,224.06
Total	$62,561,425.49	$72,329,893.51

LIABILITIES

Outstanding 7% preferred stock par $100	$ 2,470,600.00	$ 4,213,500.00
Equity appertaining to 500,000 shares, no par, common	29,721,181.96	28,711,324.98
National Plate Glass stock owned by public	650,000.00	800,000.00
Cl. A preferred stock, Fisher Body Co.	5,000,000.00	5,000,000.00
Serial gold notes, National Plate Glass Co.	3,750,000.00	4,000,000.00
First mortgage purch. money bonds, Federal Plate Glass Co.	750,000.00	750,000.00
Land contract payable	49,000.00	75,000.00
	$ 9,569,000.00	$ 9,825,000.00
Current liabilities—		
(a) Bank loans	$ 5,665,000.00	$12,560,000.00
(b) Other loans	437,961.90	.....
(c) Accounts payable, account pay rolls and interest	2,504,583.50	5,130,370.24
(d) Reserve for Federal income and profits taxes	1,449,250.51	1,887,965.50
	$10,056,795.91	$20,578,335.74
Reserves—		
(a) For red. of liv. to mkt.	$ 1,645,000.00	.....
(b) For repairs to furnaces and labor	45,714.02	.....
(c) For loss Canadian exchange	150,000.00	250,000.00
(d) For contingencies	521,242.80	671,443.62
	$ 2,361,956.82	$ 921,443.62
Surplus—		
Balance at beginning	$ 6,396,139.79	*$ 4,422,309.67
Plus net for year	4,809,961.12	4,599,344.11
	$11,206,100.91	$ 9,189,940.21
Less—		
Dividends on pfd stock, 7%	$ 256,395.50	$ 296,326.25
Dividends on common stock	2,500,000.00	2,500,000.00
Dividends on Nat. P. G. pfd	60,000.00	.....
	$ 2,816,395.50	$ 2,796,326.25
Balance	$ 8,389,705.41	$ 6,393,613.96
Less premium on pfd retired	34,164.13	11,828.83
Balance surplus fund	$ 8,355,541.28	$ 6,381,785.79
Total	$62,561,425.49	$72,329,893.51

*Balance May 1, 1919, reduced $449,941.29 by adjustment of depreciation and amortization prior to that date.
†Less discount gain on preferred stock retired.

Digitized by Google

Michigan Bond Items

Seven hundred fifty thousand dollars of Southwestern Power & Light Company twenty-year, 8 per cent bond secured notes are being offered on an 8.10 per cent basis by Bonbright & Company and Halsey, Stuart & Company. These notes are secured by first lien and general lien bonds in the ratio of 2 to 1.

At a special election, Tuesday, June 7, the citizens of Houghton county and the city of Hancock voted on a proposal to bond both the county and city. In each case the bond issue carried. The county by a vote of 4 to 1 decided in favor of issuing $200,000 of bonds for road work. The city voted 5 to 1 in favor of a bond issue of $50,000 to run for a period of 20 years. This money is to be used for the purpose of paying off accumulated debts and for street and alley improvement.

A $60,000 issue of Macomb county hospital, 6 per cent bonds were sold June 10 at private sale to the Citizens Savings Bank, Mount Clemens, at par. Bids on these bonds were received June 2. The best proposal at that time was about $1,000 below par and all bids were rejected and the county building committee instructed to readvertise for bids to be opened June 25. The offer at par came unexpectedly from the bank and was made subject to immediate acceptance.

The Macomb county road commission, Mount Clemens, will receive bids on June 20 on $400,000 of road bonds bearing 6 per cent interest.

The Gladstone State Savings Bank, Gladstone, has purchased a $175,000 city bond issue for the erection of a junior high and grade school. This is said to be one of the largest bond purchases made in that part of Michigan by a bank in many years. W. W. Gasser, who represented the bank, appeared before the members of the board of education and announced the bank's proposal to carry the bonds at a rate of 6 per cent interest. It was not the intention of the bank to float the bonds but to carry them to maturity.

The Guaranty Trust Company of New York was the successful bidder for $2,000,000 of Detroit municipal railway bonds, June 14, paying therefor at the rate of 100.25. The issue was divided into two equal parts, the first bearing interest at the rate of 6½ per cent and the remainder carrying 6 per cent.

M. A. YOUNG TO RETIRE

M. A. Young, one of Detroit's pioneer automobile dealers—having launched in the business in 1900—is retiring July 1. He will lease his large sales and service building in Woodward avenue and take a long vacation. Mr. Young's first location was at 127-29 Grand River avenue, where he handled the Elmore two-cycle car. Next he was at 254 Jefferson avenue. In 1910 he located at 754-58 Woodward avenue, where he remained nine years, selling the Elmore, Mitchell and Reo. In 1919 Mr. Young built his present building, in which he has been handling the Peerless and Chandler.

BUICK HAS BIG DRIVEAWAY

During the latter part of the week 500 Buick cars were driven from Flint to Chicago for distribution in that territory. This fleet of cars was one of the largest ever sent away from the factory.

REED FURNITURE PLANT REOPENS

Business in sight and contracted for has prompted the Ypsilanti Reed Furniture Company to reopen the Portland factory on a full working day schedule with 90 employes.

Business Meets New Conditions

American business has been clearing decks. Budgets have been revised. Every buying, selling and production unit has been overhauled and made ready for intensive service. Economy has been the test—economy of time and effort.

In any study of functions and readjusting of methods, the work done by your bank balance should not be overlooked. Has it been merely a checking account and a basis for commercial credit? Or has it brought to the aid of your organization other constructive services? Are you making use now of all the help it should provide?

Many business men who carry deposits with the Irving or with Irving correspondents have discovered broader service possibilities in their banking connections. The Irving investigates markets as well as credits, expedites deliveries of merchandise as well as collections, supplements the information resources of its customers both in domestic and foreign fields. Every transaction it undertakes, either at home or over-seas, is handled with a clear understanding of business essentials as well as careful attention to banking requirements.

IRVING NATIONAL BANK
WOOLWORTH BUILDING, NEW YORK

1851-1921: SEVENTY YEARS A BUSINESS BANK

Motor Stocks
Wm. A. Neer & Co.
Members Detroit Stock Exchange

COURTESY
SERVICE
SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

The
Public Accounting Department
of
THE MICHIGAN TRUST COMPANY

PREPARES Income and Excess Profits Tax and other Federal Tax Returns;

INSTALLS General and Cost Accounting Systems;

MAKES Audits and investigations for any purpose desired.

Pearl St. and Ottawa Ave., Grand Rapids, Michigan.

7% FARM DRAINAGE BONDS 7%

There is no better Security on earth than Tax Liens on Cultivated Farms.

Ordinarily FARM DRAINAGE DISTRICT BONDS pay the Investor Six Per-cent, but for quick sale, we offer ten choice issues to pay from 7% to 7½%. Interest payable annually or semi-annually by coupon collectible at your bank.

They come in $1,000, $500 and $100 denominations, and run from Three to Twenty years and are FREE OF ALL FEDERAL INCOME TAXES.

Upon Postal Card request, we will send Circular No. 1963—"A Few Reasons Why Farm Drainage Bonds Are So Highly Regarded."

Interest is falling. Buy High Income now for future years!

THE HANCHETT BOND CO.
(Incorporated 1910)
Municipal Bond House
CHICAGO
Dime Bank Bldg., Detroit.
W. H. Dunham, Representative.

We have active markets in all Detroit securities.

JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Members Detroit Stock Exchange
DETROIT

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

	June 8, 1921	June 1, 1923	June 13, 1920
RESOURCES			
Gold and gold certificates	297,476	261,095	168,192
Gold settlement fund—Federal Reserve Board	521,539	601,746	481,905
Gold with foreign agencies	.....	.....	111,631
Total gold held by banks	819,015	735,844	711,629
Gold with Federal Reserve agents	1,460,358	1,477,636	1,103,751
Gold redemption fund	151,399	146,144	149,678
Total gold reserves	2,430,672	2,408,652	1,965,058
Legal tender notes, silver, etc.	161,874	160,172	137,533
Total reserves	2,592,546	2,568,826	2,102,591
Bills discounted			
Sec. by U. S. Government obligations	747,066	772,563	1,440,921
All other	1,149,563	1,152,370	1,062,019
Bll's bought in open market	69,801	77,073	463,894
Total bills on hand	1,966,460	2,002,306	2,936,846
U. S. Government bonds	32,662	32,915	26,796
U. S. Victory notes	23	23	69
U. S. certificates of Indebtedness—			
One-year certificates (Pittman Act)	235,375	236,375	259,375
All other	1,662	6,614	20,733
Total earning assets	2,226,572	2,249,732	3,243,819
Bank premises	23,842	23,497	13,511
5% Redemption fund against F. R. bank notes	10,449	10,427	11,794
Uncollected items	541,495	647,094	771,796
All other resources	13,433	15,114	6,864
Total resources	5,407,366	5,424,689	6,139,969
LIABILITIES			
Capital paid in	102,066	102,216	94,234
Surplus	202,036	202,036	130,130
Reserved for Govt. Franchise Tax	38,057	36,283	.....
Deposits—			
Government deposits	20,261	23,353	21,630
Due to members—reserve account	1,634,075	1,656,861	1,869,340
Other deposits, including foreign government credits	30,721	31,466	81,500
Total deposits	1,735,057	1,720,390	1,972,570
F. R. notes in actual circulation	2,710,723	2,751,399	3,112,705
F. R. bank notes in circulation—net liability	141,054	143,492	132,232
Deferred availability items	447,357	448,087	676,466
All other liabilities	31,036	30,886	73,943
Total liabilities	5,407,386	5,424,689	6,139,969
Ratio of total reserves to deposit and F. R. note liabilities combined	58.3%	57.4%	*42.0%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	73.2%	71.5%	*47.5%

*Calculated on basis of net deposits and F. R. notes in circulation.

WILLYS-OVERLAND FINANCING

Plans are taking form for the clearing up of the financial problems of the Willys-Overland Company, Toledo, says the Chicago Journal of Commerce, particularly with regard to taking care of the corporation's bank loans, which fell due early in the year. Representatives of the banks directly interested have been holding a series of conferences and have practically agreed upon a plan which, it is believed, will adequately meet the situation. The company has steadily improved its position since the beginning of the year and at present has cash on hand equal to approximately 35 per cent of the $21,000,000 of bank loans outstanding. Moreover, the company, by reason of the drastic slashing of inventories at the start of the year, is now in a position where it can produce cars at a reasonable profit.

HOSSICK'S NEW CONNECTION

Fenn H. Hossick, who for some years has had charge of all direct mail literature for the Burroughs Adding Machine Company, has joined the staff of the Power, Alexander & Jenkins Company, Detroit advertising agency. Mr. Hossick, who has had a wide experience in the newspaper and advertising fields, was for a time assistant advertising manager of the Nash Motors Company, Kenosha, Wis.

SPEIR TALKS TO INSURANCE MEN

Robert Y. Speir, vice president of the Capital National Bank, Lansing, was the principal speaker at a banquet given last week by Clare Lamoreaux, superintendent of agents for the Detroit Life Insurance Company in honor of M. E. O'Brien, president of the company, who visited the capitol in company with other Detroit Life officials. Mr. Speir's topic was: "The Relation of the Bank to the Life Insurance Solicitor," and he paid a high tribute to the life insurance profession, saying in particular: "Life insurance as an augmentation of the merit of collateral cannot be underestimated" and "a very practical way for a life insurance solicitor to get properly established with a banking institution is to maintain a substantial working account with the banks. While all banks like all the business they can get, large and small, an average checking balance of $200 is looked upon as of importance enough to warrant special consideration from the officials of the banks. Therefore the agent who maintains such a balance always may reasonably look for especial consideration when he desires to have his notes handled. The agent who makes it his particular business never to turn over notes excepting when he is reasonably certain that the bank can collect on them readily, establishes himself on a firm foundation with the bank."

The Detroit Savings Bank
Unsurpassed in convenience and location;
Splendidly equipped for ser-ice.
GRISWOLD & STATE STREETS

Digitized by Google

Special Session Adjourns After Passing 33 Measures

Of the 72 measures submitted to the legislature at the special session, which closed last week, thirty-three were passed. The most important of these were the soldiers' bonus and that providing for an income tax amendment plan to be submitted to the voters.

The bonus bill was introduced in the House by Rep. Vincent P. Dacey, Detroit. The hottest fight was over the bond provision of the bill. As finally passed, the measure provides for a $30,000,000 issue for a straight thirty years from next July, at 5½ per cent interest. The state administrative board is empowered to create a sinking fund to buy back these bonds, or it may invest the money in other public securities, the interest from which would offset that on the bonds. Every ex-service man will be entitled to $15 a month for service between April 6, 1917, and Nov. 11, 1918. Dependents of those killed or who died will receive the same amount from the date of enlistment to August 1, 1919.

Rep. Peter Lennon, Genesee, introduced the income tax amendment, which will be placed before the voters at the general election in November, 1922. The amendment authorizes the legislature in its discretion to enact an income tax law. This tax may not exceed 4 per cent upon or with respect to gains, profits and incomes. The tax may be graduated and progressive and may provide for reasonable exemptions. For the purposes of such tax, property and persons, firms and corporations upon which such tax may operate may be classified.

The Wood bill, which was passed, is aimed at the alleged sprinkler trust, and provides for a sprinkler head commission, to comprise the state insurance commissioner and the deans of engineering at the University of Michigan and Michigan Agricultural College. This commission will pass on all sprinkler heads and when approved, insurance companies will be obliged to give the same decreased rate of insurance. If an insurance company gives preferential rates to any sprinkler company, as now claimed, a penalty of $1,000 fine is fixed for each offense.

The second proposed constitutional amendment was passed to authorize the legislature to establish ports and port districts so Michigan will be in readiness to take immediate advantage of the Great Lakes-St. Lawrence deep waterways project when completed. This amendment will also go to the voters at the election in November, 1922.

Additional appropriation and other bills were included in the measures passed.

ELLIS DEPOSITORS TO GET INTEREST

Depositors in the private bank of George E. Ellis, Grand Rapids, which was closed upon Mr. Ellis' death, will receive their regular 4 per cent interest up to July 29, the final date for filing of claims against the estate, according to Probate Judge Clark E. Higbee. The appraisers of the estate have undertaken a very difficult task, having found it necessary to fix a reliable valuation on more than 5,000 individual notes and the securities back of each.

EDGE ACT AMENDMENT PASSES

The amendment to the Edge Act providing that only 25 per cent of the capital of corporations organized under this law (foreign trade banks) is necessary to be paid in at the commencement of business and that the remainder may be made subject to call by the boards of directors of such corporations with consent of the Federal Reserve Board, has passed both the Senate and House of Representatives at Washington. It is expected that this change in the law will facilitate organization of the $100,000,000 Foreign Trade Financing Corporation.

FOR HUMANITY'S SAKE

A strange reason, you may think, to give for recommending compensation insurance in one company rather than in another.

Yes, it is perfectly logical. Surely it is humanity to save life—to prevent needless maiming and crippling.

An insurance company may wield a great power in accomplishing just this.

The great majority of industrial accidents, which kill and maim thousands annually, causing untold suffering and the loss of millions of dollars, are preventable.

A compensation insurance company, through its accurate records of thousands of accidents, is able to analyze the causes and devise practical means of preventing the greater number of them.

But many companies apparently use this information respecting accidents, their cause and their cost, solely for the purpose of determining adequate rates so that they themselves may be protected from loss.

Their enormous potential power for good is too frequently neglected or exerted in the most perfunctory way, perhaps because they lack a proper appreciation of the vital importance of such work. Or it may be due to a lack of the necessary equipment or organization.

The Michigan Mutual maintains the most complete organization for the promotion of safety in the plants of its policyholders, and prosecutes this work more vigorously than any other company operating in Michigan today.

Think what a saving in human suffering and money cost will follow the prevention of even a small part of the easily avoidable accidents.

Let us tell you more about this and other features of our compensation insurance protection. Write now. A postal will do.

Every policy shares in savings.

Every policy is non-assessable.

Michigan Mutual Liability Company

Real Estate Exchange Building

Detroit — Michigan

Home Office-Cherry 2829 — Grand Rapids, Lansing and Saginaw — Hospital-Cadillac 2670

Digitized by Google

1921 B. of C. Cruise Was a Real Holiday

Although the eighteenth anniversary cruise of the Detroit Board of Commerce has fulfilled its mission and retired into the realm of history there remains the motion picture review for those who could not go, and there will linger for some time in the minds of those who did go a memory of the best cruise ever conducted. Owen Sound and Killarney, in Georgian Bay, the only ports of call, have seen Detroit business in holiday mood, and Detroit business has been entertained well and been impressed by the two communities.

When the S. S. Noronic cast its hausers ashore at Owen Sound the Detroiters were imbued with a desire to impress the citizens with the progressive and energetic character of Detroit. On the other hand, Owen Sound had prepared to show Detroit's representatives a city of no mean industrial advantages and advancement. The admiration was mutual. Owen Sound's citizens talked of the advantages of the city as a location for the woodworking industry because of its cheap hydro-electric power and its abundant supply of timber, and evinced a keen desire to get some of Detroit's industrial energy. The city has numerous industries, among them the National Bent Chair Company, one of the largest chair manufacturing plants on the continent.

However, the Detroit cruisers were not in a business mood. The trip was for relaxation. The committee in charge provided an excellent program of deck sports, vaudeville and some addresses. The picnic at Killarney was enough some of the most beautiful Great Lakes scenery, which seemed to reach a sublime degree among the many islands in Georgian Bay. The last stop and the longest visit was at Owen Sound, where dinner was served to 700 visitors. At Killarney an Indian band provided music for the entertainment of the visitors, and at Owen Sound a kiltie band of pipers performed this duty. On board the ship an orchestra and a quartet provided the musical entertainment. For the trip back up the cruise motion pictures were part of the entertainment.

The ship left Detroit Thursday evening and Owen Sound Sunday, docking at Detroit Monday morning. W. A. C. Miller was chairman of the cruise committee.

* * *

FIFTY A. I. B.'s GOING TO MINNEAPOLIS

According to Frank J. Maurice, of the Detroit Federal Reserve Bank, who is in charge of arrangements, members of the Detroit Chapter of the American Institute of Banking and their wives to the number of 50 have signed up for the trip to the annual convention, in Minneapolis, in July.

The delegation will leave Detroit, July 16, at 11:30 p. m. over the Michigan Central for Chicago, where it will join other delegates in special cars routed via Milwaukee, where a day will be spent as guests of the Milwaukee chapter, the body reaching destination the third day at 10 a. m., via C. & N. W. Ry. A fare of $57.45 for the round trip (fare and one-half including Pullman) has been obtained. Expenses while in Minneapolis are estimated at about $40; thus it is expected that one may make the trip for a total outlay of $115. Plans have also been made so that delegates may return from Duluth via the Anchor Line steamer Jaunita, which boat has been chartered by the New York chapter. Those choosing this route for the return trip should expect a total expense of $135, as the fare and one-half rates does not apply in this case.

* * *

N. D. CROP PROSPECTS GOOD

A letter just received from J. J. Earley, president of the North Dakota Bankers Association, refers to crop prospects in that state as follows: "Crop prospects are excellent; I have never seen them better, and the cost of operation in putting in the crop has been less than half that of recent years. Practically no new machinery is being purchased at all. Labor is not much more than half last year's scale and its efficiency is greatly increased. This favorable crop condition applies over the entire state and in Montana, thus covering sections which need it much more than we do."

Current Investment Offerings

HALSEY, STUART & CO., DETROIT

Name	Rate	Maturity	Price	Yld.
DeKalb, Ill., Hospital	5.25	9-1-37-29	Acc. to Mat.	5.75-6.50
Flint, Mich., Union School Dt.	2.20	3-1-23-21	Acc. to Mat.	2.95-2.90
Amer. Public Service Co. Notes, Ser. C.	8.00	3-1-41	92.00	8.49
Interstate Iron & St. Co. 1st Sec.	2.00	5-1-41	92.30	8.93
Kelly-Springfield Tire Co. S. F. Notes	8.00	6-19-31	92.20	8.72
Northwestern Pr. & Lt. Co. Ser. B Nts.	8.00	1-1-41	93.00	8.10

AMERICAN LOAN & TRUST CO., DETROIT

Name	Rate	Maturity	Price	Yield
Clayton & Lambert Mfg. Co.	9.00	1924-1932	....	7.00
The Bendix-Robinson Co.	6.00	1922-1937	....	2.00
Lunse Realty Co.	5.00	1924	....	3.00
Oakman Blvd. Thr.	2.00	1924	....	3.00
Burkhardt Bldg. Co.	2.00	1921-1924	....	3.00

CHARLES A. PARCELLS & CO., DETROIT

Name	Rate	Maturity	Price	Yield
Eddy Paper Co. 1st mtge.	7.20	5-1-31	93.29	7.75
Colbus Ry. P. & L.	8.00	3-1-34	98.00	8.25
Great Northern	7.00	7-1-36	93.20	7.97
Goodhue Pr. & Lt.	8.00	1-1-41	99.00	8.10
Paris-Grievans R. Co.	2.00	12-1-92	*70.00	6.36
Huron County Road	4.00	11-1-22-31	....	3.00

*Per one thousand francs.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	June 14, 1921	Jan. 5, 1921	Dec. 27, 1920	July 1, 1920	Jan. 3, 1919	July 1, 1919	Jan. 2, 1919
U. S. Liberty 2½s	88.52	83.50	20.00	91.22	92.82	99.76	99.24	99.82
U. S. Liberty 1st 4s	87.98	83.00	20.22	86.90	92.06	92.00	92.80	24.12
U. S. Liberty 2nd 4s	29.90	83.20	84.10	85.02	91.58	98.84	23.04	94.10
U. S. Liberty 1st 4½s	87.44	82.32	32.90	85.18	23.48	32.14	94.92	....
U. S. Liberty 2nd 4½s	83.34	29.80	24.84	22.92	24.98	94.06	32.72	....
U. S. Liberty 3rd 4½s	91.54	86.04	87.30	89.22	21.22	24.19	94.44	....
U. S. Liberty 4th 4¼s	23.20	86.49	24.29	29.99	99.76	199.10	....	....
Victory Bonds, 4¾s	98.89	99.43	24.39	88.22	24.09	92.98	99.88	99.82

Detroit Listed Bonds

Name	June 14, 1921 Bid	Ask
Cons. Pow. Co.—6s, 1932	80	81
Detroit & Flint—6s, 1923	99½	92¾
Detroit, Ft. W. & B. T.—6s, 1927	20	27
D., M. & T. Short Line—6s, 1925	78	21
Detroit & Pontiac Ry.—6s, 1928	99	22
Detroit & Pontiac—4½s, 1928	....	14
Detroit & Port Huron S. Line—6s, 1960	82	73
Detroit Railway—5s, 1924	....	39
Detroit, Ypsi. & A. A.—4s, 1924	....	100
D., Y. & A. A., Jackson—6s, 1922	79	89
Det. United Ry.—4½s, 1932	....	21
Detroit Edison Co.—5s, 1932	87	22
Det. Ed. Co. 1st & ref. 5s, 1940	77	73
East Mich. Edison—5s, 1221	21	82
Detroit Edison deb. 7s, 1929	23¼	92¾
Detroit Edison deb. 6s, 1932	23½	92½
Detroit Edison deb. 5s, 1260	....	92½
Detroit Edison deb. 7s, 1941	100½	100⅝
D. C. Gas Co., G. M.—5s, 1913-33	....	90
D. C. Gas Co., P. L.—5s, 1223	21	99
Detroit & Sub. Gas Co.—5s, 1928	21	89
Mich. State Tel. Co.—5s, 1924	22½	....
By-Prod. Coke Co.—6s, 1230	....	....

Sales, Week Ended June 14

Detroit Edison 7s, 1929, 1,000 @ 22.
Detroit Edison 6s, 1941, 2,000 @ 100⅝.
Detroit Edison 5's, 1951, 5,000 @ 100½.
Detroit Edison 7s, 1932, 200 @ 93¼.

Sales Bank Stock

46 First & Old Bank @ 270.
Listed stocks, 200 shares.
Unlisted stocks, 82,943 shares.

Foreign Exchange

Country	Par	June 14, 1921	Feb. 2, 1921	June 14, 1920
Canada	.....	.....	.....	.1083
England	4.8665	3.9275	3.3500	3.9278
Switzerland	.1930	.1529	.1202	.1264
Paris	.1930	.0699	.0700	.0700
Holland	.4012	.3123	.3375	.3295
Belgium	.1930	.0679	.0743	.0729
Italy	.1930	.0429	.0363	.0135
Greece	.1930	.0723	.0735	.0212
Spain	.1930	.1358	.1393	.1284
Vienna	.20223	.0032	.0033	.0021
Berlin	.23823	.01249	.0154	.0053
Denmark	.1879	.1529	.1940	.1690
Norway	.2682	.1323	.1820	.1440
Sweden	.2682	.2042	.2130	.2235

Quotations show foreign equivalent of $1 in dollars or cents.

Cleveland Stocks

	Last Sale	High 1921	Low 1921
American Multigraph	13½	13¾	18
Firestone Tire & Rubber	39	39	37
Do, pfd.	87	89	72
Fisher Ohio Body	13¾	20	14
Do, pfd.	72	73¼	91
Goodyear Tire & Rubber	7	7	7
Do, pfd.	23¼	23½	23¼
Miller Rubber	72	96	47
Murray Ohio	2	2	2
National Acme	20	22¾	20
Paragon Refining	18	25½	18
Portage Rubber	10	27	10
Do, pfd.	22	22	22
Standard Parts	½	1¼	½
Do, pfd.	2	2½	1¾
Victor Rubber	20	20¾	12
Youngstown Sheet & Tube	99½	75	27
Do, pfd.	104½	104¼	103¾

Quotes by Otis & Co., June 4.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	8½	....
Commonwealth Power	12¾	13¾
Luflin Rule, pfd.	9¾	10¼
Michigan Sugar, com.	6	6½
Michigan Sugar, pfd.	7½	8¼
National Grocer, com.	8¾	7¾
National Grocer, pfd.	82	87
Saginaw Shipbuilding Co.	7½	8½
Symons Bros.	9½	10
Valley Home Tel. Co., pfd.	....	42

BANK STOCKS

Second National	229	312
American State Bank	200	310
Bank of Saginaw	152	310
Commercial National	120	206
Peoples Savings	209	289

Quotes by Chipps, Williams & Berson, June 13.

Grand Rapids Stocks

	Bid	Asked
American Public Utilities, com.	5	10
American Public Utilities, pfd.	13	19
Commonwealth P. R. & L., com.	10¾	12
Commonwealth P. R. & L., pfd.	22½	31
Citizens Telephone Co.	3½	4¼
United Light & Railways, com.	23½	36
United Light & Railways, pfd.	80	32
Cities Service, Bankers' Shares	13	14
Cities Service, com.	132	136
Cities Service, pfd.	40	42
Cities Service, Debenture "B"	20	100
Cities Service, Debenture "C"	73	80
Cities Service, Debenture "D"	70	72

Quotes by Howe, Snow, Corrigan & Bertles, June 13.

Digitized by Google

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, from which authoritative figures are obtainable, these quotations must be considered as nominal. We endeavor to obtain figures from responsible sources but do not assume responsibility for their correctness. It should be borne in mind that prices for many stocks which are closely held are apt to vary widely on sale.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	143	145
Columbia National Fire	15¾	18
Commerce Fin.	25	28
Detroit Mortgage, com.		1½
Detroit Mortgage, pfd.		5¾
Detroit Copper & Brass	16	20
Detroit National Fire	26	26
Detroit Life	64	68
Eureka Croesus	30	32
Federal Bakeries Co.	27	30
Federal Discount Co.	7	7½
Fisher Body	65¾	86¼
General Necessities Corp	10¾	12
Gladys-Belle Oil, com	19	20
Gladys Belle Oil, pfd	32	34
Great Lakes Engineering, new	11	14
Hoover Steel Ball		10
Hayes Wheel Co.		14
Interstate Fire	25	26
Invader Oil	50	65
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks Units	10	11
Jewett, Bigelow & Brooks, com.	5¾	6½
Kelsey Wheel	53	63
Little Wonder Stove	1	1¾
Monroe Binder Board	36	38
Detroit Motor Bus	2¾	2½
McCord Manufacturing, com.	6	8½
McCord Manufacturing, pfd.	40	60
Michigan Copper & Brass	12¾	14½
Michigan Fire & Marine		30
Noble Oil, com.	22	23
Petoskey Portland Cement	13½	14
Peninsular Fire Ins.	11	13
River Raisin Paper	9¾	10¾
Trippensee Mfg. Co.	5½	6½
Union Mfge., 100% com.		7¾
Union Mfge., 90% com.		7¾

Motor Stocks	Bid	Asked
Briscoe Motor	9¾	11
Columbia Motors	22	32
Chalmers	5½	23
Chevrolet	150	400
Cleveland	30	35
Elgin Motors	5	8½
Hupp	11¼	11¾
Liberty Motors		1
Lee Tire	27¾	28¼
Pierce-Arrow Truck	20½	20¾
Mercer	2	5
Mitchell Motor	8	9
Motorbus	4	6½
Nash	300	326
Republic Truck	13¾	14½
Saxon Motors	3¾	4¼
Scripps Booth	26	40
Stearns	23½	24½
Stromberg Carburetor	34¾	35½
Studebaker	75¾	76
Willys-Overland	7	7½
Grant Motor	2½	2¾
Jordan Motor	76	125
Peerless Motor	23	24½
White Motor	34¼	34¾

STRAUS & CO. ANNOUNCE PROJECTS

S. W. Straus & Company have announced that they have underwritten recently first mortgage bond issues on new housing projects in a number of American cities aggregating $6,823,000.

S. S. KRESGE CO. SALES

The S. S. Kresge Company, Detroit, whose stock is listed on the Detroit Stock Exchange, reports May sales as having totaled $4,232,289, which is an increase of 5.09 per cent over those of May, 1920. The increase in sales for the year to date is 10.05 per cent over the corresponding period last year.

W. J. ORR DIES

W. J. Orr, president of the Michigan Bean Jobbers Association and partner with former Governor Sleeper in several Michigan banks, died last Sunday at his home in Saginaw.

GERMANY BEST COPPER CUSTOMER

According to the Houghton, Mich., Mining Gazette, Germany in April ranked as our best customer for refined copper, taking 15,837,896 pounds, or 39 per cent of our total exports of copper for that month. In March the total was 52 per cent. During ten months ended with April, Germany imported 106,712,675 pounds of copper from the United States, or 22 per cent of our total exports of that metal during that period. France was second with 100,148,411 and United Kingdom third with 81,616,533.

CITIES SERVICE SHARES BREAK

Announcement that the Cities Service Company would pay the current dividend in script resulted in new low sales this week, bankers shares touching 12½ and the old common 110. President Doherty explains that the action was taken to preserve cash resources of the company and comments on the oil situation as follows: "Oil consumption is gaining at a rapid pace, giving promise of soon outrunning even our present record of production. Drilling is falling off at a rapid rate and as much of our present production is flush production, fully one-third of all the production east of the Rockies being from wells drilled in the last year and fully 50 per cent from wells drilled in the last two years, we are bound soon to have a falling off in production at a phenomenal rate."

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.	..	..
American Box Board, pfd.	17	18
Bardeen	17	18
Bryant	3	3½
Eddy, com.	..	10
Eddy, pfd.	9¾	10¾
Hawthorne	17	18
Kalamazoo	10½	12
Kalsoo Veg. Parch.	17	18
King	100	125
Lee, units	9	10
Mac Sim Bar	17	18
Michigan	11	12
Monarch	15	17
Rex	..	125
Northern Michigan Pulp	25	30
Standard	10	10½
Sutherland	20	20¾
Watervliet	15	20
Western Board	..	..
Banks		
First National	225	233
Home Savings	160	170
Kalamazoo City Savings	190	200
Kalamazoo National	149	151
Miscellaneous		
Barley Motor, com.	35	40
Barley Motor, pfd.	66	86
Hayes Wheel	..	..
Kazoo Loose Leaf	12	14
Kazoo Corset	..	10
Utah-Idaho Sugar	..	..
Kalamazoo Sanitary Mfg.	..	10½
Limousine Body	9	10¾

Quotes by Olmstead & Mulhall, June 13.

Detroit Bank Stocks

June 13, 1921

	Bid	Ask	Last Sale	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Annual Rate	How Paid	Books Close
American State			218	221	215	226	200	10%	J-A-J-O 1st	
Bank of Detroit			185					10%	M31, J 30, J31	As Dec'd
Detroit Savings			260	260	260			112%	J-A-J-O 1st	
Dime Savings	258		260	260	258			14%	1 Mon 1 Jan-Jul.	
First and Old Detroit National		271	270	273	271	275	269	12%	J-A-J-O 1st	Do Not Close
First State			181					12%	J-A-J-O 1st	
Highland Park State			250	260	250	268	268	16%	A-J-S-30 +D 31	On Dir. Date
Merchants National		151	151	149	149	163	142	8%	A-J-O 1st	Do Not Close
Nat. Bank of Commerce			215	215	210	250	190	12%	J-A-J-O 1st	Do Not Close
Peninsular State			220			220	220	12%	M31, J +S30, D31	6 Days Prior
People-State		348	355	360	355	335	306	16%	J-A-J-O 1st	
United Savings			225	208	208	212	209	12%	Monthly	
Detroit Safety Home		348	347			347		16%	Monthly	
Amer. Loan and Trust			155					6%	J-A-J-O 1st	
Guaranty Trust								6%	J-A-J-O 1st	
Detroit Trust			275	295	285	380	375	12%	J-A-J-O 1st	
Security Trust		300						12%	M31, J +S30, D31	10 Days Prior
Union Trust			180	180	180	197	197	8%	J-A-J-O 1st	
Unlisted										
Continental Bank	1120	125								
Commonwealth-Federal	2100	105				130	130			

Nominal Quotation

Jackson Stocks

Hayes Wheel Co.	9¼	11
Hayes Motor Truck Wheel	..	75
Jackson Corset	10	12½
Reynolds Spring, com.	..	50
Reynolds Spring, pfd.	54	60
Sparks-Withington	14	..
Jackson City Bank	240	260
National Union Bank	240	260
State Savings Bank	165	185
Peoples National Bank	490	500

Quotes by Jackson office of Webb, Lee & Co., June 13.

Ann Arbor Stocks.

	Bid	Ask
Ann Arbor Wire Fabric	..	4½
Economy Baler Co., com.	7	12
King Trailer Co., pfd.	..	100
Hoover Steel Ball, com.	..	10
Michigan Milling Co., com.	..	7½
Motor Products Co., com.	..	55
Prod. Foundries, com.	..	8½
C. A. Sauer Co.	4½	8½

Quotes by Langley, Hildner & Co., June 13.

S. S. ROBY CONVALESCENT

The many friends of Sheldon S. Roby, assistant cashier of the Bank of Saginaw, will be pleased to learn that he is recovering steadily from the effects of an operation which has confined him to the Saginaw General hospital. He is expected back on the job about July 1.

CROW JOINS LUMBER COMPANY

Alfie B. Crow, formerly connected with the Detroit Y. M. C. A., has become associated with the Standard Lumber & Woodwork Company, Detroit, as manager of the home building service department.

NEW KING 8 COUPE OUT

The new King 8 coupe, brought out by the reorganized King Motor Car Company, Detroit, made its appearance last week in the showrooms of the Crosstown Corporation, Detroit King dealer.

Detroit Tigers' Home Dates for 1921

June 21, 22, 23	St. Louis
July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 24, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

Digitized by Google

EXTRAORDINARY RECORD

The history of the various Sterling Loans to China dates back 35 years with an uninterrupted record of prompt payment of principal and interest.

These 5% **Chinese Sterling Bonds** now available at 55c on the dollar, together with the **ARGENTINE, BRAZILIAN, and CHILEAN Sterling Bonds**, constitute the outstanding investment values of the greatest bargain bond market of history.

They pay 8.63% annual cash income from coupon.

They should yield 72% profit in addition.

Send for circular.

HOWE, SNOW, CORRIGAN & BERTLES

Investment Bankers

Grand Rapids Savings Bldg.
Grand Rapids, Mich.

872 Penobscot Bldg.
Detroit, Mich.

The above statements, while not guaranteed, are taken from sources we believe to be reliable.

Russel Wheel & Foundry Co.

DETROIT, MICH.

STRUCTURAL STEEL WORK

We can make prompt shipment from our stock on short notice

Phone Melrose 3260

C. C. COAL COREY COKE

1903-4 MAJESTIC BLDG. DETROIT, MICH.

How Increase Bond Distribution?

(*Continued from Page 7*)

such as these organizations alone can put over, and without which the limited efforts of even the largest of us will be restricted to but a narrow slice of the great field that needs to be covered. Let's have the campaign extend to the schools and to the colleges; let's preach the doctrine that it's just as important to know how to conserve one's earnings as it is to know how to accumulate them.

As for better advertising there is much to be said, though little time to say it. Let's get back to the fundamental faults of present bond advertising, as were so admirably pointed out by Herbert Mulford in a recent article in the Investment Bankers Association Bulletin. As he suggested, let's start by making ourselves better advertising men so that we can command from our associates and supporters the respect for ourselves and the consideration for advertising which is the custom in other lines of business. Let's demand and get from our agency connections the same type of service power that it now is. Let's get our appropriations related to our sales so that the question of how much we shall spend for advertising will be automatically settled once a year and not be a recurring source of argument. Let's realize the value of large space, of continuity of effective illustrations and expert typographical arrangements. Let's cease to be the "fall guys" of the advertising world and cut our Ladies Aid Society programs, etc., and insist on knowing the circulation that we are buying from financial publications such as has been required for years among practically all other advertisers except financial.

Let's get over the idea that we have a monopoly of the world's supply of dignity and come down to earth with our copy. Let's not forget that our market today is not a restricted body of experienced and wealthy buyers but a body composed of millions of average Americans who need education and confidence to make them consistent bond buyers. We have one of the most advertisable commodities in the market. More and better advertising will put it where it belongs.

Just a word in closing as to why we should endeavor to increase bond distribution. If the question were one of selfish interest only, i. e. one affecting merely the interest of those of us who are engaged in bond distribution, I should say that the subject is, after all, not one of such vital concern as I have endeavored to portray it. But it is not one of selfish interest merely, it is rather a matter affecting our national well being.

Consider for a moment the stupendous requirements of our own government and of other governments who look to us for help in the next few years. Consider the impoverished condition of our railroads and many of our utilities, and the vast sums which will be necessary to put them where they belong. Consider the requirements of our industries for refunding the debt incurred during the war time period of feverish activity, to say nothing of their normal requirements for development, which will inevitably come with the reawakening of business. Consider these items and you will agree that this question of increasing bond distribution is not one affecting only those who will be benefitted through the act of distribution. It is instead one affecting our national interests and as such it challenges the best thought and most earnest endeavor of those upon whom in large measure rests the responsibility for the successful completion of this great task of finding a market for the bonds which must be sold in the next few years to meet the need which will inevitably arise.

An address delivered at the convention of the Associated Advertising Clubs of the World, at Atlanta, Ga., June 14.

NEW MAXWELL STOCK LISTED

New York Stock Exchange has admitted to list Maxwell Motor Corporation (West Virginia) temporary certificates for Class A and Class B stock and has stricken from list Maxwell-Chalmers Corporation 8 per cent preferred stock Class A, when issued, and common stock Class B, when issued. Further transactions in the latter may be settled by delivery of Maxwell Motor Corporation Class A and Class B stock respectively upon the seller's giving the buyer one day's written notice of his intention to make delivery.

Digitized by Google

Speeding Delivery Of Small-Lot Freight

(*Continued from Page 7*)

ments are again lifted by crane to motor trucks, taken to the doors of consignees, unloaded and then returned to the railroad cars either light or reloaded.

Time-saving at every stage is the primary object of the container-car system of store-door delivery. First of all, exponents of the system point out, time is saved at the shipping point because elimination of rehandlings between shipping and receiving points makes crating of products unnecessary; elimination of rehandlings and checking makes necessary the services of fewer truckers and clerks, and immediate unloading of goods at store doors eliminates the item of demurrage, at the same time promptly releasing freight cars, clearing yard tracks of idle cars and reducing congestion at freight station platforms.

Container cars are of two types, one designed to carry express and the other freight. Each of the nine compartments of the express type car has a capacity of three tons. The freight train type of car carries compartments of two sizes and can accommodate two large and two small, one large and four small, or six small removable sections. The capacity of the small size section is 2,500 pounds, and of the large section, 7,000 pounds.

The steel compartments, besides being fireproof and weather-tight, are made burglar-proof by setting them on to the cars in such a manner that the doors, even if they could be unlocked, could not be opened without hoisting the whole compartment above the steel bulkhead behind which it fits.

For the express type of car one of the fields of potential usefulness in the United States mail service. Container car service already has been tried out in the shipment of magazines and periodicals from New York to Chicago. One express car, its nine compartments filled with mail, left New York at 5 a. m. one day and arrived in Chicago at 8 a. m. the next. The mail was then taken by motor trucks to the post office.

On the first trial trip between Chicago and Cleveland with groceries from Reid, Murdoch & Company to its Cleveland branch, three to eight minutes were consumed transferring each compartment from freight car to motor truck and five or six minutes lifting each loaded "vault" to the car. Loading of the compartments took about half an hour.

Returning from Cleveland to Chicago, one large compartment carried battery parts from the Willard Storage Battery Company to its Chicago branch, another contained paint from the Tropical Paint & Oil Company for its Chicago branch, while a third small compartment carried dental gas in crated cylinders from the Ohio Chemical & Manufacturing Company for its Chicago branch.

Every article shipped reached its destination in first class condition and in the same position in which it had been placed at the shipping point.

PENINSULAR WINS SUIT

Judge Vanderwerp has directed a judgment of $22,322 in favor of the Peninsular Smelting & Refining Company against the Muskegon Aluminum Company, according to the Muskegon Chronicle.

"The judgment was for the full amount asked with interest," says the paper. "The Detroit concern contracted with the local company to sell it a quantity of aluminum at a stated price, and it was charged that when the business depression came the local concern failed to carry out its contract. As a result, the Detroit firm sued, alleging damages, and the court, after hearing the testimony, directed that the jury return a judgment for the full amount and interest."



Guidance, Custody and Care of Investments

The National Bank of Commerce in New York, through its Bond Department, supplies to its friends complete information on all investment securities.

Services of experienced men are available to guide in properly balancing and adapting investments to suit particular needs.

The large volume of investments handled through us insures close quotations and efficient brokerage service. We are in a position to give impartial counsel on investment matters.

Securities may be left in our care for collection of coupons and owners will be advised as to income tax certificates, announcement of "rights," conversion privileges and exchange for new forms.

National Bank of Commerce in New York

Capital, Surplus and Undivided Profits Over Fifty-five Million Dollars

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russell
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sherman & Chene
Dix & Artillery
Military & Michigan

Our Michigan Connections

coupled with our complete organization and many years of experience in this field place us in an unusually favorable position to render intelligent and helpful service to banks everywhere entrusting their Michigan items or transactions to us.

Correspondence invited.

Capital and Surplus $3,750,000

Smith, Hinchman and Grylls

Architects and Engineers

Detroit, Mich.

Digitized by Google

Direct Wires to New York Stock Exchange and New York Curb

Special Report on any Security on Request

Phone Cherry 6305

Investment Service

Investors will find it to their advantage to consult

Our Statistical Departments

before making commitments. This service costs you nothing.

Write, Phone or Call

WEBB, LEE & CO.

Members
Detroit Stock Exchange - Chicago Board of Trade
Penobscot Building - Detroit

Correspondents:
Thomson & McKinnon
Members New York Stock Exchange

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Penobscot Bldg.

Phones Cherry 6640

We solicit your inquiries

Professional association enlarges vision.

Personal application enlarges caliber.

Purchasing Agents' Association of Detroit

Publicity Office 15 Garfield Building Glendale 2819

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

3 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.

NEW ADVERTISING AGENCY

Carr Whipple and William H. Grant, Detroit advertising men, have organized a company to be known as Whipple & Grant, advertising service, with offices at 309 Free Press building. Mr. Whipple has been advertising manager for Crowley, Milner & Company, and Mr. Grant was with Walker & Company

Maintaining a Merchant Marine

(Continued from Page 10)

certain localities and the political pressure that would be brought to bear. It is quite natural for the civic spirit of a community to be manifest in a desire to have a multitude of steamship services, but it is not sound business unless cargo is obtainable at the ports of loading.

The Shipping Board, as owners of the steamers, when assigning steamers to loading brokers to operate for their account on a designated trade route, should stipulate a trade name under which the line will operate, this to be the property of the Shipping Board; and should they eventually sell these steamers operating in this trade, the trade name should go with the line. It is a well known fact that some Shipping Board operators have obtained tonnage to operate in special trades with a view to keeping these trades in their hands until such time as foreign lines and owners are in a position to supply tonnage. In some notable instances American owners obtained allocation of Shipping Board vessels until such time as they could buy or charter foreign ships and operate them on routes in which American ships were employed. An instance of this, and serious commentary on the economic results of the war, is the recent appearance of former Hansa Line steamers in the trade from the United States to India. The German ship owners, having been reimbursed by their government for ships lost or taken over by England under reparations, are now operating their former steamers under British registry, the steamers having been sold by the British government at one-third of their original cost.

Until trade revives and opportunity exists for obtaining a fair sales price, an early retirement of the Shipping Board and liquidation of its shipping business seems impracticable, but a partial solution of one of the difficulties confronting the Shipping Board is to continue to lay up a considerable portion of their tonnage, and, in line with the timely advice, "Government in business, more business in government," withdraw from all but supervision activity by chartering the steamers to reputable and experienced operators, either on a bare boat basis or on time charter, allowing the charterers the option of purchasing the steamers when conditions improve.

The claim is made, and justly, that the cost of American ships must reasonably approximate the costs of their competitors, and that capital charges must be substantially equalized with those of our competitors. The fact remains that while a considerable number of ships built abroad have been sold under stress of necessity at less than half the cost of reproduction, as in the case of ex-enemy ships sold by Great Britain, the great bulk of the world's tonnage built during the war fairly approximates the average cost of our own fleet. Again it is said that operating costs must be approximately equal to those of our competitors. Leaving wages paid in American ships out of consideration, does the foreigner, loading from American ports, obtain any lower prices for fuel, ship repairs, wharfage, harbor dues, stevedoring, supplies and stores in United States ports than do our own ships?

Shipping Laws the Main Factor

The main factor in determining whether we can compete successfully lies largely in our shipping laws. The latter are not only strangling our ocean-going ships but are affecting our carriers on the Great Lakes. It may be tacitly assumed that our ships must be manned by competent crews sufficient in number to operate economically and safely, and that American seamen should enjoy the best possible conditions receiving in wages reasonable return for service performed; but it must be equally obvious that provisions of law which require American vessels to maintain larger crews—65 per cent of whom must be licensed men—than is the case with foreign vessels and to carry as the engine room crew 30 per cent more men than the steamships of any other nation, necessarily subject American vessels to a very serious disadvantage, estimated at 5 per cent on the operating expenses. The compulsory advance in each foreign port of call of half wages earned seriously affects the working of ships and leads to expensive delays. The burden of these laws should be removed in the interest of the seamen as well as the ship owners. Their removal would appreciably improve our position and make it unnecessary to discriminate against our competitors by legislation which they are in position to adopt similarly against American goods and vessels in foreign ports, since of necessity we must have return as well as outward cargoes. Congress has declared in favor of a policy of private ownership "as soon as practicable," but it is not practicable to sell the ships in the United States in advance of legislation which will make it possible to operate under conditions which are sure to prevail as soon as the abnormal situation resulting from the war comes to an end. It therefore seems that the problem of the moment is the formulation of measures which will put American ships and American shipbuilding upon such a basis that it can compete successfully with the ships of other nations. To sell the fleet, which cost the taxpayers of the United States more than three billion dollars, without legislation revising our navigation laws is impossible. Without this legislation and revision making it profitable to our citizens to operate these ships, it will mean that these ships will ultimately fall into disuse or find their way into the hands of foreigners at breaking-up prices, to confront us later with real examples in cost of operation based upon the then capital charges.

American marine insurance companies are at a disadvantage caused by non-uniformity of state laws and excessive taxation which place American companies at a disadvantage with the foreign insurance markets in which they compete. Those disabilities should be removed by state and federal governments. Telegraphic communication from the United States to foreign countries should be under American control; it is essential to our marine development and foreign expansion.

As stated, a large amount of tonnage would undoubtedly have been disposed of a year or more after the Armistice if the opportunity had been taken advantage of. But it was not, and while the cost of the ships will be written down eventually to a reasonable figure, the ships cannot be sold until a market exists for them and until that the investors will not furnish the money to buy them. Meanwhile they will at least save the Government large outlay in carrying on their present plan of operation, if chartered to shipping people on a competitive bare boat basis. This will relieve the Government of expense and enable them to earn a moderate revenue. Large numbers of foreign ships similar to the so-called Lake type are under charter to Americans in the Cuban sugar and nearby trades which could be covered by American vessels.

The bare boat charter basis with an early revision of our navigation laws, the latter an urgent requirement of the situation—might be called a plan to enable shipping people to send our ships to sea upon terms of equality.

An address delivered by Mr. Farrell, as chairman of the National Foreign Trade Council, at the recent Eighth National Foreign Trade Convention, in Cleveland.

Digitized by Google

Banks and Bankers

NATIONAL CITY CHANGES SYSTEM

Directors of the National City Bank, New York, the largest bank in this country, have discarded the executive management system and have installed in its place the direct control arrangement, which obtains in nearly all large American banks. By reason of the change, Charles E. Mitchell, who succeeded James A. Stillman recently as president, becomes the chief of the institution in fact as well as name. The directors of the National City Company adopted similar changes and elected Eric Swenson president of that company to succeed Mr. Mitchell.

BIRCH RUN STATE'S NEW BUILDING

The Birch Run State Bank, of which R. G. Frost is cashier, held open house all day Thursday, June 9, to customers, bankers and business friends from surrounding cities in dedication of its building, recently completed at a cost of $30,000. Among the visitors were Henry T. Robinson, Saginaw, cashier of the American State Bank; Peter Pardee, Reese, and Grant J. Brown, cashier of the Industrial Savings Bank, Flint. At 7 p. m. a splendid banquet was served. This bank is rapidly approaching the half million class as to total assets. Chas. Wolohan is president; William P. McGregor, vice-president; R. G. Frost, cashier, and Herbert Walter, assistant cashier.

DUNHAM WINS KICKERS' TROPHY

Owing to threatening weather last Wednesday only a small number of golf enthusiasts turned out for the Kickers' golf competition held at the Detroit Golf Club for the visiting members of the Michigan Bankers' Association. Walter L. Dunham, of the Dime Savings Bank, won the cup with a gross score of 100, net 85. W. K. Prudden, Lansing, won second prize, with a net of 86.

1921 DIRECTORY ISSUED

The Grand Rapids National City Bank has issued its sixteenth annual Michigan bank directory. The booklet is of the pocket size and gives the following information for each institution. City, county, population of the town or city, name of the bank, year of its organization, capitalization, surplus and profits, total deposits, loans, name of the officers and names of correspondents. The statistical data was compiled by Bertrand Vander Meulen The directory will be mailed upon request.

JUNIOR BANKERS MEET

The June meeting of the Junior Bankers Club of Detroit was held June 8 at the Detroit Yacht Club and was attended by about thirty-six members, who indulged in a question box free-for-all after a splendid dinner. The questions asked covered matters relative to the law of bills and notes and negotiable instruments. Each member was furnished with a question and asked to give his answer. Ralph Clark, assistant prosecuting attorney, and Carl Wisner, of the American Loan & Trust Company, assisted in answering questions. John B. Dew, of the Federal Reserve Bank, talked on the proposition of simplifying legal procedure. It was decided to hold a summer outing late this month at one of the nearby resorts, concerning which president Frank C. Thomas will send information to the members.

MICHIGAN BRASS AND IRON

The Michigan Brass & Iron Works, Lansing, is operating on a 55 per cent production basis, with prospects that this will be increased soon. The company depends largely on local automobile concerns.

THE OLDEST HOUSE IN MICHIGAN

Canadian Funds

American shareholders in Canadian Corporations may avoid over *11% discount* on their dividends by purchasing Government or Provincial bonds.

We offer *three high grade Canadian Government issues* maturing in 2 to 15 years, payable in Canadian Funds, and *three Provincial bonds*, payable both as to principal and interest in U. S. funds. The yield is 6 to 7½%.

H. W. NOBLE & COMPANY
Bond Department
318 Dime Bank Building Detroit, Michigan



The Luxeberry Painter Says:

"Varnish must do more than enhance the beauty of every surface it covers—it must do its full duty in every service it encounters.

"For sixty-three years BERRY BROTHERS' varnishes have been the accepted standard for home and industrial use because they wear as well as they look.

"When nothing but the best will serve the purpose, specify BERRY BROTHERS' varnishes."

BERRY BROTHERS
World's Largest Makers
Varnishes and Paint Specialties
Detroit, Michigan. Walkerville, Ontario.

TWIST DRILLS, CUTTERS, REAMERS AND SPECIAL TOOLS
NATIONAL TWIST DRILL & TOOL CO.
DETROIT, U.S.A.
NATIONAL TWIST DRILL & TOOL

Digitized by Google

Motor Price Cuts Announced

(*Continued from Page* 11)

The Saxon Motor Car Corporation, Detroit, which in January reduced its prices $220 to $320, announced another cut a few days ago of $180. Present and former prices are as follows:

Model	New Prices	Old Prices	Reduction
Touring	$1,495	$1,675	$180
Sedan	2,295	2,475	180
Coupe	2,295	2,475	180
Blackstone	1,895	2,075	180

The biggest price cut announced by any manufacturer during the last eight weeks has been made by the Stanley Motor Carriage Company, Newton, Mass., which makes the Stanley steam cars. The reductions ranges from $1,125 to $1,925. New and old prices are:

Model	New Prices	Old Prices	Reduction
5-Passenger Touring	$2,600	$3,950	$1,350
7-Passenger Touring	2,600	3,950	1,350
4-Passenger Coupe	2,725	3,650	1,175
7-Passenger Sedan	3,850	5,775	1,925
Chassis	2,475	3,600	1,125

The Cleveland Automobile Company, Cleveland, has reduced prices from $170 to $180, as follows:

Model	New Prices	Old Prices	Reduction
5-Passenger Touring	$1,295	$1,465	$170
5-Passenger Roadster	1,295	1,465	170
4-Passenger Coupe	2,195	2,375	180
5-Passenger Sedan	2,475	2,655	180

Mixed conditions characterized the automotive industry during May, according to the monthly analysis made public this week by the Motor & Accessory Manufacturers' Association.

The "temperature chart" of the industry, showing in statistical form month-to-month purchases by automobile passenger car and motor truck makers from 300 parts and accessory manufacturers was made public for the first time, covering the period from January 1 to the end of April. Since this survey was not inaugurated until 1921, there is no basis for comparison with last year's figures.

This chart shows three curves—the sales of parts and equipment to vehicle manufacturers, the total of past due accounts reported and the total of notes outstanding. In all three items the curve from the beginning of January to the end of April indicates basically healthy and progressively improving conditions in the industry, with increasing confidence in the restoration of a safe and sane normal.

The totals of past due accounts and notes outstanding showed substantial decrease for the same period, thus indicating that the bed rock financial factors in the automobile industry have been improving steadily and soundly. The figures follow:

Month	Total Purchases Per Cent Change	Total Past Due Accts Per Cent Change	Total Notes Outstand'g Per Cent Change
February	66.15 Inc.	37.12 Dec.	25.5 Inc.
March	34.20 Inc.	16.57 Dec.	16.35 Dec.
April	32.93 Inc.	4.49 Dec.	5.94 Inc.

Since close to 400 of the principal parts makers are affiliated with the Motor & Accessory Manufacturers Association, figures thus reported are a sensitive gauge of conditions throughout the industry. Monthly conferences are held for the interchange of credit information and the pooling of experiences, thus making possible a scientific and impartial diagnosis of current trends.

Although the fundamental conditions as reflected by the above figures are constructive and reassuring, there are several features of a less favorable character. No effort is made by reporting members of the Association to cloak or minimize the realities of the present situation with respect to general business conditions. Many reports from Detroit and other automotive centers indicate that the manufacturing revival reported last month has not been generally maintained. There are, of course, concerns going ahead with their schedules but others report further curtailment of orders and cancellations of old releases.

Recent price revisions of vehicle makers have tended to stabilize conditions but this process of adjustment cannot be completed over night. The industry is eagerly scanning the commercial horizon for evidence of increased sales which the new price levels were designed to stimulate.

The most significant reports already received along this line come from the south and show a gratifying tendency on the part of the public to translate needs for automotive transportation into purchases of vehicles.

The National Automobile Chamber of Commerce, which embraces the principal makers of cars and trucks, is authority for the statement that the automotive market is a leader in the return of buying. Evidence to this effect was brought out by the principal executives of the industry who were in New York a few days ago for the annual meeting of the Chamber.

May Shipments

The May automobile shipments from factories exceeded April by 13 per cent and April and May shipments were 67 per cent of the same months of last year, comparing favorably with the steel market, which is on a 30 per cent basis; with pig iron, which is on a 50 per cent basis, and with rail transportation, which is on a 60 per cent basis.

Addressing the annual meeting of the National Automobile Chamber of Commerce, W. P. G. Harding, governor of the Federal Reserve Board, pointed out the encouraging elements of strength in the present situation.

"The steps in the general public order," he said, "that things are constantly going lower and lower," said Governor Harding, "and we should get some stability into the situation."

It was the opinion of the meeting that the

KANSAS COURT UPHELD

Constitutionality of the Kansas court of industrial relations law, sponsored by Gov. Henry J. Allen, has just been upheld on eight distinct points in an unanimous decision handed down by the state supreme court in sentencing Alexander Howat, mine workers' leader, to one year in jail for contempt of court.

The decision contained quotations from many other cases, with alleged instances of conditions in strikes in various parts of the country. That the case ultimately will be brought to the United States supreme court if the state supreme court refuses a rehearing was the statement in Kansas City, Mo., of Redmond S. Brennan, attorney for Howat, who was sentenced after he had disregarded the court's ruling in calling the miners' strikes in Kansas.

GREAT LAKES ROUTE FEASIBLE

Col. W. P. Wooten, U. S. Engineers, who with a Canadian engineer has been making a survey of the route of the proposed Great Lakes-St. Lawrence deep waterway, reported last week to the inland waterways committee of the Detroit Board of Commerce that the project was feasible from engineering and financial standpoints. Col. Wooten's formal report will be submitted to the International Joint Commission, which probably will make it public

NEW GRAND RAPIDS RATES

The Consumers Power Company has published new rates for Grand Rapids. The minimum charge on power current is reduced from 11 to 50 cents per horsepower connected load, with an option of a fixed charge of $5. The lighting service rate has been restored to eight, six and four cents on a basis of 60 instead of 30 hours. Recently the courts denied the city's petition for an injunction restraining the company from charging a flat rate of eight cents. The decision has been appealed

new low price levels now reached probably would be stabilized on the present basis, as almost all the motor companies had readjusted their prices. The consensus of opinion brought out that the motor car and truck companies had anticipated the lower levels of raw materials and had priced their product on the new basis.

"The public has a great deal of buying power left," said Governor Harding, "and buying power begets buying power. You start up one industry and you automatically start up another. It is amazing when you consider the automobile industry to find how many things are dependent upon its prosperity. It affects the purchases of steel and all the processes of steel manufacture. See how much employment that gives to labor."

The Chandler Motor Car Company, Cleveland, has reduced its prices $145, effective June 13. Three of the models—the two roadsters and the touring car—now are back at the 1913 level. The revised and former prices are as follows:

Models	New Prices	Old Prices	Reduction
7-Passenger Touring	$1,785	$1,930	$145
2-Passenger Roadster	1,785	1,930	145
4-Passenger Roadster	1,795	1,930	145
4-Passenger Phaeton	1,865	2,010	145
4-Passenger Coupe	2,785	2,930	145
7-Passenger Sedan	2,885	3,030	145
Limousine	3,385	3,530	145

Price reductions ranging from $100 to $900 have been made by the International Harvester Company on its line of International trucks. New and old prices are:

Capacity Model	Tires	New Prices	Old Prices	Reduction
1/2	6,000 Solid	$3,600	$4,500	$900
61	6,000 Cord	2,750	3,450	700
41	4,000 Cord	2,325	2,900	575
31	3,000 Cord	2,032	2,425	393
21	2,000 Cord	1,871	2,160	289
61	6,000 Solid	2,490	2,890	400
41	4,000 Solid	2,100	2,400	300
31	3,000 Solid	1,850	2,050	200
21	2,000 Solid	1,750	1,850	100
New	1,500 Cord	1,000	...	...

Under date of June 5, W. B. Canfield, sales manager of the Auto Sales Company, Wheeling, W. Va., distributor for the Overland and Willys-Knight, stated to the Wheeling Sunday News that the company's business this year has been the greatest in its history. The reason, he said, was the recent price reduction.

"The big decrease in the price of the cars has caused an influx of buyers; in fact, we have so many orders at the present time that the factory cannot fill them," said Mr. Canfield "From May 15 to June 1 we sold 450 cars outright. However, orders were taken for more than that number. Sale of used cars is also setting a precedent. Since June 1 we have sold eighteen second-hand cars, and indications are that at least 200 will be disposed of this month."

The Marmon Chicago Company, Inc., announced Saturday that since the price reduction of the Marmon line announced May 2 the distributor had sold 121 cars.

The Lee Motor Company, Inc., St. Louis, Mo., has reduced the price of its open cars $200. No announcement has as yet been made as to a change in price on the closed models. New and old prices are:

Models	New Prices	Old Prices	Reduction
7-passenger	$988	$1,188	$200
Roadster	988	1,188	200

The National Motor Car & Vehicle Company, Indianapolis, Ind., announces a reduction of $750 and $560 respectively on its open and closed models, taking effect July 2. New and old prices are:

Models	New Prices	Old Prices	Reduction
7-Passenger Touring	$3,650	$3,750	$750
4-Passenger Phaeton	3,650	3,750	750
2-Passenger Roadster	3,650	3,750	750
7-Passenger Sedan	3,950	4,950	960
4-Passenger Coupe	3,950	4,950	960

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

Willmarth & Morman
GRINDERS

Brand New at Special Prices

No. 78 Full Automatic, Wet Power Feed Surface Grinder---$800.
No. 3 Full Automatic, Wet Power Feed Surface Grinder---$800.

These Grinders are Brand New, Late Style, Complete with all Standard Equipment and on our floor for immediate delivery, f. o. b. Detroit, Michigan.

The Above Machines Carry the Factory Guarantee

Riverside Machinery Depot

251 ST. AUBIN AVE. DETROIT, MICHIGAN

Digitized by Google

Old Glory is now on the Seven Seas

AMERICAN SHIPS ARE AVAILABLE FOR YOUR OCEAN VOYAGE

New combination Passenger and Freight Ships, Fast, Luxurious Steamers.

Key number beside ship's name indicates operator shown bottom of column.

EUROPE

Boulogne and London

From New York

June 7—July 12—August 16—September 20—Old North State (159).

June 28—August 2—September 6—Panhandle State (159).

Bremen and Danzig

From New York.

July 13—August 10—Hudson (159).

June 8—July 23—September 7—Susquehanna (159).

June 15—July 28—September 14—October 20—Potomac (159).

Naples and Genoa

From New York.

June 30—August 13—September 24—Pocahontas (159).

Plymouth, Cherbourg and Bremen

From New York.

June 22—July 23—August 24—September 28—America (159).

July 30—August 27—September 24—George Washington (159).

SOUTH AMERICA

Rio de Janeiro, Montevideo and Buenos Aires.

From New York.

June 8—Arolus (91).

June 29—Martha Washington (91).

FAR EAST

Honolulu, Yokohama, Kobe, Shanghai, Manila, Hongkong

From San Francisco.

July 23—Empire State (105).

August 6—Coastwise State (105).

Yokohome, Kobe, Shanghai, Hongkong, Manila

From Seattle

June 18—Keystone State (106).

July 9—Silver State (106).

July 30—Wenatchee (106).

HAWAII, PHILIPPINES, EAST INDIA. Honolulu, Manila, Saigon, Singapore, Colombo, Calcutte

From San Francisco.

June 11—Wolverine State (105).

July 14—Granite State (105).

August 13—Creole State (105).

COASTWISE AND HAWAII

Hevana, Canal, Los Angeles, San Francisco and Hewaiian Islands

From Baltimore

June 11—Buckeye State (80).

COASTWISE

Hevana, Canal, Los Angeles, San Francisco

From Baltimore

Empire State (105).

80 Matson Navigation Co.
120 Market Street,
San Francisco, Cal.
26 South Gay St., Baltimore, Md.

91 Munson Steamship Line.
67 Wall Street, N. Y.
Tel. Bowling Green 3300.

105 Pacific Mail S. S. Co.
10 Hanover Sq., N. Y.
Tel. Bowling Green 4630.
621 Market St., San Francisco, Cal.

106 The Admiral Line.
17 State Street, N. Y.
Tel. Bowling Green 5625.
L. C. Smith Bldg., Seattle, Wash.

159 U. S. Mail S. S. Co., Inc.
45 Broadway, N. Y.
Tel. Whitehall 1200.

U. S. SHIPPING BOARD
Washington, D. C.

NEW MICHIGAN CORPORATIONS

For Week Ended June 11, 1921

Richard Punch & Die Corp., Detroit; to manufacture, sell and deal in tools, punches, dies, punch and die retainers, jigs, fixtures, etc.; Otis L. Clement C. and Clarence A. Ilchard, 2932 E. Grand Blvd., Detroit ..... $ 200,000

Michigan Textile Mills, Detroit; to manufacture, buy, sell and deal in cloth of all kinds, cloth materials and supplies; Albert A. Anderson, 139 Lawrence Ave.; George Bennett, Robert F. Taylor, Detroit .....

Hall Orchards, Inc., building general business of farming, fruit raising, stock raising etc. operations in townships of Orleans and Otisco, Ionia county; Brinton F. B. Howard, Florence W. Hall, Belding .....

Reynolds Truck Co., Mount Clemens; manufacturers and sellers of automobiles, motor trucks and other vehicles; Fred B. Schutt, Albert W. Schutt, Louis F. Wolf, William F. Nank, Mount Clemens .....

Wales Mfg. Co. (F.), East Orange, N. J.; Charles Wales, 655 Charlotte Ave., Detroit Mich., agent .....

Flint Coaster Co. (F.), Dayton O.; E. E. Berger, Flint .....

Bergendahl & Acher, Inc. (F.) Chicago, Ill.; Max Kahn, 416 Moffat bldg., Detroit .....

Baeder Adamson Co. (F.), Boston, Mass.; James G. Stevenson, Detroit .....

Gass-Thurston Co., Detroit; general business of contracting, engineering and construction in all its branches; Elmer J. Gass, David W. Thurston, 179 Wilkins Place; Charles E. Gittins, Detroit .....

Ludington Novelty Mfg. Co., Ludington; manufacture of metal needles, toys and novelties; Albert Anderdorf, L. E. Vorce, William C. Killeen, Ludington .....

American Medical Co., Detroit; to manufacture, buy, sell and deal in drugs, medicines, chemicals, etc.; John R. Biel, Joseph A. Macklewicz, 8304 Fleming Ave., Hamtramck, Detroit .....

Mack Storage Battery Co. (F.), Wilmington, Del.; William C. McNabb, 419 Jefferson Ave., Detroit; 1,000 shares at $66 per share.

Welfare Loan Society of Detroit (F.), Dover, Del.; H. M. Dowling, Lansing, Mich., agent .....

Hart Lumber Co., Hart; retail and wholesale lumber, lath, shingles, coal, plaster, cement, etc.; John W. Ferdon, Grand Rapids; Wilfred Keane, Ludington; Martin J. May, Hart .....

Cedar Springs Gas & Oil Co., Cedar Springs; to buy and sell oil and gasoline, wholesale and retail; George A. Munro, trustee; Dh Phelps, Joseph S. Tindall .....

West Drug Co., Detroit; to buy, sell and deal generally in drugs, toilet articles, patent goods, patent medicines, etc.; James H. West, 3744 Walsh Ave., David W. Mcmillan, trustee; Joseph S. McDowell, Detroit

Vassar Gas & Oil Co., Vassar; buying and selling gasoline, kerosene oils, automobile tires and all other automobile accessories; E. Hume Howard W. Smith, C. A. Humes, Vassar..

Liberty Mnit Co., Detroit; to manufacture, buy and sell, wholesale and retail, all kinds of textile goods and supplies; Morris Chaikin, 4237 Brush St., Morris Toboeman, Irwin I. Cohn, Detroit .....

George F. Snyder, Alpena; manufacturing of aluminum, brass and bronze castings, etc.; George F. Snyder, Samuel Taiz, Erma Snyder, Alpena .....

Enterprise Electric Co., Detroit; general electrical contracting; Conrad Mussel, 17175 McDougall Ave.; John C. Kowalski, Edwin Hoffman, Detroit

Bartholomaei & Kamm, Inc., Detroit; buying, selling, manufacturing, improving, disposing and dealing in real estate; Max and Ernest Bartholomaei, 649 Warren Ave. E.; Max A. Dreyfus, Detroit .....

American Heating Co. (F.), Duluth, Minn.; no Michigan agent .....

American Manufacturing Co., Ann Arbor; to manufacture, buy, sell, lease, exchange, dispose of or otherwise deal in all kinds of machinery and machine products; Francis J. and Ada C. Lapointe, 1338 Washtenaw Ave.; David A. Delong, Ann Arbor..

Drexel Garage Co., Detroit, to carry on and conduct general garage business for storage and repair work; Alexander Sierpinski, 2241 Canton Ave.; Thomas Lockard, Joseph Ekman, Detroit .....

Goldsmith Auto Trim Co., Grand Rapids; manufacturing, repairing and selling automobile tops, curtains, trimmings and upholsterings; Francis B. and Willard H. Clark, Eva M. and Oliver H. Goldsmith, Grand Rapids .....

Grand Traverse Packing Co., Traverse City; purchase and sale of fruits, vegetables and potatoes; Guy Tompkin, Oscar A. Nelson, Charles A. Lardie, Traverse City .....

Battery Shop, Kalamazoo; sale and service of storage batteries, automobiles and household electrical parts, etc.; Ralph M. Benton, Lindsey R. Goss, Alfred B. Palmer .....

Farmers' Marketing Ass'n, Flint; buying and selling of farm produce; Leslie J. Hawkey, Bancroft; Irwin H. and Earl C. Wing .....

New Theater, Muskegon; to engage in the motion picture business; Frank A. Weigle, Anton Cwynar, James Kolkowski, Muskegon .....

Wolverine Finance Corp., Detroit; buying, selling and dealing generally in promissory notes, bills of exchange, etc.; Harry Jacobs, 2896 W. Grand Blvd.; Bert Mattler, C. E. Watson, Detroit .....

Parker-Kiskadden Co., Detroit; to manufacture, buy, sell and deal in, wholesale and retail, goods, wares and merchandise, engine grease, oils, lubricants; Clinton K. Parker, Clarence H. Kiskadden, 46 Davenport St., Detroit; John A. Paynant, Los Angeles .....

Industrial Management & Finance Corp., Detroit; to maintain an advisory and consulting service in business management; Frank J. Donovan, Fred C. Ewing, Beasle B. Taylor, Ernest A. O'Brien .....

Detroit Auto Products, Detroit; to design, construct, repair, alter, manufacture and sell and deal in articles of metals, etc.; John Grant, 1938 Taylor Ave.; Frank L. Griffin, Robert H. Goodman .....

Supreme Motor Car Co., Grand Rapids; conducting a garage, automobile and service station; Wilbur S. Jackson, Fred C. Ewing, Beasle B. Jackson, Grand Rapids .....

Burton Heights Fuel & Building Material Co., Grand Rapids; to buy, sell and deal in fuel and building material of all kinds; George H. and William J. Breen, A. A. Brummeler, Grand Rapids .....

Cass-Prentis Co., Detroit; to buy, sell and otherwise deal in real property of all kinds and leasehold interests; E. W. and Margaret J. Stuber, 2274 Boston Blvd. W.; William H. Griffin, Detroit .....

Cleveland Switchboard Co. (F.), Ohio; James D. Nelson, Henry Clay Hotel, Detroit, Mich., agent .....

Burge Machine Works (F.), Chicago; Alfred G. Traeder, 4620 Bellevue Ave., Detroit, Mich., agent .....

National Bond & Investment Co. (F.), Wilmington, Del.; H. Beck, 1301 Detroit Savings Bank Bldg., Detroit

Peninsular Furniture Co. (F.), Wilmington, Del.; Conrad Weiffenbach, Grand Rapids, Mich., agent .....

INCREASES

Ann Arbor Foundry Co., Ann Arbor, from $5,000 to .....

Mt. Clemens Savings Bank, Mt. Clemens, from $50,000 to .....

Howe Printing Co., Detroit, from $2,000 to .....

Bean Spray Pump Co. (F.), San Jose, Cal.; Lansing, from $400,000 to .....

Grant Smith & Co. (F.) (Minn.), St. Paul, Minn., Port Huron, from $400,000 to .....

Schiewe Coal & Coke Co., Detroit, from $100,000 to .....

Close Electric Co., Muskegon, from $5,000 to .....

Olsen & Ehann (F.) (Ill.), Benton Harbor, from $50,000 to .....

Sheriff-Gosiin Co., Battis Creek, from $40,000 to .....

B. Heinemann Lumber Co. (F.) (Wis.), Wausau, Wis., Houghton, from $200,000 to .....

	10,000
	6,000
	100,000
	25,000
	30,000
	50,000
	20,000
	25,000
	50,000
	15,000
	30,000
	50,000
	650,000
	30,000
	15,000
	250,000
	20,000
	2,000,000
	1,000,000
	500,000
	35,000
	100,000
	80,000
	1,500,000

Digitized by Google



Write for this free book. It contains information that will save your business money

Do You Want to Know About Industrial Diamonds?

A vast amount of valuable information has been gleaned in the twelve years time during which the Wheel Trueing Tool Company has marketed the finest diamonds and diamond tools and rendered the utmost in industrial diamond service.

To get this information to you in the most interesting way a catalog has been prepared which not only tells you something about the diamond industry and the kind of diamonds your business requires, but contains information concerning the proper buying and use of diamonds which is invaluable to you.

Write for this excellently illustrated catalog and ask us for information regarding our free cost keeping system. It will be well worth your while to have this information on hand.

BORTZ DIAMONDS CARBON

WHEEL TRUEING TOOL CO.

IMPORTERS OF BORTZ & CARBON DIAMONDS

MANUFACTURERS OF DIAMOND TOOLS FOR EVERY MECHANICAL PURPOSE

2130 PENOBSCOT BUILDING DETROIT

EASTERN OFFICE
527 Fifth Avenue
New York City

WESTERN OFFICE
Great Northern Bldg., Chicago, Ill.

CLEVELAND OFFICE
Engineers Building

CANADIAN BRANCHES
Windsor, Ont., St. Catherines, Ont.

Cable Address
"Wheeltruco" Detroit

Digitized by Google

General Financial News

$800,000 ISSUE APPROVED

The Michigan Securities Commission has approved an $800,000 issue of additional stock of the Wolverine Insurance Company, which writes all kinds of automobile insurance and business fire risks. The stock will be disposed of in blocks as authorized by the directors. The new issue places the company in the million-dollar class.

INTERNATIONAL NICKEL

For the year ended March 31 the International Nickel Company reports surplus, after charges and federal taxes, of $2,029,700. This, after deduction of preferred dividends, is equal to $0 cents a share on the $41,834,600 of common stock outstanding.

JACKSON CREDIT MEN ORGANIZE

The Jackson Credit Men's Club has been organized in Jackson. L. F. Bomhoff, of the Jaxon Steel Products Company was elected president; C. C. Hart, of the American Oil Corporation, vice-president, and Lewis Atherton, secretary of the Jackson Employers Association, secretary-treasurer. Committees were appointed as follows: Entertainment, C. C. Hart, L. Atherton and H. M. Johnson, of the Sparks-Withington Company; membership, H. M. Johnson, C. C. Hart and C. O. Meridith, Armour & Company; entertainment, D. G. Crawford, Hayes Wheel Company; E. M. Stove, Home Products Corporation, and A. B. Sinoneau, United Appliance Company.

EUROPEAN PORT RIVALRY

Rivalry between continental Europe's three leading ports continues to be keen and is being watched by trade and shipping concerns the world over. The following are the port statistics for the first four months of 1921:

	HAMBURG	
	Ships	Tonnage
1921	2,243	2,639,675
1920	1,312	960,142
Difference	+931	+1,679,782
	ANTWERP	
1921	2,492	2,423,161
1920	2,522	2,677,144
Difference	—93	+746,442
	ROTTERDAM	
1921	2,564	3,510,600
1920	1,096	1,444,272
Difference	+1,469	+2,066,328

From the above, it would appear that Rotterdam is slowly passing her rivals in number of ships and tonnage entered.

EUREKA-CROESUS STOCK BARRED

It was reported from Lansing, June 10, that the Michigan Securities Commission had disapproved application of the Eureka-Croesus Mining Company for permission to sell 1,300,000 shares of its stock of $1 par value. The same dispatch stated that the attorney general might start proceedings as a result of the advertising of the stock if it could be shown that the same was actually sold. H. N. Duff, executive officer of the commission, is quoted as stating that 900,000 shares are held in Michigan of which about 700,000 are in the pool organized by Eugene Davis, L. P. Barrett, the assistant state geologist, who made an examination of the properties, is quoted as saying that the statements made by President F. L. Torrey to the effect that there was much ore available without expense, is a falsehood and was made with attempt to deceive. Other excerpts from Mr. Barrett's statement are reported as follows:

"The management of the company is inefficient. The accounts are in such shape they can not be presented as evidence of the present financial status of the company. No accounts other than single entries or receipts of expenditures have been kept.

"The company officials have issued exaggerated and misleading statements to their stockholders. The best possible classification of the mining property is that of an extremely speculative prospect. Torres and Harris (superintendent of the mine) both admitted that the property was at its best only a prospect. Mr. Catlin's statement, made at the preliminary hearing before the Commission, that this property was a mine and on a paying basis, was admitted to me by Torres to be false."

Cleveland Cliffs Cuts Upper Peninsula Work

Due to present business conditions, the operations of the Cleveland Cliffs Iron Company in the Upper Peninsula, so far as mining, furnace and lumbering is concerned, were suspended a few days ago. According to the Munising News, between 1,200 and 1,400 men are out of work as a result. The newspaper has a statement made by President William G. Mather, which in part is as follows:

"The Cleveland Cliffs Company, despite unfavorable business prospects, has run its mines nearly full strength up to this time to avoid unemployment, particularly during the winter. It is, however, possible to continue but a short time longer at this rate.

"With 28,000,000 tons of ore on the lower lake docks and in consumers' yards, against 48,000,000 a year ago, and no sales thus far, and with our own stock piles nearly filled, there is no choice of policy. We must radically curtail production.

"What small stocking place remains should be conserved, so that, if possible, employment can be increased before the cold weather again sets in. This unavoidable reduction, while causing much hardship to employes, is, we realize with great regret, still worse for our employes, but it can be better borne in the summer than in the winter.

"I have been in consultation for the last three days on this matter with M. M. Duncan, vice-president and general manager, in charge of mining operations, and our superintendents, in order to see how the cutback will work the least damage upon our mines and hardship on our employes, and the curtailmenta have also been distributed with reference to prevention of entire idleness in any one community.

"Our conclusion is to abandon the Lake and Lake Angeline mines, which are practically exhausted, also the Meadow, the Iron Steamba range; to close, for the time being, the Cliffs Shaft, the Spies, on the Menominee range, and the Wade-Helmer and Crosly, on the Menaba range; to put on half time, as compared with present operations, the Holmes, Princeton, Morris-Lloyd, the Maas, Gwinn, Stephenson and

"The result amounts to reducing our product by 150,000 tons per month.

"Our furnace, chemical and lumbering departments are hit still harder than the mines. The Gladstone plant was closed on February 1 and the lumbering and furnace operations connected therewith, will be shut down this month, leaving this department entirely idle. The sawmills and woods operations in Munising have also been idle since the first of April.

"The company owns twelve large steamers and only three of them are in commission. Steel mills and blast furnaces with which we are connected in Cleveland and in Youngstown are running on only 25 to 50 per cent basis.

"It is the most sudden and severe depression that I recall in my business experience, and it is the aftermath of the feverish activities induced by the war; it prevails, however, all over the world.

"We have no choice but to try to adapt ourselves to these conditions. Our communities no here are rather small and somewhat isolated from large centers and we must all pull together during hard times."

Public Utilities

NEW PROJECT IN LANSING

The West Side Pine Lake Power & Light Company has been organized in Lansing for the purpose of getting light and power for west shore dwellers. E. E. Pauliy was given the contract to install a lighting unit.

M. O. EMPLOYES ORGANIZE

Employes of the municipal street railway lines in Detroit have organized a union and affiliated themselves with the international Association of Street and Electric Railway Employes, it is announced. The city charter, while not forbidding the organization of M. O. railway employes, does not recognize a union. It was said at the city hall that no action probably would be taken by the city for the present.

COMMUNITY POWER CO.

The Community Power Company, Hubbardston, is now in operation and Maple Rapids and Middleton are being furnished with power. Later the company will supply light and power for Carson City also.

LUDINGTON GAS DEFICIT $9,000

The Ludington Gas Company is facing a deficit of $9,000 for the current year, President C. N. Remington, of Grand Rapids, told the city commissioners last week. Mr. Remington petitioned for permission to impose a service charge of 50 cents a month, which would yield his company $6,000, he said. Ludington pays $1.52 per 1m gas. A committee will report shortly.

News of the A. I. B.

Following is a list of members of the Detroit chapter of the American Institute of Banking who have passed Prof. David Friday's examination in economics, money and banking, following the season's course of lectures:

Peoples State Bank—Louis Andrzejewski, A. F. Craig, A. E. Cunningham, Earl J. Fallor, M. F. Gallup, Julius W. Haab, Robert T. Harris, H. M. Harris, Frank R. Hazelton, E. A. Heaphy, Frank C. Hines, James H. Kliefel, C. P. Mann, Christopher Montrose, J. W. Northwood, John Oelrich, Wm. A. Oppat, H. L. Phillips, J. C. Stelcke, Gilbert E. Tucker, E. B. Wald, L. W. Beasley.

Merchants National Bank—George L. Bott.

American State Bank—Wm. P. Stiven.

Dime Savings Bank—E. Leroy Gard, C. H. Hyett, G. E. Knight, Marion E. McIntyre, W. E. Powers, Harold W. Sherwood, J. P. Stewart, A. T. Wilson.

Bank of Detroit—Artie E. Trahern, Milton W. Haydock, Cushman McGee, Clarence A. Weber.

National Bank of Commerce—Nels Johnson, Lloyd L. Lawless, Horace D. Mason.

First & Old Detroit National Bank—Norman H. Benson, Leonard Bridgeman, John B. Hewitt, Aimee W. Willing.

Rural State Bank—Grover C. Austen, A. W. Gram.

Peninsular State Bank—J. F. Arthur, A. Jerome Bosley, A. J. Cummings, Wm. E. Dingman, Mary L. Kinni, John B. Petzke, Wm. F. Watson.

Highland Park State Bank—Roy R. Conger, Warner F. Hamet, Leo S. Hitchcock.

Federal Reserve Bank of Detroit—J. B. Dew, W. H. Bowen, J. G. Baskin.

National Bank of Pontiac—R. R. Anglemier.

Manufacturers' Commercial & Trust Co.—Howard Luther, Chas. F. Smith, Chas. Hink.

Farmers' State Bank, Grosse Lake—E. J. Fesler.

Oakland County Savings Bank—W. H. Grunwold.

Wayne County & Home Savings Bank—Tom K. Taylor.

Industrial Morris Plan Bank—Forrest Illman.

Detroit Savings Bank—Samuel Mullin.

American Loan & Trust Company—Alfred David.

Commonwealth-Federal Savings Bank—Roy L. Bluett.

Central Savings Bank—B. T. Shank.

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD



STATE OF MICH. GENERAL LIBRARY

Fifteen Cents a Copy

Five Dollars a Year

JUN 27 1921

UNIV. OF MICH.

Organizing the Building Industry
Bridge Financing Assured
Motor Sales Have Picked Up, But--
Cartage Program Formulated
The Machine Tool Outlook

(Financial Section Starts on Page 22)

DETROIT, JUNE 25, 1921

Vol. 27 Entered as Second Class Mail Matter at the Post Office at Detroit, Mich. *No. 26*



THE PEOPLES STATE BANK

MEMBER FEDERAL RESERVE BANK

Capital, Surplus and Undivided Profits - $14,000,000

The value of a banking connection is measured by what the depositor gets—in assistance, in advice, and in co-operation. This institution has the willingness to serve its clients fully, the experience to advise them wisely and the resources to aid them adequately.

OFFICERS

JAMES T. KEENA, Chairman of the Board

JOHN W. STALEY, President
F. A. SCHULTE, Vice-President
JOHN R. RODDE, Vice-President
H. P. BORGMAN, Vice-President
H. W. SMYLIE, Vice-President
R. T. CUDMORE, Vice-President
CHARLES H. AYERS, Vice-President
AUSTIN E. WING, Assistant to President
A. H. MOODY, Cashier

D. N. SWEENY, Assistant Cashier
D. E. LEUTY, Assistant Cashier
WILLIAM BRAASCH, Assistant Cashier
G. W. BEASLEY, Assistant Cashier
CURTIS C. BOGAN, Assistant Cashier
LEO D. HEAPHY, Assistant Cashier
C. I. NORMAN, Manager Bond Department
GEORGE T. COURTNEY, Auditor

RODERICK P. FRASER, Manager Foreign Department

DIRECTORS

RUSSELL A. ALGER	C. A. DU CHARME	FRED T. MORAN	HUGO SCHERER
GEORGE H. BARBOUR	FRANK J. HECKER	FRED T. MURPHY	F. A. SCHULTE
W. T. BARBOUR	FRED W. HODGES	M. J. MURPHY	ANGUS SMITH
JOHN R. RODDE	J. C. HUTCHINS	W. HOWIE MUIR	R. W. SMYLIE
H. P. BORGMAN	JAMES T. KEENA	TRUMAN H. NEWBERRY	JOHN W. STALEY
H. M. CAMPBELL	ROBERT S. MASON	WALTER S. RUSSEL	HOMER WARREN

(249)

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Organizing The Construction Industry

The International Chamber of Commerce Takes Lead in Forming World Body for Mutual Help

GAUGED by the number of persons employed, the construction industry is the largest of all the industries. In the United States approximately 11,000,000 persons are engaged in building activities of one kind or another. Measured by the money value of the yearly volume, the construction industry becomes the second largest, agriculture being the first. R. C. Marshall, jr., general manager of the Associated General Contractors of America, and formerly brigadier-general in charge of all cantonment construction in the United States, says that three-fifths of the proceeds of new financing and one-half of the country's annually accumulated capital are used for construction, reaching the enormous total of $77,000,000,000.

Gen. Marshall also is authority for the statement that, despite these facts, there is no organized building industry. No provision is made in the credit system of the country for construction as an industry. When he speaks of the construction industry Gen. Marshall means a definite group of activities concerned with the building of industrial, commercial, domestic, transportation and utility structures, railroads, highways, steamships, terminals, irrigation, sewers, drainage, mines and canals.

Some of the various branches of construction work are organized, but a construction industry as differentiated from manufacturing, agriculture and transportation does not exist as a distinct, unified enterprise. A result of this lack of organization, Mr. Marshall says, is the absence of any source of information regarding all those elements which enter into the successful operation of a construction industry.

On an International Basis

Through the International Chamber of Commerce a movement has been started to organize the construction industry upon an international basis, and in behalf of this movement Gen. Marshall and W. E. Dickinson, secretary of the American Committee on Organization, came to Detroit last week to interest builders, bankers and materials men in the plan to establish an international bureau of survey and statistical research. The original committee consisted of two representatives of each of these countries: Great Britain, Belgium, France, Italy and the United States. Gen. Marshall is chairman, and Frederick L. Cranford, president of Frederick L. Cranford, Inc., New York, is associate chairman.

Other members of the committee are the following well-known figures in the construction industry:

W. E. Wood, president, W. E. Wood Company, Detroit; Arthur Bent, Bent Brothers, Los Angeles, Cal.; J. W. Cowper, president, the John W. Cowper Company, Buffalo; J. H. Ellison, vice-president, Winston Brothers Company, Minneapolis, Minn.; Charles Folliott, president, A. Guthrie & Company, Inc., St. Paul; D. A. Garber, president, North-Eastern Construction Company, New York; A. P. Greensfelder, secretary, Fruin-Colnon Construction Company, St. Louis; H. B. Hanger, president, Mason & Hanger Construction Company, Richmond, Ky.; B. H. Hardaway, president, Hardaway Construction Company, Columbus, Ga.; Noble F. Hoggson, president, Hoggson Brothers, New York; George C. Mason, vice-president, Hurley-Mason Company, Portland Ore.; W. A. Rogers, president, Bates & Rogers Construction Company, Chicago; Sumner Sollitt, president, Sumner Sollitt Company, Chicago; Leonard C. Wason, president, Alberthaw Construction Company, Boston; George Watson Company, Dallas, Tex.; John R. Wiggins, president, John R. Wiggins Company, Inc., Philadelphia, Pa. and W. O. Winston, president, Winston Brothers Company, Minneapolis.

It was the opinion of the committee that the construction industry should have much the same type of organization and the same system of obtaining information that the bankers have, but before proceeding to the establishment of a bureau of research, the committee decided to send representatives to the principal cities in the United States to obtain approval of the plan.

In Detroit Gen. Marshall met a few of the builders and bankers in the Board of Commerce Friday afternoon, June 17, and outlined the plan to them. The meeting, of which John L. Lovett, manager of the Michigan Manufacturers' Association, was chairman, resulted in the appointment of this committee as a point of contract in Detroit: W. E. Wood, chairman; John J. Commerford; Frank G. Smith, vice-president, First and Old Detroit National Bank; T. W. Murray, United Fuel & Supply Company; J. A. Bryant, Bryant & Detwiler and C. W. Russel, Russel Wheel & Foundry Company.

Gen. Marshall said it was the war that brought sharply before the construction men of this country the need of some central, reliable source of information on the construction industry of the world. When the United States was in the market for materials of every description, government agencies were handicapped by a lack of information as to the sources of supply of materials, labor and trained men. It was necessary, he said, first to obtain this information. The work involved cost considerable valuable time and a great amount of money. A year ago a meeting was held at the International Chamber of Commerce in Paris and there it was decided to organize the construction industry on an international basis, at least so far as was necessary to provide a central bureau of information. The plan has been approved by Herbert Hoover, Secretary of Commerce.

When established the research and statistical bureau will prepare to furnish the following information to be obtained by a world survey:

Definite facts about raw materials necessary in construction, with schedule of price levels throughout the world;

Where raw materials are available;

What manufactured materials and machinery are available, and where;

Outline of demand for raw materials, manufactured supplies and machinery;

Report on character and amount of construction in progress in every country;

Kind and amount of labor needed, and where;

Where labor, skilled and unskilled, is plentiful; where scarce;

Distribution of beneficial discoveries and methods from one country to the rest of the construction world;

The distribution of new or better or more practical methods in building construction;

Complete data on transportation—where needed—where available;

How construction enterprises are financed throughout the world;

Complete review of credit conditions;

Import and export tariff data;

Facts on governmental control of construction, materials labor, transportation, credit and mass production methods;

Dumping possibilities;

Agencies and associations in the construction industry;

Technical schools and journals;

New market opportunities.

It's a Sizeable Task

The information thus compiled will be of special benefit to dealers in raw materials, manufacturers of materials, contractors and builders, engineers and architects, labor, management, exporters and importers, transportation officials, chambers of commerce, tariff officials, educators and publishers, firms having contracts in rebuilding devasted sections, and financial men.

It will take several years and a staff of highly skilled men to gather and organize all this information, but it will be handled in two general divisions, compilation of all existing data with the aid of existing agencies, and research in fields not covered by other agencies. Department groupings suggested are as follows:

Documentary—For the classification of all existing data and general information from known sources;

Digitized by Google

Reporting—For collection of information;

Research—For original research in all countries by field secretaries familiar with the language and customs of the peoples in the countries visited, whose work will be checked up by field directors;

Executive—For distribution of information under the direction of a director general in charge of all bureau departments.

Having this information at hand, the bureau will be able to tell the industry—

What competition to expect at home and abroad;

The possibilities for development of foreign markets;

How to judge whether a foreign offer is sound;

How to widen the export field;

What countries are in need of tools, machinery, motor cars, trucks, safety appliances, rails, pipe, hardware, paint and building materials;

Where there are opportunities to obtain construction contracts in other countries;

Where there are strikes, walkouts, profit-sharing, labor guilds and welfare work;

Where competition is keen and the nature of that competition;

How goods should be manufactured, packed, marked and shipped to different countries;

How chambers of commerce and boards of trade can extend their services to the construction field;

What tariff schedules exist, why and how they should be revised;

How to use the services of commercial attaches, and what they are supposed to do and how they do it;

Where financing is needed and is justified;

The effect of taxation on construction in all countries;

Needs of the Orient, Russia, China, India and South America;

What finances are available for this work;

How business should be conducted with foreigners;

Evidences of prosperity or depression throughout the world and in any one or several countries.

Mr. Smith's Talk

Following Gen. Marshall's outline of the plan, Frank G. Smith, of the First & Old Detroit National Bank, expressed his approval of the idea.

"I can see no reason why such a bureau should not be established and why it would not be of inestimable value to the industry," he said. "A short time ago a Detroit contractor told me that he would have had to give up a certain city contract had it not developed that he could buy certain material cheaper in Belgium than in the United States. How he obtained the information I do not know, but you can see that it meant considerable money to him."

"There are agencies at work gathering information," said Mr. Dickinson, "but the scope of their work is necessarily limited and they are not always satisfied with the results. For instance, the only source of information on labor is the American Federation of Labor, and much of this information is biased and therefore unreliable so far as the employers are concerned. Of all the major countries, the United States has the least general information on the construction industry. We have a chance to remedy this defect now, and with the understanding that every country subscribing to the service will share in the cost."

In a recent address in Washington, Mr. Cranford, associate chairman of the special committee, said:

"Speaking broadly, and not individually, our function is the construction of the economic facilities or plant of the people of the United States and our activity or inactivity is of national importance. At this minute progress in construction is stopped, maintenance of our industrial and economic plant is not being fully kept up, and such activity as we are engaged in is largely confined to urgent maintenance and repair.

"Transportation is the key to development. Transportation is originally construction and transportation in this country always has been the key to development. The building of the Erie canal opened the door to the development of the Middle West; the building of the Pacific railroads opened the door of opportunity west of the Mississippi. It is interesting that a very small investment, comparatively, $200,000,000 or $300,000,000, spread over a period of about 60 years, constructed the facilities which opened the greatest door of opportunity the world ever has seen, but every individual that entered that door faced the problem of construction, home building and the development of natural resources. Who of us would venture to measure the percentage of development we have now built within this territory?"

On the subject of wages, Mr. Cranford said in part:

"In the period before the war, labor, especially unskilled and semi-skilled, did not get a square deal; wages were inadequate properly to support families. The advance in wages during the war followed usual economic laws and was to be expected, but the further advance in the post-war period was unwise and seemed to have much the same basis as the boosting of real estate prices in a boom town. The question of wages is very important. Its solution is essential to our reconstruction. It is unfortunate that we must wait until the unemployment of millions of men forces wage reductions. I believe we should go at this problem with courage and fairness and not misuse the power we have. If we do not, otherwise unemployment for more millions will be the result."

Referring to the Lockwood investigation, Mr. Cranford said that the graft and price fixing combinations brought to light temporarily had destroyed public confidence. He added:

"During the last year in New York city, notwithstanding as large a degree of cooperation between builders and union labor as existed in any other community or any other industry, labor difficulties never were more frequent, from which an inference can be drawn. We are reminded of Sam Parks and his operations twenty odd years ago. They seemed to have had a continuing effect."

Mr. Cranford made no attempt to condone high costs of materials when he said:

"Construction materials at the peak of the high prices reached an advance of 300 per cent over the pre-war prices, and they still are double. The Lockwood committee has compelled the dissolution of several price fixing groups—that is, they destroyed the organization through which such price fixing was initiated, but what the result will be as to the substance remains to be seen. Personally, I believe in cooperation as the way out, but cooperation of the producers, or of the producers and labor, when in either instance the consumer is the victim of an economic crime, and it is used at this time to fleece those in actual need of homes. It is apparent that price fixing combinations have existed in some construction material groups, and it is safe to assume they operate all over the country. This situation needs drastic treatment."

Credit Facilities

His reference to the lack of a proper credit system in the construction industry as a unit shows where Mr. Cranford stands in regard to the need of some such facilities as the banking fraternity has. He says:

"A few months ago this organization sent Richard Waldo on a trip covering the greater part of the United States to survey the housing conditions. On his return Mr. Waldo reported an acute shortage of homes in practically every section of the country, which was due not only to the actual shortage of dwellings of every kind, but particularly to the demand for better housing by common labor. Mr. Waldo visited and talked with bankers everywhere, including the president of every Federal Reserve district. He asked each one what part of their credit facilities they would allocate to construction in the period of reconstruction then approaching. With one exception he received the same answer—that construction was an individual function and credit depended upon the individual standing of the applicant.

"The exception was the president of the Federal Reserve Bank of San Francisco, who said 'You have struck our weak spot. We have a nationally organized banking system, but no other industry is similarly organized; we have no information upon which would permit us to allocate credit to an industry, no matter how great the need.'"

Mr. Cranford in no wise seemed to be discouraged by the present conditions in the building industry. Instead he saw in it the growing nucleus of greater construction activities in the near future. He said:

"We believe that in the present industrial depression the construction industry is an important factor, because it is not only a preliminary factor to any new development or enterprise but because there is a vast delayed program to be performed. Ten years or more ago E. H. Harriman said the railroads were in need of an annual expenditure of two dollars a year for five years; that expenditure has not been made and it is probable that the need today is for even a greater amount.

"Hydro-electric development has been retarded due to the withdrawal of all public lands for entry for such use fourteen years ago. Public works and utility development were stopped upon our entering the war, and financial difficulties have prevented any considerable extension of them since. Reclamation and irrigation projects have been quiescent since 1914. Adding the delayed public works of our cities and states, of roads, terminal facilities, docks, warehouses, factories, home and business building, harbors and waterways, it is quite easy to figure a delayed construction program in the United States of $15,000,000,000. Very soon we will be embarked upon the greatest construction program this world has ever seen and with it will come general prosperity. First we must settle the questions of world peace and finance, but our present duty is to correct some other factors I have mentioned so that when the great questions are settled we will be prepared to do our share of the work ahead of us."

Compensation Act Applies To Out-of-State Cases

According to a decision handed down by the Michigan court, the workmen's compensation act of Michigan applies to all employment contracts made within the state, even when the accident occurs under such employment outside of the state. This problem has always confronted the industrial accident board and the McDonald law was passed by the 1921 legislature to give the board this jurisdiction. The court ruling now strengthens this position. The court declares that the legislature did not intend to limit the place of the accident, or it would have been so stated.

The court ruling was made in the case of Fidelia Crane vs. the Leonard, Crossette & Riley Company, Greenville. George W. Green, husband of the claimant, was in the employ of this company, which buys and ships produce. He had charge of three cars of potatoes consigned to St. Louis, Mo., and was found dying in one of the cars at Chicago, his injuries evidently being due to an accident.

In previous cases of this character the accident board has ruled that its power did not extend beyond the state, and has denied compensation. However, those cases were not appealed.

Digitized by Google

Bridge Financing Assured

Construction of Detroit-Windsor International Span Begins in 1922; Details of the Structure Made Public

By F. W. HERSEY

ASIDE from the willingness of Windsor to be a handy source of supply of bottled sunshine that brightens the arid communities on the American shore of Detroit river, the Border Cities and Detroit have many mutual interests that send approximately 12,000,000 persons and 600,000 vehicles back and forth between the communities every year. Even when Pontiac plotted the destruction of the tiny stockaded village that is now Detroit, and an Ojibwa maiden on the Canadian side frustrated the plot in ex pression of her love for a soldier, the broad expanse of water offered no obstacle to the birchbark transportation of the day.

It has been ordained from the first that the two divisions of one continent should be linked, first by a tunnel beneath the waters and then by a bridge over them. The tunnel was a long time coming, but it materialized in time. An international bridge, to be one of the engineering exhibits of modern civilization and a highway from shore to shore, has been dreamed of for many years, and within the last two years it has appeared a possibility hut not entirely a prohability. There have been objections to such a project. It has been declared prohibitive because of the expense. It has been frowned upon by certain transportation interests that have been ably serving the public with ferry boats, although with increasing difficulty because of the steady growth of Detroit and the multiplication of American and Canadian interests. At not time, however, has the engineering phase of the project been in doubt.

Judging from the announcement of Charles Evan Fowler, chief engineer of this project, to the effect that all preliminary work has been completed and that the details of design, rights and way and construction would be taken up at once, the international bridge connecting Detroit and the Border Cities will be in existence by 1926. After making the announcement Mr. Fowler left for New York to work upon the plans and specifications. On his return to Detroit, August 1, the work on the bridge approaches will be started, although it may be late in the fall before an appreciable number of men are put to work. From the time the excavation job is started to the date of formal opening will be four years, Mr. Fowler estimates. He is assuming that weather conditions, labor and material supply and other requirements will be normal enough to offer no serious handicap to the work.

This is the first definite statement that the bridge was to be built Mr. Fowler has been able to make during the two years he has been at work on the project. From the start he has been confident that he could build the bridge, that it would be financed and that it would justify many times over the cost of the undertaking, but the problem of financing such a project when the country was passing rapidliy from extreme prosperity to marked depression was such as to prompt great care in making public announcements.

Although the transition from stagnation to normal activities is progressing slowly, Mr. Fowler declares with all confidence that the financing of the bridge will be accomplished without any great difficulty. Apparently he has good reasons for his statement. His two years of work has been devoted to surveying traffic volume, deciding upon the type of bridge needed and its construction, and sounding the depths of sources from which the funds must come.

The details of the bridge project fall into three main divisions—finance, engineering and traffic volume from which revenue must be derived. Taking up the first subject, engineering, these details are given.



Drawing showing Detroit-Windsor international suspension bridge as it will appear when completed in 1926. This span, it is said, will be the longest and heaviest bridge in the world.

The bridge will be of the suspension type, closely resembling the Williamsburg bridge, New York. It will span the river at a point where the channel is narrowest, and will be 1,805 feet long, 110 feet above the water at the highest point in the span, and will be, according to Mr. Fowler, the longest and heaviest bridge in the world.

The towers from which the supporting cables will be strung will be 150 feet higher than the First National Bank building, or approximately 400 feet high. Eight cables, consisting of 10,000 wires each and capable of sustaining a strain of 240,000 pounds to the square inch, will be strung, one wire at a time, until the eight cables are completed, and wound with additional wire. In other words, there will be 6,000 miles of cable and 60,000 miles of wire, quite enough to tie a double hitch around the world. Besides the cables, the bridge structure will require 80,000 tons of steel, many tons of concrete and other materials. The wire will be furnished by the Roebling Company, which concern supplied the cabies for the suspension bridges over the East river.

The bridge foundations will be sunk to bed rock to a depth of 100 feet by the pneumatic process, this work to be done by the bridge company. When completed, the weight capacity of the bridge will be 24,000 tons per lineal foot, sufficient to stand the pounding weight of 80,000,000 persons crossing annually and 6,000,000 automobiles, to say nothing of railroad trains and trolley cars. The importance of the cables may be judged from that fact that their construction will occupy at least eight months.

Although two decks are to be built, the first one to be completed will be the highway deck, which will have two roadways, each twenty-eight feet wide, and two sidewalks, seven feet wide, both paved with concrete. Double trolley tracks will be laid through the center of the deck. At each end of the span there will be a three story fireproof building for bridge, customs and immigration offices, and two toll stations. Very probably the railroad deck will not be constructed for two or three years after the highway deck has been completed and opened for traffic. The approaches to the highway deck will extend half a mile inland on each shore, the grade being 4 per cent. The railroad approaches will extend inland a mile and have one and one-half per cent grade.

The location of these approaches is not announced, for the reason that certain rights-of-way must be obtained. However, it is fairly certain that they will be located well away from the present business center of the city, and therefore it may be assumed that the completion of this bridge will establish in Detroit and on the Canadian shore new business centers.

It would be futile for any company to plan such a project without having some assurance that the increase in traffic would warrant such an investment. Mr. Fowler says in this respect that within one year after the bridge has been opened the automobile traffic will have increased six-fold and the foot and trolley traffic two-fold. He estimates that the gross earnings for the first year will be 10 per cent on the cost of construction, with a steady increase in percentage thereafter. The tolls have been arranged as follows:

Foot passengers, 5 cents.
Street car passengers, 2½ cents.
Motor cars with two passengers, 30 cents.
Each additional passenger, 5 cents.
Trucks with load up to two tons, 50 cents.
Each additional ton, 25 cents.
Freight cars, $2.50.

These are tentative estimates. Undoubtedly some kind of commutation service will be provided, but it is unlikely that the minimum charge will go below 2½ cents, Mr. Fowler says. Street car service plans are to be worked out, but the desire is that alternate service by Detroit and Border Cities cars be provided with transfer privileges in each city.

The railway deck plans call for four tracks connected on the Canadian side with the Essex Terminal Railway to provide access for the Grand Trunk, Pere Marquette and Canadian Pacific. On the American side connections with all railroads entering the city are contemplated.

For railroad traffic it is proposed that 120-ton electric locomotives be used, power to be furnished by the hydro-electric interests in Canada from the new Niagara plant. The locomotives will haul from thirty to fifty cars, which, Mr. Fowler says, adequately provides for future

(*Continued on Page* 33)

Digitized by Google

Motor Sales Have Picked Up, But–

Distributors Are Wary About Making Predictions; Not Much Chance for Improved Export Trade Soon

Detroit Dealers Declare Business Is Satisfactory

By MARC BRAUN

MUCH has been said and probably will continue to be said and printed on the subject of present, war time and pre-war prices, not only of automobiles but of practically everything else. Dodge Brothers, Detroit, in this connection have issued a series of charts showing the relation of price increases on their cars during the last six years to increases made in other lines. Two of the charts are reproduced on this page.

The commodity figures shown on the charts are those compiled by the United States Department of Labor and in most all instances are those prevailing in April each year, the basis for the price of the Dodge car being the original 1914 figure and the basis of the other commodities being based on the April figures since 1913.

Officials of the Dodge Brothers concern have not departed from their established policy of "saying the least and doing the most," in other words, they are still as reluctant as ever about telling just what is going on at the big plant. A visit a few days ago to the second largest automobile manufacturing establishment in Detroit revealed, however, certain facts which did not require a spokesman. Contrary to reports which have been circulated for some time the Dodge factory is in operation on what might be called a very nearly normal basis. There are thousands of men at work and between 400 and 450 cars are being produced daily. It is quite likely that this quota will be increased—all depending upon how business comes in. Just now there are orders galore on the books and Dodge dealers from most everywhere are calling for more cars. As is the case with other plants, as much, if not more, is being accomplished with a smaller force than a year ago. There is greater efficiency, more willingness to do well, greater care; the man know that there are many unemployed waiting for a chance to get in.

Outlook Improves

Asked as to the future, one of the executives of the company, who explained that the rule of the house is that he cannot be quoted, said:

"Just now the outlook is good. It may last 30 or 60 or 90 days. Nobody knows and nobody can tell what may happen. Business has met with so many unexpected reverses during the last twelve months that it has scared the prophets out. There are so many contributing factors which were not on the list either in 1914 or during the war days that it is extremely difficult to predict anything. There are certain principles which business men, whether manufacturers, merchants or shopkeepers, must follow, the most important being that we must be very cautious. Even if business does pick up all of a sudden, we must not come to the conclusion that it is going to stay that way. We have had several starts at better times but every time a sudden and unexpected slump has followed."

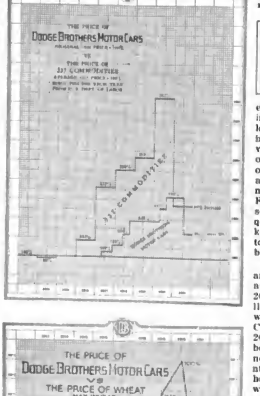
Inquiry made at the offices of the Ford Motor Company showed that the production schedule of 4,000 cars a day for June was being maintained steadily.

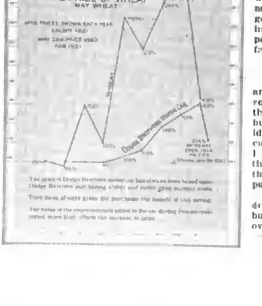
"We are turning out that average every day," said one official. "Some days we go up to 4,100 and even near 4,200, then again we drop down to just over 4,000. Orders have been coming in satisfactorily and naturally the recent price reduction has not caused a slump in the demand, in fact we have an accumulation of unfilled orders which, compared with normal times, is indicative of the fact that Ford cars are still in great demand."

What are the Detroit automobile dealers and distributors doing and what have they to say? Here is, briefly, what some of them told the writer:

Detroit Oakland Company—"We are doing well and feel quite confident that business will continue good. May was one of the best months we ever had. There seems to be no

(*Continued on Page 31*)





L. J. Ollier Writes Braun As to Conditions in Europe

[Several letters have been received of late by Marc Braun, of the editorial staff of this publication, from friends, automobile distributors in France and Belgium. In order to find whether some of the statements made in these letters were true, Mr. Braun wrote to L. J. Ollier, vice-president of the Studebaker Corporation, Detroit and South Bend, who has just returned from a trip abroad. It will be noticed in Mr. Ollier's reply, printed below, that he confirms most of the allegations.

In connection with the letter of Mr. Ollier, and for the enlightenment of the reader, it may be said that the limit price for automobiles in France—20,000 francs—and in Belgium—30,000 francs—is equal at present exchange rates to approximately $1,600 and $2,400 respectively. The price of the Citroen car in France—12,000 francs—is equal to about $1,625 in American money.—The Editor.]

I HAVE your letter of June 11 in which you ask me to give you the impressions I gained on my recent investigation of conditions in the automobile industry in Europe, and the outlook for American car sales.

I quite agree with the opinion expressed that the opportunities for business in Belgium and France are the general outlook for American cars is a bright, as has been stated in articles which I have noticed in various newspapers. In the first place, the value of the franc is a big factor in limiting the sale of cars in both of these countries. To this must also be added the duty of 45 per cent which now is effective on motor cars shipped into France, and a duty of some 25 per cent on some cars shipped into Belgium. I am not quite certain as to the Belgian duty but I know that it has just recently been brought up to a much higher figure than has prevailed before.

I talked with a number of dealers in France and they stated very positively that few if any motor cars could be sold for more than 20,000 francs. In fact, that seemed to be the limit in price which users of motor cars were willing to pay. When you consider that the Citroen is being offered for from 13,000 to 20,0000 francs, depending upon the type of body, and that recently the Renault have announced a 10 h. p. car which is being offered at a very low price—to say nothing of a number of other cheap cars of French manufacture which are being offered on the different markets, all of which is supplemented by the general preference of the French buyer to home products—there is left little or no opportunity, in my opinion, for American manufacturers to develop much business in France.

Economic Conditions Bad

The general economic conditions are bad and at this time the number of new cars being sold in France is very limited. In fact, until the Citroen people worked out a plan for building taxicabs their plant was practically idle, but I understand they have built up a considerable business in this line and when I visited their plant in Paris during March they were turning out about forty cars a day, the greater number of which were taxicabs or public conveyance jobs.

Under normal conditions there should be a decidedly active sale for motor cars in France but even for those cars which were taken over from our War Department and sold to

(*Continued on Page 32*)

Digitized by Google

Cartage Program Formulated

National Team & Motor Truck Owners Association, In Convention Aboard Noronic, Discuss Problems

By ALFRED FISCHER

THAT the development of the commercial hauling industry has brought new problems, new necessities for regulation and greater opportunities for transportation service was the conclusion arrived at by the 200 delegates and visitors who attended the nineteenth annual convention of the National Team & Motor Truck Owners' Association and listened to the deliberations and discussions. The convention was held June 13-16 on board the steamer Noronic, starting from Detroit and cruising through Lake Huron and Georgian Bay, with stops at Mackinac, Owen Sound, Ont., Sarnia and Port Huron.

For four days the delegates discussed such questions as the relative efficiency and economy of horse drawn and motor vehicles on different classes of hauling; operation costs and the factors thereof; abuses in the sale of equipment; cargo insurance; legislation and general conditions. The spirit of the discussions appeared to be toward correcting conditions in need of improvement, wherever they existed, without recourse to regulatory bodies, and for the general stabilizing of the industry. The following were chosen for the ensuing year: President, Joseph X. Galvin, Chicago; first vice-president, E. Foster Moreton, Detroit; second vice-president, Joseph Glenn, Buffalo; secretary, F. L. Henk, Detroit; treasurer, William J. McDevitt, St. Louis; directors, for two years, E. H. Sullivan, New York; A. T. Barton, Kansas City; George Reichle, Cincinnati; D. J. Devine, Philadelphia; J. T. Counsell, Chicago; W. C. Wheelock, Cleveland; M. T. Green, Buffalo; Frank A. Britten, St. Louis; Carlisle Cameron, Minneapolis; directors for one year, to fill a vacancy, H. G. Beebe, Jackson, Mich. Time and dates for the 1922 convention were left to the decision of the new officers.

The convention was formally opened on the evening of June 16 by addresses of welcome from E. Foster Moreton, president of the Detroit Transportation Association, host for this year. Major Roiph Duff, Lansing, representing Governor Groesbeck, welcomed the delegates to Michigan, and John Atkinson, of the Department of Public works, represented Mayor Couzens on behalf of Detroit. F. J. Abel, Buffalo, speaking for the association as its president, responded.

The first discussion on elements in the industry came Tuesday morning when Wayne Dinsmore, secretary of the Horse Association of America, spoke on the subject, "The Horse, a Short Haul Money Maker," which was reviewed in these columns in part last week. He said further:

"The 1921 census figures show that there is an important revival in horse breeding and that the demand is steadily on the increase for good work horses. There are more horses on the farms today than there were ten years ago. The 1920 census showed 19,833,000 and last year the count was a little over 20,000,000, in the cities the decrease was about 900,000 horses.

"These figures would seem to indicate that, after having tried to operate with tractors the farmer has returned to his faithful servant, the horse, which will do all his work, while a tractor will perform only a part of the duties of a general nature."

Mr. Dinsmore said that three fifths of the horses which go into the hauling industry are raised in the Central West.

"I invite you motor truck operators to give serious thought to one phase of your work that is just developing," said Mr. Dinsmore, continuing his discussion. "There have been millions of dollars spent in highway construction in the United States. It has been demonstrated that a road suitable for passenger automobile traffic and light delivery work, as well as moving of farm products to makets, can be constructed for about $35,000 a mile. Such a type of highway, however, will not stand up under a motor truck load. The least that a heavy type road can be built for is $50,000 a mile. The extra burden must be levied against the taxpayers. The people of the United States are becoming very greatly interested in these figures. They are beginning to ask whether or not it is quite fair to build and maintain heavy roads free for the users and spread the cost on the taxpayers.



Delegates to the National Team & Motor Truck Owners' Association ninetsnth annual convention, and their ladies. This photograph was taken on board the steamship Noronic when it docked at Owen Sound, Ont. E. Foster Moreton, president of the Detroit Transportation Association, hosts of the convention, is standing on the stairway, in the center. Photo by Craig Studio, Owen Sound



JOSEPH X. GALVIN

Mr. Galvin, who lives in Chicago, is the new president of the National Team & Motor Truck Owners' Association.

"Another group becoming interested in that subject is made up of railroad operators. The trucking line that uses a highway paralleling a railroad right-of-way has free use of a route more expensive than the railroad, but which is built for him and for which he does not have to pay anything directly to use and maintain. It is becoming evident that as a result of this condition the motor trucking business is expanding rapidly at the expense of the railroads. In order to get along the latter are forced to increase rates. Then also, they are taxed to maintain these highways which make it possible for ruinous competition to exist against them. They are beginning to call for a more equitable condition of affairs.

"You are going to find a growing tendency to equalize the condition here described before very long, as the problem becomes better understood. Then when the railroads learn the nature of their competition they are going to lay out their city track systems so as to make hauls from team tracks as short as possible. It is a mistake to have a haul at any terminal more than two miles. Every city should have sufficient freight facilities to make that condition possible. Now, when that state of affairs is brought about, and the average haul in any large center is down to that distance, the horse is able to enter the lists as a serious competitor of the truck for carrying

Digitized by Google

that load such a moderate distance."

Development of cartage business has had the effect of creating several new varieties of insurance, the convention was told in two addresses by C. M. Carter, of the Detroit Insurance agency. Each new phase of risk brought with it a demand for protection, which, he said, was given where practicable and at costs commensurate with the risk involved. Except for protection against pilferage, said Mr. Carter, the trucking industry could protect itself against any kind of loss.

Mr. Carter described the newest branch of protection, fleet insurance, which gives a flat rate to operators of ten or more trucks or to owners of equipment representing an original investment of $15,000. In the event of no claims under this policy within certain periods of time, radical reductions are made.

The discussion which followed disclosed that there is a wide range in rates in various cities the tendency being toward higher rates on theft in larger cities. Mr. Carter cited figures showing that for some time past there have been four losses by theft as against one by fire. The rule of New York operators, limiting the amount of loss on shipments to a liability of $50, has compelled many shippers to protect themselves while their goods are in transit.

Joseph W. Glenn, Buffalo, in a paper on "Uniform Methods in the Cartage industry," emphasized the need of complete and adequate accounting, which would keep track of business transacted and costs. He reviewed a number of forms and showed exhibits taken from companies in his city. The informal discussion prompted by these displays indicated the necessity for standardization in cartage office practice.

R. W. Andrews, transportation cost specialist of the Packard Motor Car Company, Detroit, addressed the convention on "Motor Truck Costs." His remarks were based on compilations started during the war by the Council of National Defense and followed up by private concerns and other groups. The result of the findings, he said, showed the necessity of determining costs on the basis of the unit mile.

The unit mile, or ton mile, works like this: If a truck travels on a round trip of twenty miles and carries seven tons and returns light, the cost would have to be figured on a 70-mile basis. But if four tons of freight were carried back, thereby making eleven tons carried, the basis would be 110 miles. The ton mile basis must be figured to determine cost of handling for each commodity, as there is a wide range in expense of handling of the hundreds of commodities which come to the cartage man daily, Mr. Andrews said. The units entering into a cost table include fixed charges, such as interest, insurance, license, driver's wage and garage.

Variable charges per mile include such items as fuel, lubricants, maintenance, tires and sinking fund (based on 100,000 miles as the life of a truck). The third important item is overhead, which covers office administration, clerical assistance, postage, advertising, claims, etc. These things, with exception of overhead, have been worked out in what is known as the national truck cost system, and can be obtained wherever motor trucks are sold.

The address brought out a number of discussion which revealed the necessity for greater education along cost lines. Many speakers defended the established practice of basing costs on the hour basis. This was attacked as having too many loopholes for dishonest practice, overloading, over-speeding and other expensive factors. All were unanimous that the industry should lose no time in establishing its cost based on actual operation in the various sections of the country for all classes of hauling and every kind of equipment.

Organization Matters

The vast amount of organization work that the convention was called upon to handle was indicative of the year's development in the Association. Delegates from the several cities were urged to work for permanent offices with full time secretaries for their respective locals, in order that the membership might get better service in protection against forces that might be detrimental to their business, and for the development of new varieties of service. Wherever the plan has been tried, it was shown, a healthier condition and greater stabilization was the result.

The constitution was amended to permit other groups of commercial haulers into membership, such as state bodies. This makes it possible to take the Michigan Highway Transportation Association into membership. That body was organized in Grand Rapids in April of this year, and is desirous of becoming affiliated. The election of Mr. Beebe as a director was to make that induction easy.

The other and more important action for the constitutional amendment was in order that the other large national body, the National Association of Commercial Haulers, might find a way to merge, a movement that has been talked for some time. President W. A. Sted, Cleveland, head of this association, which is just about a year old, attended this convention for the purpose of opening negotiations with a merger in mind. It is the intention of Mr. Galvin, of the older group, to attend the Commercial Haulers' convention, which comes at Milwaukee this month, as a return courtesy and to get the opinion of the new body on this question.

Demands from several large cities for local cartage associations revealed the necessity for much organization work during the ensuing year, and to make that possible the convention voted to increase its per capita tax. A special subscription was also voted again all members for the association official organ, the National Team and Truck Bulletin.

In the resolutions adopted by the convention, store door delivery plans were held undesirable. Isaac Goldberg, New York, in tendering the resolution opposing this idea, called it a scheme to sell equipment to railroads. The plan, which is an outgrowth of the war, would provide for having railroads do their own terminal carting. Mr. Goldberg pointed out that many roads were unfavorable, since it placed upon them a responsibility for the safety of merchandise after it had left their premises.

Another resolution by George Wilson, Detroit, criticized the government of that city for its methods in hiring trucks and insisting on cut rates and overloads in the handling of municipal work on street railways and other improvements.

Detroit continues as national headquarters, with offices in the Detroit Transportation Association building, at Third avenue and Howard street.

The Society Salesman

[The following, which appears concurrently in Hyatt's Tractor Tract, published by the Hyatt Roller Bearing Company, has to do with the merchandising of farm tractors, but it is not without application to other lines of salesmanship, especially in these times.—The Editor.]

A SALESMAN traveled many miles from his home office to call on a farmer. He *offered* to sell this farmer a farm tractor. The farmer was not inclined to accept favors on such short acquaintance and politely declined.

He said he didn't need a tractor.

The salesman goes back to town, gets a room at the hotel—a nice room equipped with a shower bath. He visits the food emporium and eats a $2 steak with the conventional accessories. Then, being in an imaginative mood, he makes out his expense account and goes to a movie drama.

Later he returns to the hotel and writes a report on the call. It is an exhaustive report, embellished with superlatives, complete even to the most minute detail.

He tells how through some stroke of luck he succeeded in getting an unusually satisfactory interview with this particular farmer. Found that they had mutual acquaintances—in fact a slight family connection on his Uncle's side!—need to know a chap at college who courted the farmer's daughter! On the strength of all this the whole family gave him a cordial reception —he even made friends with the dog—would just naturally have to admit that he got under the old man's skin.

Incidentally would have sold him a tractor except that he said *he didn't need one.*

And the salesman, having thus finished his two-hour report on his five-minute call, lovingly fondles the missive, puts it in an envelope, hids it God-speed and entrusts it to the care of our Great Postal System, where it went through the usual period of hibernation and was ultimately delivered to the Sales Manager, somewhat yellowed with age.

And the Sales Manager read it. He re-read it. He slept over it and he answered thusly:

"My dear Mr. Salesman:

"Although your report is above reproach from a rhetorical point of view, unfortunately we have no 'society column' in our correspondence file.

"Right now I don't remember whether it was Moses or Elbert Hubbard who said: 'Friendship founded on business is better than business founded on friendship.'

"The man who shines in society is usually dull in business, so let's put business at the top of the list—first, last and always.

"You say that this farmer doesn't need a tractor. Now let me tip you off to *some real inside dope: That's exactly why you were sent to see him!*

"Few farmers know that they need tractors. Why man alive! if they *did* know it Sears-Roebuck and the Baltimore Bargain House would have monopolized the industry years ago!

"In his own opinion a man never needs a thing with which he is not familiar. Folks didn't need electricity until Tom Edison came along and put the bee in their bonnet!

"If the farmer realized the need of tractors we wouldn't have to spend good money for advertising. If he had learned all the advantages of power farming you and I both would be out in the shop helping production to catch up with sales or else we'd be trying to sell 'em something that they *didn't* know they needed!

"The kind of farmers that we are anxious to sell are pretty shrewd business men. Naturally they assume the offensive. Nine out of ten will tell you that they don't need tractors. The tenth one will buy anyway—no use spending much time with *him!*

"Some of these farmers will tell you they don't need a tractor just to hear the advantages reiterated again. It's music in their ears. Don't disappoint them—throw in your clutch and let 'em have the whole story—let 'em have it on high gear!—once, twice, three times if necessary."

"I'm afraid this particular farmer is a better

(*Continued on Page 32*)

Digitized by Google

The Machine Tool Outlook

What Does Michigan Sales Field Offer for Future And What New Sales Policies Therefore Must Prevail?



—Donahey in Cleveland Plain Dealer.
BETTER KEEP YOUR EYE ON "JERRY!"

—McCutcheon in Chicago Tribune.
ECONOMIC HISTORY OF THE U. S. DURING THE LAST TWO YEARS

—Racey in Montreal Star.
TO WIN THE PEACE

WITHIN the last year the volume of machine tool business among the automotive manufacturers in Michigan has declined, one might say, from bucketfuls to thimble measures. Prospecting for orders among the numerous car and truck plants and their allied industries is just exactly what the first word in this sentence means—prospecting. Order taking has had its day and selling is the new order of business; but before much selling can be done considerable prospecting has to be done. A review of war time expansion in both plant space and equipment throughout the state offers little for optimism to feed upon, unless the prospector looks beyond the immediate evidences.

It has been said that many of the plants in this state are expanded and equipped for future business needs for a period of five years, assuming that we do not have another feverish demand for products such as characterized the last three or four years. Such a demand is not expected, consequently manufacturers are becoming convinced that the growth of business will be very gradual and the need for equipment moderate.

Service the Watchword

If this is to be the case, then the business of the next year or more will be "pickings," not "showerings." Where, for instance, machine tools, such as turret lathes, drill presses and other bulky machines were sold in "flocks," in the future they are more likely to be sold one at a time, here and there. It is apparent that the field will have to be canvassed thoroughly and carefully. It is certain that wherever a machine is sold the demand will be for every element of service the manufacturer can give.

The demand to "deliver whatever you have that can be used on this job" now changes to "look over my problem first and then provide me with what I need to do this work the best and at the lowest cost. If you can't fit my problem four-square, I'll have to look elsewhere."

The railroad business gave the machine tool industry its greatest incentive to development until the automotive industry increased the range of possibility and demanded more specialization. As a result, specialization was carried on with a high hand and at a great cost. Competition in quantity output among the automobile plants in Michigan put factory production engineers on their toes and their leaning was toward special machinery which would make possible rapid production by the simplest operations. Tools for these machines were made in the plant tool rooms at great expense because this kind of work requires much skill both in designing and in workmanship. The expense of specialized machinery and tool production has been much greater than has been realized. It has not been necessary to consider this expense in the same questioning light that it will be considered hereafter.

The rapid production required has taken its toll from the life of much of the machinery installed, and it is not unreasonable to suspect that with a resumption of industrial activity, replacements will be necessary before the maximum efficiency can be obtained. For a while at least it is to replacements that the machine tool business must look for its new orders. Manufacturers of long standing in the machine tool business seem to be of the opinion that there will be less specialization in machinery desired if standard machines can be made to do the same work at less initial cost. The stress of modern manufacturing methods wears out machines, and where such machinery is custom-built the cost of replacements is a heavy item.

With economy uppermost in his mind it is probable that the manufacturer will modify somewhat his idea of specialized machinery if he can adapt standard machines to his work. He will be encouraged by the machine tool manufacturers, who, undoubtedly, will make the standard machine fit the job. To accomplish this the machine tool man will have to give more time to the study of manufacturing problems, which is service. Service has not been such an important factor in any business during the last few years, for the reason that the sellers' market changed business psychology on the one hand, while on the other, the demand for products came from so many sources and in such volume that the problem of adequate supply occupied the whole attention.

Mr. Stillwell's Opinion

C. S. Stillwell, Detroit district manager for the Warner & Swasey Company, Cleveland, reflects the mental attitude of industrial buyers and also the new viewpoint of the sellers of industrial equipment, when he says:

"For the next few years we in this business will be devoting as much if not more attention to the sale of one machine than was required to sell a battery of them a year ago. In this state alone the sale of machine tools has been twice as great as it would have been normally, and if we can sell 50 per cent as much product in the next year or two we will be doing 25 per cent more business than was done five or six years ago. The buyer will demand every element of service the seller can give him.

"I do not share the opinion of some whom believe it will take five years for the industry of this state to get back to capacity production. But I do admit that the process must be gradual; that less product will be sold, with a greater expenditure of effort. My experience with the automobile industry is that it is quicker on the trigger than any other enterprise. As an illustration: The other day I was working on a program for a certain plant in this city, and I was given what seemed to be a definite answer to the effect that the program could not go through. A few hours later I received a message that the program would go through and it was up to me to get busy.

"Two important elements that will help dig out business are consistent advertising and

(*Continued on Page 34*)

Digitized by Google

Chemical Engineers Hold Convention in Detroit

The American Institute of Chemical Engineers held a six day convention in Detroit this week. Men prominent not only in the chemical world, but in many other industries, institutions of learning, etc., took part in the meetings which brought to the city a galaxy of notable speakers.

Sessions were held in the convention hall of the Hotel Statler. On Monday the visitors were invited to inspect the Cadillac Motor Car Company's new plant. In the evening they were the guests of the Detroit Boat Club. On Tuesday they went to Ann Arbor, where they inspected the laboratory of the University of Michigan. The day's meeting was held at the University. Henry Ford's River Rouge plant was taken in on Wednesday forenoon and during the afternoon the chemists visited the plant of Hiram Walker & Sons, in Walkerville. The evening they spent "barbecuing" on the shore of Lake St. Clair. More boat riding was on the program for Thursday forenoon and that evening a subscription dinner was given at the Statler.

Between the boat rides and sightseeing and investigation trips the delegates met and heard among other well-known speakers the following: Dr. M. L. Burton, president of the University of Michigan; W. L. Badger, professor of chemical engineering, University of Michigan; Dr. C. D. Holley, director of research for the Acme White Lead & Color Works, Detroit; Chester M. Culver, Employers Association of Detroit; W. B. Stout, head of the Stout Engineering Laboratories; Col. A. E. White, director of the Department of Engineering Research, University of Michigan; A. H. Blanchard, professor of highway engineering and highway engineering and highway transport, University of Michigan; O. C. Berry, chief engineer, Wheeler-Schebler Carburetor Company; Henry M. Leland, president of the Lincoln Motor Company; David Wesson, oil expert; C. F. Kettring, chief of research of the General Motors Corporation; W. A. Gatward, engineer, Hopkins Manufacturing Company; William G. Nelson, chemist, Morgan & Wright; A. N. Corse, general manager of the Monel Metal Products Corporation; Dr. J. C. Olsen, president of the Brooklyn Polytechnic institute, and Dr. J. H. Ransom, chief of research of the Michigan Smelting & Refining Company.

Wives and daughters of the delegates were not forgotten, they were kept practically as busy sightseeing and being entertained as the men. They took in the Twentieth Century, Country, Barton Hills and Detroit Athletic Clubs on different days, visited the Ford Motor Company's plant in Highland Park and were given a boat ride and another outing in Palmer park.

FOR SAFER DETROIT STREETS

The police commissioner of Detroit has announced that renewed efforts will be put forth by the department to make the streets safer. The commissioner is said not to be satisfied with the showing made during the first half of June as to the number of fatal accidents, which totaled 52 as compared with 110 for the corresponding period in 1920.

According to the figures given out by the commissioner, there were in operation up to the end of last week in the city of Detroit 3,019 jitneys, 397 public vehicles, 284 taxis and 50 motor buses, a total of 3,784 vehicles used in carrying passengers. This is an impressive increase over the situation one year ago.

SCOTT BILL PASSES HOUSE

The Scott bill amending the LaFollette Seamen's Act, was passed late last week by the House of Representatives by a vote of nearly 2 to 1. Two or three slight changes in the revised draft, drawn at the recent Great Lakes conference at the Detroit Board of Commerce, were made

What Motorsts Are Looking For

"ENDURANCE is the most popular and economy the second favored feature of the motor car, according to a nation-wide poll of motorists," said J. C. Long, of the National Automobile Chamber of Commerce, speaking before the Associated Advertising Clubs of the World, in Atlanta, last week. "Comfort is the third consideration, followed by price. Speed and distinctive refinements have little interest for the average purchaser."

These conclusions are the compiled returns from question cards sent to car owners in all sections of the United States by the National Automobile Chamber of Commerce, asking motorists to express their relative preference concerning the following features of a car: Appearance (general), appointments, comfort, economy, indorsement of other owners, endurance, flexibility, hill climbing, price, service (good local repair shops), specifications and speed.

"Buying points," said Long, "rather than selling points are the important considerations today; and this poll of the customer should prove a helpful guide to both engineer and advertiser.

"Returns from twenty states, covering more than thirty makes of cars, on the index basis of 100 give the following emphasis to the different buying points: Endurance, 15; economy, 14; comfort 9½; price, 9½; appearance, 8; service, 7½; hill climbing, 7; flexibility, 6½; indorsement of others, 6½; specifications, 6; speed, 5½; appointments, 5.

"Twenty-three per cent of this poll expressed an interest in specially featured parts, such as motors and springs, but 48 per cent were not interested and 29 per cent were non-committal.

"Different makes of cars may call for different merchandising. The large farmer market, representing about 60 per cent of automobile sales, and the widening uses of the motor car in business doubtless will continue to accentuate ability to 'stand up,' economy of operation, easy riding qualities, and price in relation to value, as leading buying points."

Michigan Foundrymen Discuss Standardization

Means of effecting standard costs for foundry work, whether done in large or small foundries, and plans for co-operating with the facilities offered for experimental departmental work by the engineering department of the University of Michigan, were the chief topics before the first regular meeting of the newly organized Michigan Foundrymen's association, in Muskegon, last week.

The meeting was attended by 25 foundrymen from various parts of the state. Samuel Powell, secretary of the Ohio State Foundrymen's Association, addressed the meeting on standardization. He also gave the newly organized association the benefit of some of his experiences in general conduct of the association's business.

Prof. A. E. White, of the University of Michigan, spoke on the possibility of the manufacturers using the facilities offered at the University for carrying out experimental work. He asked that the foundrymen make full use of these facilities.

The address of welcome was delivered by A. M. Larsen, president of the Muskegon Employer's association.

Two committees, one named to prepare a contract form for use in doing business with coal dealers and the other to submit contract forms for use in buying pig iron, reported their suggestions. The forms presented were discussed considerably and the committees asked to give further consideration to them and to report again at the next meeting.

The session continued until late in the afternoon, after which the visitors inspected the new Shaw Crane foundry building and other plants in the city and Muskegon Heights.

President J. Edgar Lee, of the Challenge Machinery Company, Grand Haven, presided, while H. W. Lorz, of the Lansing Foundry Company, acted as secretary. The next meeting will be held at Manistee.

RECEPTION TO NEW CITIZENS

The Detroit Board of Commerce will give a reception Sunday afternoon, June 26, to 600 foreign born citizens who have been naturalized during the last month in the federal and circuit courts. Judge Arthur J. Tuttle of the United States district court, and Judge J. H. Goff, of the Wayne circuit court, will present the certificates of naturalization, while aliken American flags will be presented the 600 new citizens by the Detroit chapter of the Sons of the American Revolution. Addresses will be delivered by the two judges and by John A. Russell, president of the Board of Commerce; Rev. Hugh Jack; Frank Cody, superintendent of schools; Rev. Minot C. Morgan and Aldrich Baxter. Boy Scouts and the Studebaker band also will participate in the exercises. Frank C. Sibley is chairman of the arrangements committee.

TOWNSEND BILL A LAW BY JULY 1

Senator Charles E. Townsend, Michigan, expects to get his highway bill passed by Congress before July 1, the date of the termination of federal aid to states in road construction. The bill, which creates a federal highway commission and provides for the construction of interstate highways under federal supervision, has been widely indorsed. One of the chief claims made for it is that it establishes a unified system of roads and does away with pork barrel legislation.

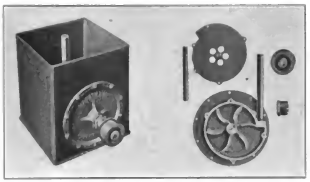
CADILLAC PROMOTES HULGRAVE

D. F. Hulgrave has been appointed manager of purchases for the Cadillac Motor Car Company, in Detroit. He succeeds J. H. Main, who has just been appointed director of the purchase section of the advisory board for the General Motors Corporation, with his office in Detroit. Mr. Hulgrave has served thirteen years with Cadillac, the last three years being as assistant to Mr. Main.

Digitized by Google

LAFAYETTE Soluble Oil Pump And Agitator,--

A Supply Tank With Built-In Pump and Agitator



Simple—Efficient—Durable

Pump is always charged with its cutting fluid, making loss of prime impossible.

It is self lubricating, all parts running in oil.

Wear does not affect pumping capacity.

No check valves to cause trouble.

Requires little power.

No springs.

Pumps oils and other fluids with equal efficiency.

Agitation important, as it prevents soluble oil and water from separating.

THE CHAS. A. STRELINGER CO.

Machinery—Tools—Shop Supplies

149 East Larned Street
Detroit

126 Ferry Street
Windsor

New Ross Carrier Perfected

H. B. ROSS, Benton Harbor, who has spent a lifetime inventing labor saving and time saving machinery for lumber mills, and who several years ago perfected a new type of industrial truck for moving a great quantity of lumber at a load, has redesigned this truck for use in industrial plants of all kinds. The first carrier developed proved so successful that a plant was established about five years ago and more than 100 of these carriers are now in use.

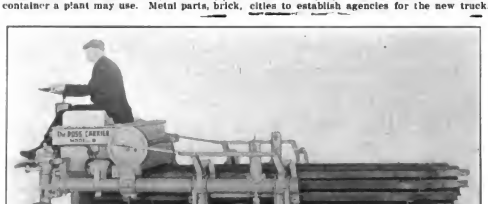
The original truck sold widely in southern lumber territory where mules and improvised platform trucks called "dollies" were extensively used. One of the Ross carriers displaced six to eight mules and as many dollies and drivers and also cut down the loading and transportation time below what was possible with animal-drawn trucks.

The new Ross carrier has a capacity of 4,000 pounds, is nine feet long, four feet, eight inches wide, turns in a radius of eight feet, four inches and has a clearance of thirty inches and a speed of six miles an hour. The depth of long material that can be carried is two feet, the length of loading platforms, six feet, six inches, and the width of load, three feet, two and a half inches. It is equipped with an Edison 24-cell battery, a 24-volt General Electric motor, solid rubber tires and will lift a load four inches in six seconds. The weight, including the batteries, is 3,000 pounds.

This type of carrier differs from other industrial trucks in that the truck straddles the load and lifts it. Platforms can be constructed of tough lumber and distributed about the plant. These platforms can be loaded at any time and left for the regular trips of the carrier. It engages the platform by means of wide flanges which slide under the edge of the platform, and the operator can then raise the load clear of the floor.

The platforms may be made in the form of boxes, baskets, hoppers or any other type of container a plant may use. Metal parts, brick, sand, castings, boxed merchandise, barrels, machinery, rails, angle irons in fact all kinds of building material and almost any bulk stuff found in manufacturing establishments can be handled. The length of material that can be carried is limited only by the space allowed for turning.

During the lull in business, which affected the Ross plant as it did other concerns, Mr. Ross perfected his latest carrier and production will be started as soon as business warrants. Samuel H Clark, assistant treasurer of the Ross Carrier Company, left this week for Eastern cities to establish agencies for the new truck.



THE NEW ROSS CARRIER

Digitized by Google

Allegheny

STEEL SHEETS

AUTOMOBILE
METAL FURNITURE
ELECTRICAL
And Special Sheets for Deep Drawing Work

SHEARED PLATES
3-16" and Heavier up to 96" wide

Lap Welded Steel
BOILER TUBES
2" to 6" O. D.

Allegheny Steel Company
Pittsburgh, Pa.

J. ALLAN ARMSTRONG
SOLICITING AGENT
1436 Dime Bank Building
Detroit, Michigan
PHONE—CADILLAC 6729

H. S. DODSON
R. V. CARD

Financing, Designing, Contracting
of
POWER PLANTS, FORGE SHOPS
AND
INDUSTRIAL PLANTS

226 Murphy Building
155 Congress St. W.
Phone Main 7835 DETROIT, MICH.

AUTOMOTIVE

Production :: Sales :: Service :: Financing :: Personnel

DURANT TO HAVE FOUR COMPANIES

An order issued by the Michigan Securities Commission last week reveals that Durant Motors, Inc., is to have four distinct companies. The Delaware and New York corporations have been organized and approved but the proposed Michigan and California organizations have not been created. The Delaware company is to be the holding concern; the New York company will manufacture the cars for the territory east of the Allegheny mountains; the California concern for the territory west of the Rockies, Pacific coast and Mexico, and the Michigan company, with its plant in Lansing, for all the territory between.

The order issued by the Commission is satisfactory to the corporation. It is pointed out that only stock in the Delaware holding company is being sold at present, while the stock for the Michigan company will not appear until it is incorporated. The holding company controls at least 60 per cent of the stock in the other corporations.

G. N. Murchey & Company, Lansing Durant representatives, deny that any original Durant stockholders are now unloading at a profit. This, they explain, would be impossible. When W. C. Durant first announced his plans he was given unsolicited money and in return alloted to the subscribers stock at $10 a share, none of which could be sold for two years and then only through himself.

FRANKLIN SALES GAIN 100 PER CENT

According to officials of the Franklin Automobile Company, Syracuse, N. Y., sales for the first six days of June exceeded the corresponding period in May by 100 per cent, this impetus following the cut in the price of the car, announced June 1. This latest reduction, together with the previous cut in September last, means that the price of the Franklin has been lowered from $4,750, according to model. Since February 10, the Franklin factory has been on a 100 per cent normal basis and has been turning out cars at the rate of 40 a day. Production for June will total 960 cars, indicative of the manner in which sales are crowding on the heels of production. It is interesting to note that on June 1, the Franklin Company had on hand orders for June delivery amounting to 82 per cent of the month's output.

MCOY JOINS REO

B. B. McCoy, formerly advertising manager of the Olds Motor Works, Lansing, and previous to that connection identified with the Oakland has been appointed advertising manager of the Reo Motor Car Company, Lansing. For the last year Mr. McCoy has been handling General Motors advertising in the British Isles, with headquarters in London.

MAXWELL-CHALMERS APPOINTMENTS

John J. Plath has been appointed director of sales of the Maxwell Motor Sales Corporation and E. W. Clark to the same position with the Chalmers Motor Car Corporation. Announcement is made by Arthur E. Barker, vice-president and general sales manager of the Maxwell Motor Corporation. General offices of Maxwell Chalmers have been moved from the Chalmers plant, in Jefferson avenue, to the Maxwell plant, in Oakland avenue.

JORDAN SALES FOR JUNE

The statement is forthcoming from the Jordan Motor Car Company, Cleveland, that the response to the price reduction announced some time ago has brought so many orders to the factory that on May 31 the June production schedule of 700 cars had been sold to the extent of 679 cars.

"We are entering a period of keen competition in selling," said President Edward S. Jordan, a few days ago. "The recent cuts in tires and automobiles are but the beginning of the fight for business in which service to the user will be the determining factor for ultimate success."

BUICK'S OUTLOOK

The Buick outlook continues to improve steadily, according to a statement issued by H. H. Bassett, president and general manager of the company. Mr. Bassett calls attention to the fact that, with the exception of three weeks at the first of the year when a complete inventory was being taken, the company has kept 11,000 men continuously employed. He adds that production will be constantly increased and the working force augmented, although for the present no new employes will be taken on, preference being given to men formerly with the company.

TO MAKE DURANT TRANSMISSIONS

Transmissions and steering gears for the various cars to be produced by Durant Motors, Inc., will be manufactured by T. W. Warner Company and the Warner Corporation, Muncie, Ind. The two corporations, which are headed by T. W. Warner are to be operated independently, it is announced, but will be affiliated with Durant Motors. Mr. Warner has resigned the presidency of the General Motors Muncie products division and will be a vice-president of the Durant organization.

FURTHER WHITE CURTAILMENT

The Cleveland Plain Dealer says that notices have been posted in the plant of the White Motor Company, Cleveland, announcing further curtailment in operations effective June 30. It is understood says the paper that about 1,800 employes will be laid off.

SELLING REYNOLDS TRUCKS

The Reynolds Truck Company which recently purchased the assets of the defunct Reynolds Motor Truck Company Mount Clemens is selling the manufactured trucks on hand and when automotive conditions are more nearly normal expects to resume the production of motor vehicles. Albert Schott is president of the new company which is capitalized at $70,000; Fred B. Schott is vice-president and L. F. Wolf secretary-treasurer.

WILL MAKE MOTOR BUSES

The Duplex Truck Company, Lansing, reports that business is improving. The plant is operating three days each week. The company is planning to develop the passenger motor bus business and has received orders for several vehicles from the South Bend-Elkhart Motor Bus Company.

SEIBERLING'S AFFAIRS ARRANGED

Under an agreement between Frank A. Seiberling, former president of the Goodyear Tire & Rubber Company, and his creditors, Mr. Seiberling's assets have been listed at $10,136,570 and his liabilities at $6,700,000. The assets will be transferred to the Prudential Securities & Realty Company, which has been organized to handle the property and protect Mr. Seiberling's equities. The assets are said to be local in character and to include $2,000,000 of Goodyear preferred stock.

Digitized by Google

FOUR TYPES OF DURANT CAR

Dispatches from New York are to the effect that Durant Motors will produce four types of cars. The one selling for the smallest price, it is reported, will be the Durant, which will be priced at less than $1,000. This car is said to have been O. K.d by the Durant engineers. The next car will be the Sheridan, which will be made in the six-cylinder model only, and the next will be the Collins, an eight, which will be produced in Detroit. The fourth car, details of which are not as yet available, will be built in a Durant factory in Flint.

REO PAYS REGULAR DIVIDEND

The Reo Motor Car Company, Lansing, has declared its regular quarterly dividend of two and a half per cent on the common stock, payable July 1 to stock of record June 15.

WINTON ON 30 PER CENT BASIS

The plant of the Winton Company, Cleveland, is being operated at about 30 per cent of capacity, according to a statement by Alexander Winton, president of the company, who says that orders are picking up.

HOBLITT HEADS AJAX SALES

Frederick M. Hoblitt, who has been president and treasurer of Quick Tire Service, Inc., has been appointed general manager of sales of the Ajax Rubber Company, New York, succeeding F. E. Dayton, who severs his connection with the company after ten years service, to enter the real estate field. His resignation is effective July 1.

HAND WITH MACK ORGANIZATION

E. D. Hand, formerly vice-president and sales manager of the J. C. Wilson Company, Detroit, has been added to the executive staff of the International Motor Company, New York, manufacturer of Mack trucks.

GOODYEAR ADDS TO FORCE

The Goodyear Tire & Rubber Company, Akron, has added 1,200 men to the working force and the daily production is said to be 16,000 tires. The tire business in Akron is reported to be running about 60 per cent of normal.

MOTOR WHEEL'S ORDERS

The Motor Wheel Corporation, Lansing, has several large orders on which it will begin work in the early fall. The plants are on a 50 to 60 per cent production basis.

HANDLEY-KNIGHT PRICE CUT

The Handley-Knight Company, Kalamazoo, which reduced its prices last November, announces a further reduction of $125 on its touring car, but no change on the other models.

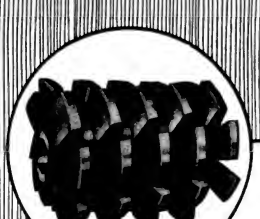
Models	New Prices	Old Prices	Reduction
7-Passenger Touring	$2,850	$2,975	$125
Sedan	4,185	4,185	...
De Luxe	3,150	3,150	...

FISKE LEAVES FRIGIDAIRE

Co-incident with the merger of the Frigidaire Corporation with the Delco Light Company, Dayton, J. Parker Fiske has resigned as president and general manager of the Frigidaire. The latter's affairs hereafter will be under the direction of R. H. Grant, general manager of Delco.

ORR WILL ASSIST HANNUM

The appointment of Ernest M. Orr as assistant to George H. Hannum, general manager of the Oakland Motor Car Company, Pontiac, is announced. Mr. Orr, who has been associated with Mr. Hannum since 1906, has been plant manager of the Jacox Steering gear plant of the Saginaw Products Company. Both Oakland and Saginaw Products are General Motors subsidiaries.



PROMPT DELIVERIES

Prompt deliveries are being offered on Brown & Sharpe spur gear, worm wheel and special purpose Hobs.

Keep an eye on tne future. Check up your hob and cutter equipment. Be ready for all orders that require accuracy and speed--equip with

BROWN & SHARPE HOBS

Brown & Sharpe Mfg. Co.
Providence, R. I.

Digitized by Google

POWER



THE RED SEAL
on the crank case is the emblem of 100% motor service.

CONTINENTAL MOTORS CORPORATION
Office Detroit, U. S. A.
Factories Detroit and Muskegon

Largest Exclusive Motor Manufacturers in the World

Continental Motors

PISTON PINS

Hardened and Ground Parts

INQUIRIES SOLICITED

The Machine Specialty Company

ANN ARBOR MICHIGAN

PHOTOGRAPHER
STUDIO BUILDING
4038 Woodward Ave.
NEAR WARREN

Commercial and Portait

Rush Work Given Special Attention

Glendale 10

MAIN 1491

SPRUNK ENGRAVING CO.

Commercial Artists and Engravers

700 MARQUETTE BLDG. DETROIT

COMMERCIAL HAULING

BUSES ON GRAND BOULEVARD

The mayor of Detroit has recommended to the common council that the ordinance regulating the operation of motor buses on the streets be amended to give the council power to stipulate routes. The suggestion was drafted into proper form, last Tuesday evening, and given first and second readings. It will be brought up for third reading next Tuesday evening. The mayor's action was occasioned by the Detroit Motor Bus Company's starting operation of its buses on Grand Boulevard, between Grand River and Woodward avenues. The mayor is opposed to the buses on the boulevard.

FLINT'S NEW ORDINANCE

The Flint council has passed a new jitney bus ordinance designed to settle its recent dispute with operators of such vehicles. The new ordinance requires each driver to take out indemnity insurance and makes violation an issue for a court of chancery to determine. Only one dissenting vote was registered to the ordinance, which provides also that buses cannot run along city street car lines.

The ordinance provides that drivers must be 21 years old, able to read, write and converse in the English language, and must possess a full knowledge of all traffic laws, submitting to an examination to be conducted by the chief of police.

Routes and running hours must be stipulated upon application for license, which is made revokable. Buses must be properly lighted, have suitable winter tops for inclement weather and be equipped with adequate heaters. Five thousand dollar indemnity insurance to cover injuries to any persons who may be injured by the bus must be provided.

The ordinance, it is believed, will end a fight between jitney operators and the city, which started recently when the city attempted to stop the buses operating along street car lines. The buses operated with "free bus" signs, passengers having a privilege to "donate" their fares.

TOLEDO BUS REGULATION

Judge Johnson, of the Toledo common pleas court, has ruled that the city has a right to regulate the kind of traffic which shall use the streets, thus the jitney ordinance passed some time ago and which provides rules and regulations as to bus operation, will be enforced.

SERVICE OUT OF MANISTEE

Freight service by truck has been started between Manistee, Onekama, Bear Lake, Benzonia, Beulah, Elberta, Arcadia and Portage Point by Schlief Brothers, Menominee. The operation of the trucks is said to have been inaugurated upon the express recommendation of the business men of the towns and communities along the route.

SOME THINGS TO REMEMBER

L. B. West, president of the West Construction Company, Chattanooga, Tenn., recently advised the legislators of his state that when they considered the legislation limiting the weight of motor trucks they should take certain matters into account so that no injustice or undue hardship be the result to truck owners. Mr. West said:

"Recently my own company invested $50,000 in five-ton trucks and had no sooner put them in operation than state legislation was passed limiting the total weight of the truck and load to 7½ tons. It is a known fact that injury to the road is caused by the weight bearing upon each inch of tire in contact with the road surface.

"The only just and practicable basis of restriction is to provide a maximum weight per inch width of tire. The maximum weight adopted in a number of states is 800 pounds per inch width of tire. If a standard basis were adopted by all of the states, the truck manufacturer and truck user could proceed intelligently and without fear of having their product and equipment rendered almost useless by confusing and conflicting state laws.

"Traffic crosses and re-crosses state lines, and it is an absurdity for the owner of trucks operating legally in one state, to find, as soon as he has crossed the state line, that he is subject to heavy fines and even imprisonment for using the same trucks in the same manner on identically the same kind of roads as characterized the other state.

"Not only do such conditions work injustice to the truck manufacturer and the truck owner, but they are harmful to the taxpayer, for contractors cannot go in and compete in states where a large portion of their equipment may be barred from use, and where the contractors who actually bid upon work are restricted to equipment that may not be operated as economically as the heavier units. Truck weight regulation is desirable, but it should be based upon a fair and standardized conception of the justifiable limit in weight per inch width of tire."

TRYING OUT THE DUPLEX BUS

In order to try out a new motor bus it intends to manufacture, the Duplex Truck Company has started a jitney service in the city of Lansing, permission having been obtained from the council covering a period of thirty days. The chief purpose is to obtain figures on costs and possible profits for purchasers. The machine carries twenty-one passengers seated, with standing room for ten or twelve more. The car is of the pay-as-you-enter type, the entrance being at the front end. The latest patented fare registers have been installed and electric heating facilities provided. The fare is five cents.

MOTORIZING IN TOLEDO

The city council of Toledo has authorized the issuance of $125,000 of bonds, the proceeds to be used in motorizing the division of streets' equipment. It is planned to purchase six one ton trucks, four tractor dump trucks, thirty garbage collection trailers, four roadsters and one caterpillar type tractor. The tractor is to be used in road repairing and the ten trucks for alley cleaning, ash and refuse removal and to aid in carrying street repair materials. It has been estimated that there will be a saving to the city of $50,000 a year by using the motor operated vehicles.

DAVID BUICK HEADS LORRAINE

The Lorraine Motors Corporation, Grand Rapids, which formerly was the Hackett Motor Car Company, has passed into the hands of new interests, headed by David Buick, founder of the Buick Motor Company. Mr. Buick will be president of the concern, while A. H. Wyatt, Toledo, is vice-president and general manager. John L. Larkin, formerly with the Haynes Automobile Company, Kokomo, as sales promotion manager, will be sales manager. F. Van Voorst is assistant general manager.

A new car designed by Mr. Buick will be made and the first testing models are expected to be out within the next three months. The capacity of the plant is twenty-five cars a day. It is expected that about 100 men will be employed at the start.

Digitized by Google

8/100 of one cent



The cost of telephone service is so small that it has practically no effect on the price of the merchandise you buy.

Yet, the telephone is so necessary to business and social life that its value cannot be estimated.

As an illustration, but eight tenthousandths of every dollar you spend for merchandise in one of Detroit's largest department stores, goes for telephone service.

The amount is so small that it hardly affects the average purchase. Actually it is but eighttenths of one mill out of every dollar spent.

The remainder of the dollar goes into merchandise, labor, taxes, and other items of expense incidental to the operation of the store.

The value of the telephone service to the public and to this institution can hardly be overestimated. It is as valuable to the store's customers as is the merchandise offered the public. But its cost is negligible.

MICHIGAN STATE TELEPHONE CO.

"Our Ambition — Ideal Telephone Service for Michigan"

Digitized by Google

Detroit United Lines

(EASTERN STANDARD TIME)

In Addition to Local Cars

FAST LIMITED CARS

Leave Detroit for

CLEVELAND AND TOLEDO — 7:20 a. m. and every two hours to 5:20 p. m. Toledo only, 7:20 p. m.

TOLEDO EXPRESS—6:20 a. m. and every two hours to 6:20 p. m.

JACKSON-KALAMAZOO LIMITEDS—6:30 a. m. and every two hours to 4:30 p. m. To Lansing, 6:30 p. m.

JACKSON EXPRESS—7:30 a. m. and every two hours to 7:30 p. m. Saline cars from Ypsilanti.

FLINT, SAGINAW AND BAY CITY—6:15 a. m. and every two hours to 8:15 p. m.

IMLAY CITY LIMITED—3:15 p. m.

PORT HURON—8:10 a. m. and every two hours to 8:10 p. m. Sundays only, 11:00 p. m.

Reduce Boiler Room Costs!

Use the Coupon

The Wickes Boiler Co., Saginaw, Mich.

Gentlemen:—

Without obligation on my part I would like to read your educational technical bulletins:

Bulletin 2. Aids in the Selection of a Steam Boiler with a Peep at the Wickes Vertical Water Tube Boiler.

Bulletin 3. Reducing Costs in the Boiler Room.

Bulletin 4. Magnitude and Prevention of Air Infiltration Losses.

Bulletin 5. Saving Coal in Steam Power Plants.

Name .....

Business Address .....

Home Address .....

Date .....

THE WICKES BOILER CO.
SAGINAW, MICHIGAN

PISTON PINS

Hardened and Ground Parts
Screw Machine Work
Patterns Made for Production

MICHIGAN PATTERN & MACHINE WORKS
R. KETTLEWELL, Pres.
3431 Jefferson Ave., E., Detroit, Mich.
Phone Edgewood 2033

TRANSPORTATION NEWS

Rail :: :: *Water*

Detroit—Fuel and lubricant committees have been appointed for each of the four divisions of the Pere Marquette Railway by General Superintendent E. E. Cain to effect economies in the use of lubricants and oils. The division superintendents are chairmen of the division committees and at frequent intervals will hold meetings with engine and trainmen for instructions and discussion. A general committee has been appointed for the system and will hold regular meetings at Saginaw, Grand Rapids and Detroit. The members of the general committee are: Fuel Supervisor Glenn Warner, Chief Mechanical Inspector C. F. Willoughby, Air Brake Inspector W. C. Groening and Master Mechanics C. K. Wood, Saginaw; W. G. Griffith, Grand Rapids, and C. E. Montgomery, St. Thomas.

Benton Harbor—Judge Clarence W. Sessions, of the United States district court at Grand Rapids, last week released the Graham & Morton Steamship Company from receivership after application had been made by the directors. The company has been in the hands of the Michigan Trust Company, Grand Rapids, since 1915. The new owner is Nathaniel Robbins, formerly of Grand Haven, who took over the line last Spring. All debts have been paid.

Muskegon— A big step forward in the transportation program of Muskegon has just been completed in a survey of the Muskegon situation by Vice-president Rogers of the Pennsylvania Railroad who is in charge of all lines west of Alliance, Ohio. Mr. Rogers was accompanied by a staff of several of the under officials who have been in Muskegon several times lately. In 60 minutes a complete survey of the city, including a trip over the Belt Line by locomotive, was effected, and more than 500 definite and well prepared questions asked and answered. The local men will submit to Mr. Rogers a complete statement in writing of all the matters discussed.

Detroit—According to the Detroit News, the Pennsylvania Railroad expects to begin an extensive building program in Detroit in 1922. The program, it is said, includes the erection of a large freight terminal and construction of tracks over the Pennsylvania right-of-way from Carleton to Detroit. The freight terminal, the newspaper says, will be located on property bounded by Congress, Third, Larned and Sixth streets, which the Pennsy has owned for two years. The project will cost several million dollars. Part of the grading on the right-of-way between Carleton and Detroit was begun some time ago.

Detroit—Delivery of twelve new steel coaches and baggage cars, which were manufactured for the Pere Marquette Railway by the Standard Steel Company, Hammond, Ind., was completed June 20, and all of them are being put into immediate service. President Frank H. Alfred contracted for these some months ago and the final delivery was made June 4. The total outlay represents $645,000. The coaches cost approximately $34,000 each, while the baggage cars represent an outlay of $20,000 each.

Washington—During the first three months of this year, 175 Class 1 railroads in this country reduced their working forces 225,000 men, or 13 per cent, according to a report from the Bureau of Railway Economics. The reduction was due to a slump in traffic and the necessity of cutting operating expenses. Part of these employes were in the repair shops, most of whom will have to be returned to their tasks as soon as the roads have funds with which to resume work. The payroll for these 175 railroads during the three months was $717,425,-173, as compared with $754,653,744 for the same period before wages were increased. Even at this reduction the yearly payroll totals $2,870,-000,000, as against $1,739,000,000 in 1917.

Saginaw—It is expected that the new roundhouse of the Pere Marquette in the Wadsworth yards, will be completed some time in September, and work has been resumed. According to the contractors, probably more than 150 workmen will be on the job within a short time. The roundhouse will have a capacity for housing more than 30 of the largest locomotives.

St. Joseph—A corporation known as the Roosevelt Steamship Company has been organized to operate a line between St. Joseph and Chicago. The steamer Theodore Roosevelt has been acquired for the purpose.

Napoleon, O.—The Detroit, Toledo & Ironton Railroad, owned by Henry Ford, is having its shops enlarged and machinery and equipment transferred here from the Jackson shops, for the purpose of making the Napoleon shops the largest outside of Detroit.

TOLEDO SEES DURANT PLANT

The report is current in Toledo that there is a possibility of Durant Motors starting a plant in that city. There is nothing official about it; in fact no one connected with the Durant organization is known to have made any statement concerning the matter, but for some reason the report has gained some credence because T. W. Warner, who was president of the Toledo Chevrolet Company, retired from this company last week to become a vice-president of Durant Motors.

SPEEDING COAST OPERATIONS

Production of the plant of the Chevrolet Motor Company of California, at Oakland, will be increased within the next thirty days, it is announced by W. C. Williams, until recently factory manager of the Chevrolet Motor Company of Texas, who has been transferred to Oakland to have charge of the California plant.

Y. M. C. A. MAN JOINS M. S. A. S.

A. G. Zeller, president and general manager of the Michigan State Auto School, Detroit, announces that he has obtained the services of Harry Rugg, formerly director of technical education for the United Y. M. C. A. Schools. Mr. Rugg has had a broad experience in technical and automotive work. For fifteen years he was engaged in mechanical engineering, both in designing and manufacturing, and was one of the designers of the original Stanley steam power plant. After two years as a commissioned officer teaching in the Army schools, he put in two years as Y. M. C. A. director, supervising the organization and operation of the Association's auto school and ten machine shop schools. Mr. Rugg is a member of the American Society of Mechanical Engineers, Society of Automotive Engineers and National Association of Stationary Engineers.

Mr. Rugg is devoting his attention to extending the services of the M. S. A. S. along lines of greater co-operation with employers, further improvement of instruction and closer personal touch with the individual student.

FIRST DUESENBERG SHIPMENT

The first shipment of Duesenberg cars will be made July 1 from the plant in Indianapolis. A chassis, roadster and touring car are being exhibited in Indianapolis.

Digitized by Google

Columbia Steel & Shafting Co.

MILLS GENERAL OFFICES

PITTSBURGH, PA., U. S. A.

Formerly Pittsburgh Shafting Co. of Detroit

COLD FINISHED STEEL PRODUCTS

"Columbia" Turned and Polished Shafting
Free Cutting Screw Stock
Axle and Alloy Steel
Special Shapes

SALES OFFICES AND WAREHOUSES

BOSTON	CLEVELAND			DETROIT
SALES OFFICES:	New York	Philadelphia	Chicago	Dayton
SALES REPRESENTATIVES:	Atlanta		Denver	Portland
EUROPEAN:	Columbia Steel & Engineering Co., Ltd., London, Eng.			

Detroit Warehouse—1300 West Fort Street Cherry 6700



Amazon Knitting Co. Mill, Mayberon, Mich.

The first Michigan mill

for the spinning of cotton yarn is illustrated above. The layout of machinery and its installation was supervised by

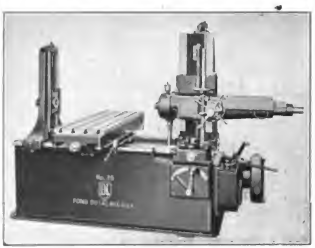
LOCKWOOD, GREENE & CO.

ENGINEERS

1227 Washington Boulevard, Detroit

BOSTON ATLANTA CHICAGO NEW YORK
CLEVELAND CHARLOTTE PHILADELPHIA
LOCKWOOD, GREENE & CO. OF CANADA, LTD., 215 BEAVER HALL HILL, MONTREAL, P. Q.
COMPAGNIE LOCKWOOD GREENE, 47, AVENUE DE L'OPÉRA, PARIS, FRANCE

THE GIDDINGS & LEWIS
No. 25 HORIZONTAL BORING MILL



Should be in every Tool Room

Ask us for details

THE MOTCH & MERRITWEATHER MACHINERY CO.
MAJESTIC BUILDING · DETROIT

CLEVELAND CINCINNATI PITTSBURGH

Digitized by Google

THE eighth world wonder is the workman who really enjoys and prides in his work. We have him. In fact we have many just like him. How do we do it? By a system which recognizes merit and rewards initiative.

The benefit of such a system is soon reflected in the low cost of our work.

MILLER-YORK
INCORPORATED
133-135 WEST LARNED STREET
DETROIT

Need an Elevator?
Ask LEITELT
Modern Designs
Superior Construction

LEITELT IRON WORKS
Office and Factory
315 Mill Ave., Grand Rapids, Mich.
Eastern Michigan Service
1900 N. Mich. Ave., Saginaw, Mich.

AJAX PATTERN WORKS, Inc.
Manufacturers of High Grade
Wood and Metal Patterns
Service Our Motto
Cherry 8451 Main 6602 680 Fort St., E. DETROIT

McMullen Machinery Company
Everything in Shop Equipment
GRAND RAPIDS, MICH.

INDUSTRIAL BUILDING

Progress, Projects and Contracts of the Week

Detroit—The Michigan Canned Food Company, whose offices are in Detroit, will build a factory at Ionia.

Cheboygan—The city council and board of city supervisors have passed a resolution not to raise the present assessed valuation of a 1,700-acre tract at Duncan, a suburb, for the period of five years in order to permit A. W. Gregg and others, of Detroit, to erect a 200-room hotel and build a boulevard around the Duncan Bay shore.

Cheboygan—Work has been started by the county road commission on the improvement of six miles of trunk line highway, No. 10, between this city and Aloha. The road will be graded and graveled and the work will occupy the major part of the summer.

Detroit—During the week ended June 18, 279 building permits were taken out, involving an expenditure of $934,710, as compared with $1,531,240 for the preceding week, when 331 permits were issued. A year ago during the corresponding week 302 permits were issued and the cost represented was $4,378,140. Of the 279 permits issued last week, 158 were new construction, to cost $755,625.

Grand Rapids—During the week ended June 10, there were 66 permits taken out, involving cost of $82,465. Among the permits was one for a two-story residence to cost $10,000 and several frame residences and dwellings to cost from $2,500 to $4,600 each. The largest item in the list was for a two-story addition to the plant of the Riverview Furniture Company, to cost $27,000.

Detroit—The price investigation being conducted by the special committee of the Detroit Board of Commerce continues. At the committee's regular meeting, Thursday of last week, figures on prices of eight or ten lines of building materials were reported by the committee's field staff, and the data is being checked to allow each member of the committee to investigate its accuracy.

Grand Rapids—The Colonial Furniture Company has acquired a site, 160 by 260 feet at Lyon and Monroe, and will soon start the erection of a factory structure, two stories high, 64 by 140 feet.

Chicago—Compilations prepared by the F. W. Dodge Company as to building activities in May, show contracts awarded in 37 northwestern states totaled $242,093,000, as compared with $220,886,000 during April. In the central west and portions of eastern Kansas and Nebraska, contracts awarded totaled $264,918,000, which is 10 per cent more than the average for the first five months of the five years previous to 1921. The investigation further shows that during the first five months of this year more than $2,000,000,000 in contemplated work has been reported.

Detroit—The week ended June 16, failed to show many important contracts let by architects or contractors, according to the list of the Builders & Traders Exchange. Among the items is a warehouse to be erected in Hecla avenue for C. L. Ibsen & Company. Residential construction continues to lead. Following are a list reported from the architects' offices: A brick veneer, two-story residence building; a four-story apartment, six stores and thirty apartments; a two-story addition to the United Brotherhood building; a two-story brick veneer residence building to be erected in Chicago boulevard; three brick veneer stores; a brick and steel laundry building; a reinforced concrete garage building; a four-store and apartment building; seven stores and thirty apartments; a two-family frame flat building; a two-story store, assembly hall, bowling alleys and billiard room, and alteration to the Brunswick Shop. A good volume of smaller construction completed the list. Contracts awarded during the last four months show 33 to 50 per cent for housing as against all other classes.

Adrian—Building permits issued from June 1 to 14 totaled fourteen, involving an expenditure of $5,770. In 1920 during the first two weeks of June, nine permits were issued, the cost represented being $2,705.

Alpena—Frank F. Rogers, state highway commissioner, has notified the Alpena county board of commissioners that he has awarded the contract for the construction of Section A of state trunk line road No. 10-18 to John Nelson, Posen, Mich., whose bid was $24,734.81.

A BUILDING QUESTIONNAIRE

The Detroit Steel Products Company has summarized the replies to a questionnaire sent out to 200 nationally known architects, engineers and builders asking their opinion as to whether now is the time to build, and what are the causes for the depression in the construction industry. Among important causes of delayed building activity are listed: Labor disputes, material prices, labor costs, credits, unstabilized conditions, lack of confidence and freight rates. Of those replying 73 look for a gradual return of building activity, twenty-six predict an increase in building next year, twenty-five forecast larger activity in the fall of 1921 and the remainder designate earlier periods for the improvement.

PIONEERING

Recently a bus line was started from the terminus of the D. U. R. at Farmington Junction, and connecting with Farmington, Novi, New Hudson, Brighton, Howell, Fowlerville, Webberville, Williamston and Lansing. The Farmington Enterprise says:

"Just as our larger territories were opened up by James J. Hill and Commodore Vanderbilt with their railroads, so our smaller territories will be opened up by electric lines and bus lines. It takes just as much nerve to establish a bus line through a virgin territory as it does to open up a railroad, for these men have staked their resources in order to open up territories which have no means of rapid transit. These bus lines will bring our neighbors near to us and it is up to us to help these legitimate enterprises, for they will directly benefit our community and business life. Since these lines have gone into operation it makes all the property in the district which it helps to transport richer commercially because the one fundamental way to open up a district is to furnish that district with adequate transportation. Farmington is rapidly coming into her own and the bus lines will help her materially."

CHANGES IN REO ORGANIZATION

Several changes have been made in the Reo Motor Car Company organization. Carl Parker, manager of the London branch, has been transferred to the sales organization at the plant, while George Hopkins has been made branch manager. A branch house will be established at San Francisco to handle the California and Pacific coast business, as well as Far Eastern exports. This branch will be in charge of P. L. Emerson. As an auxiliary, a retail establishment will be opened under the management of Byron C. Foy, at present assistant manager of the Detroit Reo branch. C. P. Green, of the engineering department, will direct the service department at the San Francisco unit.

Digitized by Google

Some Sights Along Route Of Michigan Pikes Tour

The 1921 tour of the Michigan Pikes Association will bring the tourists through some exceptionally beautiful country, according to John W. Hannen, editor of Michigan Roads and Forests. From Detroit the route leads up the central Michigan pike from Lansing to St. Ignace, passing through Mt. Pleasant, Clare, Grayling and Cheboygan. Between St. Ignace and Newberry the roads are of good gravel construction and the country is partially of cut-over timber, and some of it is still picturesque standing timber. Towns touched between St. Ignace and Newberry are Allenville, Moran and Brevort. From Garnet to Hendrick's Quarry, on trunk line 25, the road is unimproved but the scenery is delightful. Several miles of fine macadam lead into Newberry. Along the west Luce county line to Blaney the road is unimproved but this is a hardwood section and a rolling country. From Blaney to Manistique the highway is practically all well maintained macadam.

At Manistique the big power development plants and paper mills will be of interest From Manistique to Escanaba the entire route is over a tarvia treated macadam highway through a country of cut-over lands. Extensive ore docks at Escanaba will be an attraction. From Escanaba to Marquette, on trunk line 15, is easy traveling over a fine highway through much of virgin forests and trap rock quarries. From Marquette to Ishpeming and Negaunee is one of the finest macadam tarvia treated roads in the state. The mining district will be entered at Ishpeming and Negaunee. One of the prettiest scenic routes in the Upper Peninsula is from Ishpeming to Republic. The Chaping mine will be an attraction in Menominee county and the Menominee Iron Range. From Iron Mountain to Crystal Falls the route follows the Cloverland trail. The road is good gravel all the way.

Near Watersmeet stands a historic pine tree (Lonesome Pine) directly in the center of the road which is built aronnd it and the state highway department maintains it. Just off the highway is Geogebic Lake, one of the largest in the state and recognized as one of the best fishing grounds. West of Wakefield the tourists will pass by the great open pit iron mines where a seven-yard shovel is operated to remove the ore this being the largest implement of its kind in use. After Wakefield the tour will pass through Bessemer, a city maintained by the iron mines and one of the most progressive mining centers in the state. After reaching Ironwood the tour leads to Duluth.

It is noteworthy that this will be the first time in the history of the Upper Peninsula that it has been traversed by an organized automobile jaunt and the officials of the Boards of Commerce in every town and city are co-operating to make it a triumphal tour for the members of the Michigan Pikes Association. Much of the country will be new and more than likely deer will be seen in abundance.

From Duluth the route takes the tourists through Grand Marais to Fort William and the north shore of Lake Superior. It is along this shore that some of the most picturesque country in America will be seen. A day will be spent in the twin cities of Ft. William and Port Arthur and then the tourists will embark on the Noronic for Sault Sainte Marie.

LINCOLN HIGHWAY GUIDE OUT

The Lincoln Highway Association has just published its fourth annual Lincoln Highway road guide. The book, whose purpose is to answer questions regarding the Lincoln Highway for tourists, is in the nature of a memorial to H. C. Ostermann, late vice-president and field secretary of the Association, who was killed a year ago in an automobile accident



A Machine Tool Service Station

In Detroit
where so many Warner & Swasey turret lathes are operating
a Service Station is imperative,
so we put on at 5928 Second Boulevard.

Two practical men are there to serve you—
Men who know Detroit and its vicinty
and who know Warner & Swasey Turret Lathes,
C. S. Stilwell, Manager, and Wm. B. Pope.

Turret lathes of each size are on exhibit there.
You can buy one right off the floor if you like,
and equip it with tools from the stock we keep there,
or you can buy tools for the machines you have.
Our tools are adaptable to any make turret lathe.

Come and look us over—or telephone us.

The Warner & Swasey Company

5928 Second Boulevard
Detroit, Michigan

Home Office and Works—Cleveland.
Branch Offices: Detroit.....5928 Second Boulevard
Boston.....Oliver Building
New York.....Singer Building
Buffalo.....Iroquois Building
Indianapolis.....Lemcke Annex
Dayton.....Mutual Home Building
Milwaukee.....Sycamore Building
Chicago.....618-622 Washington Boulevard

Digitized by Google

MICHIGAN MANUFACTURER AND FINANCIAL RECORD

Published Every Saturday by the
MANUFACTURER PUBLISHING COMPANY
611 Free Press Building Telephone Cherry 6010
DETROIT, MICHIGAN

Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan.

John A. Russell, President and Editor; Edward R. Grace, Vice-President; John P. Fitz Gerald, Second Vice-President; Ira W. Welbon, Secretary-Treasurer; Harold High, Managing Editor; Phil S. Hanna, Financial Editor.

Subscription Rate: Fifteen Cents a Copy. Five Dollars a Year in the United States, Canada and Mexico. Advertising Rates on Application.

DETROIT, SATURDAY, JUNE 25, 1921

When the Blind Lead the Blind

TWO important tax measures affecting commerce and industry in Michigan have been passed by the legislature just ended. The first of these is not effective yet in the way of being actual legislation, but is a joint resolution authorizing the submission of a constitutional amendment for an income tax. This measure was presented after an understanding was reached with the legislature that if a corporation tax were accepted by the larger tax-paying organizations of industry and commerce, no income tax legislation would be initiated. However, under the influence of the state administration, the legislature was induced to initiate the income tax amendment. Now, it appears that the form in which it is presented is, to say the least, confusing. It may be worth while interjecting here that the business of drawing tax laws and framing the verbiage in which they appear is not one so easily managed as to permit it to become the subject-matter of haphazard framing and amendment in legislative battles. That was what happened to the income tax amendment, with the result that the form in which it is to be presented to the people authorizes a maximum tax of 4 per cent on net incomes, without describing what net incomes may be in the eye of the law; and, in addition, neglects to say how frequently the tax may be levied. Out of this confusion those who oppose an income tax draw the conclusion that the new amendment, if passed, will not be workable. We wish we could agree with them, because the income tax, as proposed, would derive most of its revenue from the southeast corner of Michigan and the county of Kent, which is an unfair distribution of any part of the public burdens. But it does not seem impossible for the legislature to define what "net" income may be. There may be several entirely reasonable definitions for tax purposes. Whether the fact that the tax levies for state purposes are and have always been made on an annual basis of contribution by the general and special properties of the state may not be read with the new provision for an additional tax may well be left to the lawyers and the courts to determine. But those who are opposed to the income tax need not be too cocksure that if the amendment, even in its present form, receives a majority of the votes of the people, it will not form a sufficient basis for the legislation which it is proposed to base upon it.

The other measure which the tax law handy men put over in the legislature was Act No. 84, Public Acts of 1921, whereby, among other provisions, a tax is imposed on corporations amounting to $3.50 per thousand on paid-up capital stock and surplus.

A careful study of this act shows that hardships will be imposed upon most corporations and that inequalities in assessments will result.

Section 7 of the act says that, "every corporation for profit * * * shall in the month of July or August of the year 1921 and annually thereafter in the same month file a report with the Secretary of State showing its condition at the close of business upon the 30th day of June next preceding the filing of such report."

On page 3 of the blank prepared by authority of the Secretary of State, known as Form 279; it is set out that the information rendered is "a true statement of the condition of the corporation as of the **30th** day of June, 1921."

From the above quotation it is apparent that every corporation organized for profit must attach to its report a true statement of its financial condition as of the **30th** day of June of this year and each succeeding year. In order to prepare a true statement of financial condition it is evident that all concerns carrying an inventory (which are greatly in the majority) must take a physical inventory of all merchandise on hand on the **30th** day of June in order to meet the requirements of the law. This works a hardship on those corporations which do not close their books on June 30, for the reason that an inventory must be taken for the purpose of this report exclusively.

There is nothing in the law indicating that the balance sheet to be submitted could be prepared as of any other date than June 30, which fact would force all corporations whose fiscal year ends at a date other than June 30 to go to the expense of taking an extra physical inventory and besides sustain a loss on account of curtailed business operations. Relief could be provided by allowing corporations to file a balance sheet prepared as of the date of the close of its fiscal year.

It is not certain that the new Form 279 supersedes the old Form 67 which has heretofore been filed as of December 31. We assume, however, that it does, on account of the titles of the two forms being indentical as well as the number of reports (two) required to be filed.

If Form 279 does supersede Form 67 it will undoubtedly become a public record in the county in which the taxpayer is located, which was the case in connection with Form 67. This being the fact, it does not seem fair to force a corporation to attach a detailed statement of financial condition to a report which will be open to the inspection of any one desiring to examine it.

By this act a minimum tax of $50 and a maximum tax of $10,000 are imposed. This means that all corporations with a combined paid-up capital stock and surplus of less than approximately $14,300 will be forced to pay the same tax as those with a net worth of that amount, and that a corporation with a net worth of approximately $2,850,000 will be called upon to pay the same amount of tax as one with a greater net worth.

These provisions impose a penalty on corporations with a net worth of between $14,300 and $2,850,000 for not having a greater net worth, and impose a severer penalty on corporations with a net worth of less than $14,300, for the same reason.

Likewise if a corporation has no surplus but instead a deficit, whether it be the result of operating losses or dividends, no deduction can be made from paid-up capital arriving at the amount against which to apply the tax rate. This imposes a penalty on a corporation for not having a surplus.

Thus some interesting questions are opened up in the matter of the corporation tax. It looks as if the people who drew these laws understood and appreciated neither business nor taxation. It is a case of the blind leading the blind.

Mr. Thomas Speaks

WHEN Samuel Gompers and other organized labor leaders get up before the public or labor union gatherings it is a twenty-to-one shot that every element in this country except labor union members get "razzed" for the present condition of things in business. It has not been our good fortune to observe any other kind of public utterances but scathing attacks on business men in general from any of the more prominent American leaders.

But now from a man from across the Atlantic has come one of the first and most sensible utterances concerning labor. J. H. Thomas, British labor leader, speaking at the Denver convention of the American Federation of Labor, said: "No nation today can lock itself up in a watertight compartment and isolate itself from the rest of the world, and prosper. Do not make the mis-

Digitized by Google

take of thinking that any nation of the world can build a wall around itself. We have been living in artificial prosperity—a fool's paradise. The workers of the world are suffering the inevitable price of living a riotous life during the last six years."

The first sentence shows a keen appreciation of world economics and is first cousin to the statement that we cannot hope in this country to have foreign trade without purchasing goods from other lands. And possibly he also had the thought in mind that foreign countries cannot permanently buy our high priced goods, made with labor costs several times those of foreign countries.

"The workers of the world are suffering the inevitable price of living a riotous life the last six years," says Mr. Thomas. This is an honest admission of the facts. How often were working men reminded during 1919 and 1920 that those were days of "golden opportunity" in which to save part of the swollen wages for the rainy day, but how few profited thereby!

What labor in the United States needs is more leaders like Thomas, who are unafraid of losing their jobs and who are willing to let their future as professional labor leaders rise or fall with the natural evolution in human relations.

Profit, 174 Per Cent

A STORY which, while it may not be true in every detail (you know how a story grows in the telling), illustrates the complaint that the chief reason why economic conditions are not adjusting themselves as rapidly as they should is that retailers have been and are still a bit obstinate about marking prices down somewhere near the level justified by wholesale reductions, is going the rounds in Detroit business circles. It is vouched for by a man of standing, who says he knows.

According to the story, a downtown merchant put into his show window a gown and affixed to it a price tag bearing the figure $29. A rival merchant, strolling down the avenue early in the morning on his way to his own desk, chanced to notice the window and nearly had heart failure when he saw the price mark on the dress. Suspecting that the merchandise was being displayed as a "come-on," he hurried to his store and sent one of his salesgirls over to buy the gown.

When the girl told the clerk she wished to purchase the dress the clerk said he would have to call the floor walker. The latter rubbed his hands together unctuously and was very sorry that the gown was much too small for the customer. It pained him immensely, but there was no larger size of that particular model in the store. Could he show her another "just as attractive?" No, she wanted that gown and none other. She would have it altered, you know. But, the floor walker insisted, the gown was made in such a way that it couldn't possibly be changed without ruining it. The salesgirl stood her ground. She would have the gown. A member of the firm was called. He tried ineffectually to talk her out of it, but when she declared she would have the gown, fit or no fit, and take her chances on the re-fitting, he finally gave in, there being nothing else, apparently, to do about it.

She carried the dress back to her employer's store and there they compared it with others—and, sure enough, it was identically the gown they were asking $160 for.

The merchant, his fury at his competitor's tactics mingled with pride over the neat transaction he had "put over," was telling it to a friend.

"The dirty pup," he blustered, "working the old come-on game! And that was the dress that I paid $68 for, wholesale!"

He paid $68 for it wholesale and was selling it for $160. That's a profit of 174 per cent.

Write your own answer.

We were just getting interested in that new Mexican revolution when we heard that the rebel army included all of 150 men —probably all generals. At that, they may find Mr. Obregon under the bed if they ever get as far as Mexico City.

King George and the British government should rehearse their act a little longer before they put it on. The day after the king pleaded tearfully with the Irish to "be good," assuring them that Lloyd George had only the best of wishes for them, Mr. George sends in a few thousand more troops and declares his intention to declare martial law.

Admiral Sims reached Washington Wednesday, and, bright and early the next morning, after carefully tucking a couple of pillows into his trousers, left for Mr. Denby's office.

Chicago is ashamed to acknowledge it has a building scandal. Chicago should be proud it has enough building to support a scandal.

A congressman from Mississippi has introduced a bill to make it a prison offense for a woman to smoke a cigarette in the District of Columbia. Why drive the poor souls to stogies?

Hamilton Holt is still arguing in favor of our going into the League of Nations. Somebody should wake Hamilton up. He's walking in his sleep.

Somebody wants to establish a tri-county zoo near Detroit. There ought not be much trouble filling it.

The Russians have been accused of most everything in the category of crime. And now it's piracy.

Short Measure Stuff

AHA!

The finest line
Of print or writing,
Is just this phrase:
"The bass are biting!"
—Detroit Free Press.

The greatest words
I've heard to date,
Are: "Come on, boys!
I've got the bait!"
—Hastings (Neb.) Tribune.

That's great, by jing,
And you can bet it!
The bait's the thing—
But where'd you get it?
—Newark (O.) Advocate.

But if the bait
Is all you wish,
Why waste it on
A lot of fish?

* * *

All that is necessary to make the front page these days is a couple of wives.

* * *

Admiral Sims, having received a lot of unfavorable publicity by the press of the world, through his unnecessary and futile horning in on a question that did not concern him, should now consider himself fully qualified for a regular job on the Dearborn Independent.

* * *

What has become of the old-fashioned landlord who charged overtime for June because it contained the longest day in the year?

* * *

The folks who want to know when there will be another period of excessive prosperity are the same ones who used to ask when the war would end.

* * *

Why does a fat man in a summer suit look like something the butcher wrapped up?

* * *

A week-end in a nice, airtight cold storage plant might help to make the operators who keep the price of coal up to the old levels listen to reason.

* * *

GONE ALL HEMLOCK!

(From the Holland City News)

J. M. Brunner, of this city, received a telegram from the Misses Anna Van Putten and Gertrude Tiesenga, which read as follows: Arrived safely in Chicago. Necks were stretched two inches by looking at sky-scrapers."

* * *

The strawberries and the sweet girl graduates ought to make an optimist of anyone.—A. F.

A. F.

Digitized by Google

FINANCIAL

Is Easier Money Near at Hand in Detroit?

By PHIL S. HANNA

SEVERAL TIMES of late attention has been called on this page to the possibility of a period of more plentiful money supply this summer. And it now appears that such a period is nearly at hand, judging from the trend of returns of the Detroit clearing house banks.

For the first time since the last week of April, 1920, total deposits are greater than total loans and investments. This is most significant. It is possible, of course, that this relation will not continue, but the trend of the figures would seem to point toward continued increases in deposits sufficient more than to offset the gain in the loan item.

By reference to the chart on page 80 in the 1921 Bankers and Investors Annual of this paper (published June 4) the reader will readily follow the trend. Total deposits, which were about $399,000,000 in the middle of May, are now $414,000,000 (June 16), whereas total loans and investments, which were $415,000,000 in May, are now $411,000,000 (June 16). During this same period borrowed money items fell off from $45,000,000 to $39,000,000. It looks as if deposits, according to the detailed chart which is kept up to date each week in this office, are headed for higher levels. Following each gain there is a loss, but since April 1 the total has never dropped back to its low level and is now $39,000,000 ahead of the total on that date.

This, however, is not a promise. It is, nevertheless, a pretty good indication that the money supply of the banks is improving. But, unfortunately, even if money gets really plentiful, it does not necessarily mean a return of flush times immediately. Some veteran observers point out that easier money may mean idle money, a condition not wholly unlikely and one which has occurred heretofore in this country. But one thing is sure, a period of easy money is going to change sentiment and is going to encourage the house-building industry, and whoever can offer a bankable proposition is going to fare heart again, for his chances of obtaining funds will be improved.

It is to be hoped that these encouraging signs are a true forerunner of what is apparently indicated, but time once more is going to be the sole judge, and we shall look forward to next week's report with absorbing interest.

The Purchase and Sale of Foreign Bills of Exchange

By FRED W. ALLEN

THE actual turnover in foreign bills of exchange is really the principal source of revenue of a foreign exchange department, inasmuch as the trading in such bills is practically the only means of meeting obligations abroad.

Bills of exchange might be classified into three different groups; individual, bankers' and export bills. The first class represents nothing more nor less than the withdrawal of funds from banks, as in domestic transactions. These bills are generally clean—that is, not supported by shipping documents.

The second class, bankers' bills, are, as the name implies, drafts drawn by banks in this country upon their correspondents abroad, and represent funds placed to their credit either by demand or time bills that have matured, or the transfer of funds by cable. Bankers' bills are also clean bills, as in the first case. The market value of bankers' bills is governed by the class of the bill alone. So many second-class bills have been offered in the foreign exchange market in the last few years that bankers these days require a strict understanding with the seller of the draft that such drafts will be drawn by prime banks and the bid is made upon the draft accordingly.

The third class, the export bills, are either clean or documentary. In the first case clean bills are, as a rule, drawn by the exporter as representing balances placed to his credit through the payment of obligations due him. Some of the packers find it to their advantage to have meat and provisions shipped from various parts of this country direct to their representatives abroad, payments to be made upon receipt of the shipments and the funds placed to the credit of the exporter, who is then advised by cable regarding his balances. It is his privilege to sell such balances in the open market, either by cable transfer or demand draft.

Documentary bills are drafts supported by the usual set of shipping documents, which includes full sets of bills of lading, invoices, consular invoices, insurance and war risk certificates and any other necessary papers called for in the terms of the contract. The tenor of these drafts ranges from "at sight" to "six months"; but as a rule are drawn at either thirty, sixty or ninety days. It is always to the advantage of the consignee to have these bills drawn at the longest tenor possible in order to allow him to dispose of the goods or the equivalent two or three times before the obligation is due. Such drafts cover the shipments of meat, provisions, flour, grain and cotton, the first two being the most widely offered in the market at the present time

In bidding on foreign bills of exchange, the rate is based upon the demand rate of the day in the city upon which the drafts are drawn and upon the tenor of the drafts. Ordinarily there is no stamp charge made by foreign banks upon individual or bankers' clean bills, but there is a tax on export bills, as well as banker's commission. These charges are deducted from the demand rate, together with interest on the funds for thirty, sixty or ninety days, according to the tenor of the draft.

Under the present market conditions, sales against the purchase of bills of exchange are made, as a rule, so as to permit of their catching the first steamer following that upon which the remittance is made. This practice is considered due to the very violent fluctuations in the foreign exchange market; and while the turnover might result in a smaller margin of profit, the general public is to accept smaller profits and thereby avoid the possibility of excessive losses.

Balances are disposed of by the protection of drafts drawn by smaller banks equipped with the necessary facilities for drawing against your account; also, counter trade as well as city trade. In addition to these various forms, the foreign exchange brokers are at all times in a position to bid upon demand drafts we might have occasion to sell, to meet the requirements of other banks being short on that particular exchange. Drafts, money orders, cable transfers and letters of credit, of course, enter into the final disposition of these funds, inasmuch as they are eventually charged to our account, and the same procedure is followed from day to day to build up our balances as funds are withdrawn.

Mr. Allen, author of the foregoing, which appears in the current issue of "F. N. F." house organ of the Northern Trust Company, Chicago, is manager of the foreign exchange department of that company. Until recently he held the same position with the American State Bank, Detroit.

Comparative Bank Clearings Detroit

Week Ended	1921	1920
January 5	$107,887,894	$151,488,204
January 12	90,276,447	140,887,609
January 19	101,898,885	181,841,087
January 28	79,018,807	97,841,685
February 5	87,986,924	91,775,883
February 9	76,806,481	161,049,806
February 16	76,061,985	101,198,770
February 25	67,711,081	98,658,757
March 5	88,525,596	157,098,854
March 9	75,782,585	115,011,861
March 15	90,836,483	139,176,058
March 23	80,188,495	148,987,888
March 30	89,091,571	118,481,956
April 6	75,156,973	124,898,881
April 15	81,451,867	106,881,367
April 20	90,777,520	161,688,148
April 26	80,688,890	112,788,078
May 5	91,944,988	114,786,787
May 13	79,615,906	114,448,992
May 18	108,341,704	115,784,718
May 25	84,600,615	118,677,741
June 1	85,506,509	98,256,756
June 8	89,169,964	107,548,161
June 15	72,323,059	127,208,578
June 22	126,804,858	139,612,858
Month of		
January	$88,450,288	467,221,870
February	$92,841,688	485,266,496
March	$87,878,640	$70,458,529
April	$84,284,078	$40,370,089
May	$82,162,222	484,786,858
June		505,706,267
July		572,634,146
August		532,189,086
September		561,597,940
October		515,425,788
November		465,085,864
December		457,951,245
Yearly totals, 1920		$6,103,822,903
Yearly totals, 1919		$4,504,886,165

HANNUM AND WARNER FETED

George H. Hannum, recently appointed general manager of the Oakland division of the General Motors Corporation, Pontiac, and Fred W. Warner, retiring manager, were entertained at dinner last week by business men of Pontiac and Saginaw, in the Pontiac Board of Commerce. The guests numbered 200.

HORSES AND TRACTORS TO COMPETE

A series of competitive demonstrations of horses and tractors in farm work is to be conducted by the National Industrial Vehicle Association before representatives of the tractor manufacturers, Horse Association of America, American Society of Agricultural Engineers, Society of Automotive Engineers and the United States Department of Agriculture. The first demonstration will be held at Fargo, N. D., June 28, 29 and 30.

Digitized by Google

The American Investment In Oil in Old Mexico

On several occasions reference has been made to possible trouble between Mexico and United States involving the interests of American concerns engaged in crude oil enterprises. Little is known generally as to the number of these companies or their output. In a recent article on the subject, the Boston News Bureau, referring to the production of crude oil by these concerns in 1920 and in 1919 said:

"Mexican Eagle Oil Company established a high record for production in Mexico in 1920, producing 32,381,555 barrels, or 13,583,248 more barrels than in 1919, an increase of about 72 per cent. According to the figures just issued by the Mexican Petroleum Department, total production for Mexico was 156,062,707 barrels, against 87,072,955, an increase of 68,989,752 barrels over 1919, or nearly 80 per cent. Standard Oil Company of New Jersey was the second largest producer.

"The following table shows production of crude oil in Mexico by companies in 1920 and 1919, with change, the figures being the official records of the Mexican Petroleum Department:

Companies	Output in Barrels 1920	Output in Barrels 1919	Increase or Decrease
Mexican Eagle	32,381,555	18,798,307	Inc. 13,583,248
Standard of N. J.	19,340,073	7,172,099	Inc. 12,067,974
Texas Co.	12,526,156	5,709,507	Inc. 6,756,651
Mexican Petroleum	12,513,575	16,946,139	Dec. 4,431,561
Gulf Oil	11,944,664	6,250,480	Inc. 6,692,186
Prospect-Mex. Sinclair	11,127,545	4,986,706	Inc. 6,140,840
International Pet.	7,964,261	496,181	Inc. 7,468,160
Mexican Investment	7,552,814		Inc. 7,552,940
Penn-Mex. Fuel	7,233,495	9,703,169	Dec. 1,469,674
Atlantic Gulf	6,713,623		Inc. 6,713,623
Corona Oil-Royal Dutch	4,267,375	822,648	Inc. 3,444,727
Island Oil & Transp.	3,215,418	5,317,954	Dec. 2,101,535
Southern Pacific	2,020,596	1,106,200	Inc. 47,052
N. E. Fuel-Magnolia	2,977,963	394,763	Inc. 2,582,200
Utiles Service	1,607,579	457,026	Inc. 1,150,553
Boston Mex. Leasing	1,003,579	349,789	Inc. 1,353,790
Panuco Bost. Atl. Ref.	1,531,321	836,525	Inc. 694,806
Scottish-American	790,262	1,581,129	Dec. 841,347
Atlantic Lobos	361,757	4,005,279	Dec. 3,673,522
Miscellaneous	1,668,663	1,942,346	Dec. 273,439
Total	156,062,707	87,072,955	Inc. 68,989,752

"The average number of producing wells existing at any one time was 118, making the average annual output of each well 1,300,000 barrels."

WHAT FOREIGN TRADE SHOWS

Government figures on exports and imports for April show $20,717,814 sold to South American purchasers, against $47,026,874 in April, 1920, while we bought from them $30,535,087, as against $76,007,952 a year ago April, resulting in an adverse trade balance for the month of approximately $10,000,000. Exports to Europe were $174,645,581, compared to $364,094,160 in April last year, while imports aggregated $69,146,424, compared to $111,346,889.

Exports	10 months this fiscal year.	10 months last fiscal year.
Trade with Europe	$2,053,315,828	$4,184,087,642
South America	467,919,783	386,418,623
Imports.	10 months this fiscal year.	10 months last fiscal year.
Trade with Europe	$822,352,715	$968,927,520
South America	443,246,673	716,373,697

AN UPPER PENINSULA LINE

A bus service has been started between St. Ignace and Sault Ste. Marie with a vehicle having carrying capacity of 25 persons, and freight. The bus starts at 8 a. m. and arrives at destination at noon, beginning the return trip at 1 p. m., to arrive in St. Ignace at 5 p. m. The round trip costs $5 and the fare one way is $3, which latter rate is slightly below the railway fare.

DETROIT BRASS DIVIDED

The Detroit Brass & Malleable Company has declared the regular monthly dividend of one-half of 1 per cent, payable July 1 to stock of record June 26, 1921.

THE OLDEST HOUSE IN MICHIGAN

As syndicate participants, we offer

COLUMBUS, OHIO
RAILWAY POWER AND LIGHT COMPANY
Three year 8% Sinking Fund Mortgage Bonds

Dated June 1, 1921 — Due June 1, 1924

SINKING FUND: $50,000 per month to be used for retiring bonds of this issue.

SECURITY:
1. General mortgage on entire property of company.
2. Additionally secured by pledge of $4,000,000 First Refunding 5's due 1940.
3. Net earnings over 2 3-5 times annual interest charges on all bonds.

PRICE: 98 and interest, yielding over 8.75%.

We recommend these bonds for investment

H. W. NOBLE & COMPANY
318 Dime Bank Building — *Bond Department* — Detroit, Michigan

DIME SAVINGS BANK
FORT & GRISWOLD STS.
DETROIT, MICH.

BRANCHES
Woodward & Milwaukee
Woodward & Willis
Jefferson & Beaufait
Gratiot & Russel
Grand River & Lawton
Grand River & Highfield
Michigan & Eighth
14th & Ferry Park
Broadway & Witherell
Oakland & Holbrook
Harper & Frontenac
Mt. Elliott & Davison
Sharman & Chene
Dix & Artillery
Military & Michigan

The Many Services

which the DIME SAVINGS BANK renders to its customers—local and out-of-town—attract to this widely known Michigan institution a steadily growing number of depositors and correspondents requiring the best of service in this great territory.

We invite and will appreciate your business—or any part of it.

Capital and Surplus, $3,750,000

W. J. PEOPLES & CO.

STOCKS
BONDS
FOREIGN
EXCHANGE

First Floor Panobesot Bldg. — Phones Cherry 8640

We solicit your inquiries

COURTESY SERVICE SAFETY

You will find the personal, friendly service of our bank of great assistance in helping you to meet the unusual financial demands incident to the present war conditions. We should like to co-operate with you.

The Grand Rapids National City Bank
City Trust and Savings Bank
GRAND RAPIDS, MICHIGAN

Digitized by Google

Weekly Federal Reserve Statement

RESOURCES AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED
(In thousands of dollars)

	June 15, 1921	June 8, 1921	June 18, 1920
RESOURCES			
Gold and gold certificates	311,017	297,476	162,878
Gold settlement fund—Federal Reserve Board	456,211	571,259	460,853
Gold with foreign agencies	.....	.....	111,531
Total gold held by banks	767,228	819,015	675,242
Gold with Federal Reserve agents	1,550,812	1,460,358	1,161,784
Gold redemption fund	127,522	151,299	125,295
Total gold reserves	2,445,568	2,430,672	1,962,321
Legal tender notes, silver, etc	170,056	161,874	138,579
Total reserves	2,615,624	2,592,546	2,100,900
Bills discounted:			
Sec. by U. S. Government obligations	664,286	747,000	1,231,841
All other	1,003,383	1,149,353	1,064,296
Bills bought in open market	53,200	69,501	294,591
Total bills on hand	1,720,870	1,965,860	2,684,728
U. S. bonds and notes	35,066	32,662	26,864
U. S. certificates of indebtedness—			
One-year certificates (Pittman Act)	222,375	225,375	259,375
All other	300,513	1,662	87,716
Total earning assets	2,318,823	2,225,572	3,068,683
Bank premises	21,442	21,842	12,254
5% Redemption fund against F. R. bank notes	10,176	10,449	12,110
Uncollected items	722,766	541,496	948,863
All other resources	18,233	18,492	9,167
Total resources	5,707,179	5,407,386	6,152,977
LIABILITIES			
Capital paid in	102,156	102,066	94,662
Surplus	202,036	202,036	120,120
Reserved for Govt. Franchise Tax	39,057	38,057	.....
Deposits—			
Government deposits	14,597	20,261	56,256
Due to members—reserve account	1,866,455	1,684,975	1,809,417
Other deposits, including foreign government credits	48,175	30,721	77,485
Total deposits	1,929,227	1,735,957	1,943,158
F. R. notes in actual circulation	2,674,435	2,710,723	2,168,810
F. R. bank notes in circulation—net liability	135,950	144,054	182,904
Deferred availability items	554,267	447,857	633,722
All other liabilities	31,011	24,936	82,101
Total liabilities	5,707,179	5,407,386	6,152,977
Ratio of total reserves to deposit and F. R. note liabilities combined	56.8%	58.3%	*44.5%
Ratio of gold reserves to F. R. notes in circulation after setting aside 35 against deposit liabilities	72.6%	72.2%	*48.4%

*Calculated on basis of net deposits and F. R. notes in circulation.

Michigan Bond Items

Dillon, Read & Company, formerly W. A. Read & Company, are offering $4,000,000 of first mortgage 8 per cent sinking fund gold bonds of the Hanna Furnace Company, Cleveland, at 99½ to yield about 8.10 per cent. According to their circular, the Hanna Furnace Company is the largest independent producer of merchant pig iron in the United States, operating eight well equipped blast furnaces with a yearly capacity of about 1,000,000 tons. The bonds are to be secured by first mortgage on the entire fixed assets and leaseholds of the company, subject to $440,000 bonds on part of the properties, and by pledge of interests in the Hanna Ore Mining Company and in various ore, coal mining, coke producing, lake vessel and other companies. The bonds will also be guaranteed by M. A. Hanna & Company. Stock of the Hanna Furnace Company, both common and preferred, is listed on the Detroit Stock Exchange, and Detroit is further interested in this company because two modern blast furnaces with a capacity of 700 tons of pig iron are located just south of the Detroit city limits on the Detroit river near the Semet-Solvay Company plant, from which coke supply is obtained. The bonds are dated June 1, 1921, and mature June 1, 1926.

The board of education of the Munising township school district, Alger county, is offering for sale the bonds of the district to the amount of $200,000, dated July 15, 1921, bearing interest at the rate of 6 per cent per annum, payable semi-annually. Twenty thousand dollars of the bonds are due on January 15 in each of the years 1922 to 1926, and $10,000 on January 15 in each of the years 1927 to 1936, both inclusive. Both principal and interest of the bonds are payable at the Continental & Commercial National Bank, Chicago. The assessed valuation of the district is $6,535,101, and the debt of the district, including these bonds, $200,000. Bids should be addressed to Theodore W. Scholtes, secretary of the board of education, Munising, and be in the hands of the secretary on or before 12 o'clock noon, July 1, 1921.

A syndicate composed of the Guaranty Trust Company of New York, the National City Company and Harris, Forbes & Company has purchased $2,000,000 of Detroit street railway bonds. There were four bidders. The syndicate will pay 100.27 per cent and accrued interest to date of delivery. Half of the bonds will pay 5½ per cent and the other half 6 per cent. The bonds are part of the issue of $15,000,000 authorized by the people for the construction of the municipal street railway. Issuance of these bonds will bring the total sold to $6,750,000.

"What steps will be taken by the city to satisfy, if possible, holders of the $25,000 municipal bonds recently coming due, and the money for which attorney J. T. Pingeman, representing the Superior Trust Company, demanded of the council Wednesday evening, is a question that promises to loom high on the horizon," said the Houghton Gazette a few days ago. "Mr. Finnegan's demand is the initial legal step toward having the bonds taken up. That the city's financial condition does not permit retiring the issue is no secret."

The Central Union Trust Company, New York, has been appointed trustee of $13,500,000 of the Maxwell Motor Corporation's one, two and three-year, 7-per-cent gold notes, dated June 1, 1921.

The Genesee county road commission, Flint, has sold to Keane, Higbie & Company, Detroit, approximately $380,000 of Covert act road bonds at par and accrued interest.

A special election will be held in Owosso, June 28, to vote on a proposal to bond the city for $500,000 for the purpose of erecting two ward schools and a high school building.

The city of Saginaw will offer for sale, July 1, $200,000 of 10-year street improvement bonds, dated July 1, 1921, and bearing 5½ per cent interest.

Bond issues of $1,650,000 for the erection of a city light and power plant were approved by the Lansing city council last week and will be submitted to the people at a special election.

Otsego has voted, 468 to 118, in favor of bonding the town for $60,000, the money to be used for paving purpose.

The city council of Escanaba has authorized the issuance of special assessment bonds of $13,500 which will bear interest at the rate of 6 per cent and will run for a period of five years, to pay the city's portion of paving fourteenth street.

A special election will be held in Owosso, June 28, to vote on a proposal to bond the town for $500,000 for school building purposes.

Van Meer township, Munising county, has decided by a vote of 32 to 4 in favor of bonding the township for $15,000 for highway improvements.

A special election will be held in Owosso, July 7, for the purpose of deciding the question of bonding the city in the following amounts: $20,000 for extension of water mains; $23,400 for storm sewer and $3,300 and $2,800 for paving.

The voters of Bay City have approved a bond issue of $1,400,000 for school building construction.

CITY NATIONAL, BATTLE CREEK

The City National Bank of Battle Creek, formerly the City Bank, is publishing figures running back to June 2, 1871, showing the growth of the institution. Total resources on the date mentioned were $35,294.89; July 2, 1881, ten years later, they were $365,922.20; July 9, 1891, $612,868.30; June 2, 1901, $1,383,987.55; June 2, 1911, $1,789,334.45, and June 2, 1921, $4,764,189.27. E. R. Morton, a brother of John Morton, who is interested in the new Commercial State Savings Bank of Detroit, is vice-president and cashier of the Battle Creek institution.

NATIONAL GROCER DIVIDEND

The National Grocer Company has declared the regular semi-annual dividend of 3 per cent on the preferred stock, payable July 1 to stock of record of June 20, 1921.

INSPIRATION CONSOLIDATED

Forty mining claims on Pinto creek, Arizona, are reported to have been acquired at a cost of $44,000 by the Inspiration Consolidated Copper Company.

Digitized by Google

Detroit Bank Stocks

June 91, 1921	Bid	Ask	Last Sale	Range 1921 High	Range 1921 Low	Range 1920 High	Range 1920 Low	Annual Rate	How Paid	Books Close
American State		215	218	221	215	226	200	10%	J-A-J-O 1st	
Bank of Detroit			185					10%	M31, J+S30, D31	3 Days Prior
Detroit Savings	230		200	200	200			12%	J-A-J-O 1st	
Dime Savings			260	260	258	259	258	14%	1 Mon 1 Jan Jul.	
First and Old Detroit National		270	270	273	271	275	269	12%	J-A-J-O 1st	Do Not Close
First State			181					10%	J-A-J-O 1st	
Highland Park State			250	260	250	268	266	16%	A-J-S 30+D 31	On Div. Date
Merchants National		150	151	149	149	163	142	8%	J-A-J-O 1st	Do Not Close
Nat. Bank of Commerce	195		215	215	210	230	190	12%	J-A-J-O 1st	Do Not Close
Peninsular State	220			230	220	230	220	12%	M31, J+S30, D31	6 Days Prior
Peoples State			355	360	355	335	306	16%	J-A-J-O 1st	
United Savings			225	208	208	212	200	12%	Monthly	
Wayne County Home			347			347	347	6%	Monthly	
Amer. Loan and Trust			155					8%	J-A-J-O 1st	
Guaranty Trust								8%	J-A-J-O 1st	10 Days Prior
Detroit Trust			275	295	255	380	375	12%	J-A-J-O 1st	
Security Trust								12%	M31, J+S30, D31	10 Days Prior
Union Trust			180	180	180	197	197	8%	J-A-J-O 1st	
Unlisted										
Continental Bank	190	120								
Commonwealth-Federal	295	105	100			130	130			

†Nominal Quotation

Miscellaneous Stocks

(Owing to the fact that many of the stocks quoted below are not listed on any recognized stock exchange, from which authoritative figures are obtainable, these quotations must be considered as nominal. We endeavor to obtain figures from responsible sources but do not assume responsibility for their correctness. It should be borne in mind that prices for many stocks which are closely held are apt to vary widely on sale.)

Local Stocks	Bid	Asked
Burroughs Adding Machine	146	145
Columbia National Fire	13½	13
Commerce Fin.	25	99
Detroit Mortgage, com.	1⅝	1⅞
Detroit Mortgage, pfd.	5¼	5½
Detroit Copper & Brass	16	20
Detroit National Fire	25	99
Detroit Life	60	62
Eureka Croesus	29	30
Federal Bakeries Co.	97	30
Federal Discount Co.	7	7½
Fisher Body	35⅝	36¼
General Necessities Corp.	10⅝	19
Gladys-Belle Oil, com.	13	20
Gladys-Belle Oil, pfd.	92	24
Great Lakes Engineering, new	11	14
Hoover Steel Ball	9	11
Hayes Wheel Co.		14
Interstate Fire	96	23
Invader Oil	50	56
Jackson Cushion Spring	7	9
Jewett, Bigelow & Brooks Units	9¾	10¼
Jewett, Bigelow & Brooks, com.	6	6¼
Kelsey Wheel	63¾	64¼
Little Wonder Stove	14	15
Monroe Binder Board	38	39
Detroit Motor Bus	8¾	9¼
McGord Manufacturing, com.	5¾	6¼
McGord Manufacturing, pfd.	95	40
Michigan Copper & Brass	13¼	14½
Michigan Fire & Marine		80
Noble Oil, com.	19	20
Petoskey Portland Cement	19⅛	14
Peninsular Fire Ins.	91	21
River Raisin Paper	9½	10
Trippensee Mfg. Co.	5⅝	3⅜
Union Mtge., 100% com.		7½
Union Mtgs., 90% com.		7¾
Motor Stocks	**Bid**	**Asked**
Brisco Motors	2	10
Columbia Motors	2⅜	3
Chalmers	¾	1½
Chevrolet	150	409
Cleveland	27	29
Elgin Motors	6	6½
Hupp	10¾	11½
Liberty Motors	2⅝	3⅛
Lee Tire	27⅜	28¼
Pierce-Arrow Truck	20¾	20⅝
Mercer	3	4
Mitchell Motor	1	9
Motorbus	6	6½
Nash	900	926
Republic Truck	13⅝	14¼
Saxon Motors	2⅝	3⅜
Scripps Booth	95	35
Stearns		29
Stromberg Carburetor	30⅜	31¼
Studebaker	74⅜	74⅞
Willys-Overland	6⅞	7⅜
Grant Motor	9½	2⅜
Jordan Motor	75	125
Peerless Motor	23	26½
White Motor	30¼	30⅝

Detroit Listed Bonds

Name — June 21, 1921	Bid	Ask
Conn. Pow. Co.—5s, 1935	80	81
Detroit & Flint—5s, 1921	96⅛	93⅛
Detroit, Ft. W. & B. I.—5s, 1927	78	81
Detroit Gas Co.—5s, 1925	76	81
Detroit & Pontiac Ry.—5s, 1932	99	99
Detroit & Pontiac—4½s, 1928		34
Detroit & Port Huron R. L.—5s, 1950	15	25
Detroit Railway—5s, 1924		36
Detroit, Ypsi & A. A.—5s, 1924		100
Det. Ypsi. & A. Jackson—5s, 1929	79	86
Det. United Ry.—4½s, 1932		91
Detroit Edison Co.—5s, 1933	87	99
Det. Ed. Co. 1st & ref. 5s, 1940	77	79
East Mich. Railroad—5s, 1931	81	33
Detroit Edison deb. 7s, 1928	94⅛	95⅛
Detroit Edison deb. 7s, 1929	97	95⅛
Detroit Edison deb. 7s, 1930		94
Detroit Edison deb. 8s, 1931	99⅛	100⅛
D. C. Gas Co., G. M. 5s, 1912-23		90
D. C. Gas Co., P. L.—5s, 1922	91	95
Detroit & Sub. Gas Co.—5s, 1933	81	99
Mich. State Tel. Co.—5s, 1924	86½	88⅜
By-Prod. Coke Corp.—6s, 1930		

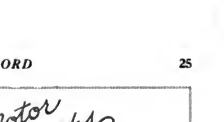
Stock Sales — Week Ended June 21

Det. & Ft. W. & B. I. 5s, 1927, 4,000 @ 78⅜.
Detroit Edison 8s, 1931, 1,000 @ 100⅜.
Detroit Edison 8s, 1931, 4,000 @ 100⅛.
Detroit Edison 7s, 1929, 2,000 @ 95.
Listed stocks, 22,696 shares.
Unlisted stocks, 66,769 shares.

Kalamazoo Stocks.

Paper Companies	Bid	Ask
American Box Board, com.		17⅜
American Box Board, pfd.	9	10
Bardeen	16	18
Bryant	17	18
Eddy, com.	2⅜	3
Eddy, pfd.	9	10
Hawthorne	9⅜	10¼
Kalamazoo	17	19
Kazoo Veg. Parch.	10½	11¼
King	17	17⅜
Lee, units		25
Mac Sim Bar	9	10
Michigan	17	17½
Monarch	11½	12
Rex	15	18
Northern Michigan Pulp		125
Standard	28	30
Strathmore		10¼
Watervliet	20	20⅜
Western Board	15	90
Banks		
First National	225	250
Home Savings	160	175
Kalamazoo City Savings	190	200
Kalamazoo National	145	150
Miscellaneous		
Barley Motor, com.	25	45
Barley Motor, pfd.		
Hayes Wheel	9	11
Kazoo Loose Leaf	12½	14⅛
Kazoo Corset		10
Utah-Idaho Sugar		
Kalamazoo Sanitary Mfg.		10
Limousine Body		10⅛

Quotes by Olmstead & Mulhall, June 21.



Wm.A.Neer&Co.

Members Detroit Stock Exchange

7% FARM DRAINAGE BONDS 7%

There is no better Security on earth than Tax Liens on Cultivated Farms.

Ordinarily FARM DRAINAGE DISTRICT BONDS pay the Investor Six Per cent, but for quick sale, we offer ten choice issues to pay from 7% to 7½%. Interest payable annually or semi-annually by coupon collectible at your bank.

They come in $1,000, $500 and $100 denominations, and run from Three to Twenty years and are FREE OF ALL FEDERAL INCOME TAXES.

Upon Postal Card request, we will send Circular No. 1963—"A Few Reasons Why Farm Drainage Bonds Are So Highly Regarded."

Interest is falling. Buy High Income now for future years!

THE HANCHETT BOND CO.
(Incorporated 1910)
Municipal Bond House
CHICAGO
Dime Bank Bldg., Detroit.
W. H. Dunham, Representative.

CANADIAN BONDS
payable in U. S. offer high yield with safety.
Write for circulars.
JOEL STOCKARD & CO., INC.
INVESTMENT BANKERS
Detroit Cherry 2600

The Detroit Savings Bank
Unsurpassed in convenience and location; Splendidly equipped for service.
GRISWOLD & STATE STREETS

LEWIS G. GORTON
Stocks and Bonds
1413 Majestic Building, Detroit, Mich.
Member of Detroit Stock Exchange
LISTED AND UNLISTED SECURITIES

Digitized by Google

Detroit Stocks—Current Prices—Price History Dividends—Capitalization

DETROIT STOCK EXCHANGE — CLOSE JUNE 21st

LISTED STOCKS	Bid	Asked	Par	High-Low Sales 1921 to date	High-Low Sales 1920	Annual Dividend Cash	Annual Dividend Payable	Last Dividend When Paid	Last Dividend Cash	Last Dividend Stock	New Dividend Payable	New Dividend Ex.-Div. Date	New Dividend Amount Cash	New Dividend Amount Stock	Dividends Total This Year Cash	Dividends Total This Year Stock	Capitalization Outstanding
American Chicle, pfd.			100			6%	Quar.	4- 1-21	1½%						3%		$3,000,000
Am. Lt. & Trac. Co., com.	70½	72	100	114 - 80	204 - 68	*4%	Quar.	3- 2-21	1%						4%	2%	$22,911,650
Do., pfd.			100			6%	Quar.	3- 2-21	1½%						6%		$14,000,000
Bower Roller Bearing Co.		16½	10	17½ - 17	29¼ - 16		Varies	7- 1-20	5%								$600,000
Char. Iron Co. of America, com.		6	10	7 - 7	13½ - 7¼		Varies	4- 1-19	2½								$2,500,000
Do., pfd.	9½	11½	100	11 - 11	14 - 8		Varies	7- 1-19	3%								$2,217,500
Cities Service Co., com. XD	117½	118	100	224½ - 107	385 - 203½	136%	Mon.	6- 1-21	1½%	1½%	7- 1-21	6-18-21	1½%	1½%	3%	7½%	$84,447,000
Do., pfd. XD	45	47	100	68½ - 63½	70 - 60	6%	Mon.	6- 1-21	1½%		7- 1-21	6-15-21	1½%		3½%		$2,739,241
Consolid. Lead & Zinc Co.			1	1⅛ - ⅛	1⅛ - ⅛		Varies	11-25-17	20%								$200,000
Columbia Sugar			10	14½ - 7	20¼ - 11½	120%	Quar.	4- 1-21	2%						6%		$3,000,000
Commerce Motor Car Co.			10	7½ - 7½	18½ - 6¼		Varies	1- 1-17	1%								$1,000,000
Cons. P. R. & L. Co., com.			100	16 - 13¾	10¼ - 10¾		Varies	11- 1-17	1%								$18,482,800
Do., pfd.			100	30 - 29	43½ - 29	110%	Quar.	4- 1-21	1½%						1½%		$17,000,000
Continental Motor Co., com.	6¼	6¾	10	7¾ - 6¾	14½ - 6¾		Varies	12-31-20	5%								$10,000,000
Do., pfd.	68	75	100	81 - 76	100½ - 93	7%	Quar.	4-15-21	1¾%						3½%		$2,151,000
Det. Hr. & Mallenbie Wks.			100	98 - 93	98 - 93	8%	Mon.	1-21-21	2%		7- 1-21	6-20-21	4%		6%		$1,247,500
D. & C. Navigation Co.		77	100	73½ - 71	100 - 67	8%	Quar.	4- 1-21	2%		7- 1-21	6-15-21	2%		4½%		$3,000,000
Detroit Creamery Co.	19½	21	10	25½ - 20½	38½ - 20½	8%	Quar.	4- 1-21	2½%		7- 1-21	6-30-21	2½%		7½%		$1,000,000
Detroit Edison Co.	92	92½	100	98 - 92	114 - 92½	8%	Quar.	4-15-21	2%		7-15-21	6-30-21	2%		6%		$36,000,000
Detroit United, XD.			100			6%	Quar.	1- 1-21		2½%					2½	2½%	$11,000,000
Durant Motors	23	23½	None	23½ - 22½													1,000,000 shs.
Edmund & Jones, com.			100	14½ - 9¼	34 - 14½		Varies	1- 1-21	50c						50c		$60,000 shs.
Do., pfd.			100	79 - 79	85 - 79	7%	Quar.	4- 1-21	1¾%		7- 1-21	6-20-21	1¾%		3½%		$890,400
Federal Truck	14½	15½	10	18 - 14	28 - 13½		Varies	1- 1-21	10c						10c		$2,000,000
Ford Motor Co. of Canada	242	244	100	256 -217	460 -210		Varies	7-15-20	15%								$4,000,000
Gen. Al. & Br. Mfg. Co., com.			10	13½ - 9½	22 - 12		Varies	10- 1-20		5%							$1,136,350
General Motors			None	16 - 9¾	39 - 12½	81.00	Varies	2-25-21	25c						50c		20,414,665 shs.
Godchaux Sugar, com.			None		28¾ - 20½												$70,000 shs.
Do., pfd.			100			7%	Varies	4- 4-21	1¾%						3½%		$1,440,000
Hanna Furnace, com.			10	26 - 25			Varies										$1,200,000
Do., pfd.		97	100			8%	Quar.	3-15-21	2%						2%		$700,000
Hall Lamp Co.			10	15 - 13	32½ - 16		Varies	12-24-20	6%								$1,000,000
Hayes Mfg. Co., com.	2	2½	10	3½ - 2	7 - 2		Varies	12-31-20	5%								$1,200,000
Holland-St. Louis Sugar Co.			10	10 - 7	19½ - 7½		Varies	10-15-20	6%								$2,000,000
Iron Silver Mining Co.			10		1¾ - 1¾		Varies	11- 1-20	10c								$2,000,000
R. R. Kresge, com.		136	100	141 - 140	151 - 120	6%	Semi-Ann	1- 2-21	3%		7- 1-21	6-16-21	3%		3%		$10,000,000
Do., pfd.			100	96½ - 96½	100 - 100	6%	Quar.	1- 1-21	1½%		7- 1-21	6-16-21	1½%		3%		$3,000,000
Lincoln Motor, Class A			50	21½ - 17¾	50½ - 13½		Varies	7-30-20	$1.25								$2,000,000
Linderman Steel, Com.			10		155 - 155	12½%	Quar.	7-1-21	30c		7-1-21	6-15-21	30c		60c		$1,000,000
Mexican Crude Rubber Co.		6¼	None	6¼ - 6¼	13¾ - 6¼		Varies	12- 1-14									$750,000
Mexican Drop Forge, com. XD.		87	None		90 - 86½	83.00	Mon.	6- 1-21	25c		7-1-21	6-15-21	25c		$1.00		112,500 shs.
Do., pfd.			100		90 - 90	7%	Mon.	4-21-21	2%						3½%		$280,000
Michigan Stamping Co., com. XD			10	18½ - 17½	31 - 16½	9%	Mon.	6-25-21	2½		6-25-21	6-15-21	2½%		3½%		$1,300,000
Michigan Sugar Co., com. XD	6	6¼	10	8¼ - 6¼	14¾ - 7¼	40%	Quar.	1- 1-21	1%					2%	2%		$4,211,000
Do., pfd.			10	8¼ - 8¼	9¾ - 8	8%	Quar.	3-15-20	1¾%								$2,700,000
Miles-Detroit Theater Co.			10	16½ - 16	20 - 15		Varies	4-10-21	50c						50c		$350,000
Motor Products	45½	None	50	57 - 37½	60¾ - 42		Varies	5- 1-21	$1.25						$2.50		$2,845,000
Motor Wheel, com.	9½	10	10	9¾ - 9	14¾ - 9		Varies	12-31-20	5%								$1,211,000
Murray Mfg.			10				Varies	10- 1-20	10%						4%	2%	$733,450
National Grocer Co.		6¾	100	9¾ - 6¾	156 - 156		Varies	10- 1-20	10%								$2,000,000
Do., pfd.			100		157 - 90	8%	Semi-Ann	12-31-20	2%						4%		$1,500,000
Packard Motor Co., com.	7½	7¾	10	13 - 7¼	30 - 6¼		Varies	10-15-20	$1.25		7-1-21	6-20-21			$2.50		$15,000,000
Do., pfd.			100	90 - 84	96½ - 84	7%	Quar.	5-16-21	1¾%						3½%		$10,000,000
Paige-Detroit Motor Car, com.	14	14	10	25½ - 12	42½ - 12½		Varies	12-10-20	1%								$1,000,000
Parke, Davis Co.	87	89	100	91 - 85	117 - 85	20%	Quar.	4- 1-21	5%		6-30-21	6-20-21	*5%		5%		$1,000,000
Penberthy Injector, pfd.		90	100	92 - 92		6%	Quar.	4- 1-21	1½%				1½%		6%		$500,000
Reo Motor Co.	17½	17¾	10	19 - 16¾	29¼ - 16¾	8%	Quar.	4- 1-21	2%		7- 1-21	6-15-21			4%		$5,000,000
Scotten-Dillon Co.			10	41 - 38	39 - 25½	8%	Quar.	4-18-21	2%						4%	50%	$2,250,000
Timken Axle, com.	27	28	10	31 - 25½	63½ - 20*		Varies	1-15-21	25c						25c		$5,000,000
Do., pfd. XD			100	93 - 84	93 - 84	7%	Quar.	6- 1-21	1¾%						3½%		$3,000,000
True-Cut Steel Co., com.	18½		10	28½ - 18	29½ - 10	16%	Quar.	4-15-21	4%						8%	200%	$1,000,000
Do., pfd.	91		100	93½ - 91	96 - 91	7%	Quar.	6- 1-21	1¾%						3½%		$1,500,000
U. S. Radiator, com.			100		110 - 110												$2,000,000
Do., pfd.			100	87 - 87	95½ - 80	17%	Annually	1-25-21	7%						7%		$830,000
Waring Bat Co., com.			None				Varies										$10,000,000
Do., pfd.			100			8%	Quar.	4- 1-21	2%						4%		$1,000,000
Western Knitting Mills	10½	10¾	None	11 - 8¾	30½ - 8¾		Varies	11-25-20	50c								$1,000,000
White Star Line	46½		50	51 - 46	50½ - 50½		Aug. & Nov.	8-25-20	3½%								$750,000
Wolverine Port Cement Co.	7½		10	8 - 3	2 - 2	5%	Varies	12-15-17	1%								$1,000,000

*Old 300-370; new 63¼-26. 17% in 1911, 7% in 1920, 7% in 1921, no Common dividends since organized. *1% Extra dividend. ‖Book value, $1,010,997. Ed. & J. ‖Book value, $3,219,567. Godchaux. †Shoript. Book value, $2,627,780.09. Western Knitting Mills. ‖Book value $5,084,446. Motor Products. **Also 4% stock. ‖With Extras. ‖ New. ‖1¾%

monthly stock dividend.

Foreign Exchange

Country	Par	Jan. 5, 1921	Feb. 5, 1921	June 21, 1921
Canada		.1140		
London	4.8665	3.6275	3.8560	.0275
Switzerland	.1930	.1529	.1602	.1694
Paris	.1930	.0599	.0706	.0846
Holland	.4019	.3162	.3375	.3325
Belgium	.1930	.0645	.0743	.0856
Italy	.1930	.0246	.0256	.0259
Greece	.1930	.0763	.0735	.0631
Spain	.1930	.1345	.1393	.1336
Germany	.2382	.0021	.0024	.0030
Austria	.2382	.0116	.0116	.0135
Denmark	.2679	.1595	.1740	.1735
Norway	.2680	.1595	.1800	.1455
Sweden	.2680	.2045	.2190	.1960

Quotations show foreign equivalent of $1 in dollars or cents.

Liberty Bond Range

LIBERTY BONDS Closing New York Bid Prices	June 21, 1921	June 7, 1921	D ec. 27, 1920	July 1, 1920	Jan. 2, 1920	July 1, 1919	Jan. 2, 1919	July 1, 1918
1st 3½s	85.02	85.50	90.00	91.06	99.20	98.78	99.54	99.62
1st 3½ Conv. 1st 4s	87.70	88.60	96.32	95.68	99.00	94.90	98.00	98.12
1st 4½s	86.54	86.80	84.10	85.00	91.68	93.84	93.64	94.18
1st 4½s	87.50	86.35	85.50	85.18	92.46	95.14	98.50	....
1st 4½s	86.74	86.30	84.34	85.00	92.20	94.86	98.70	....
1st 4½s	91.46	90.04	87.20	86.72	91.88	94.10	94.44	....
1st 4½s	86.94	86.66	84.96	84.64	92.24	100.18	....	....
Victory Bonds, 4¾s	98.40	96.48	94.90	89.50	94.80	96.08	98.34	98.32

Digitized by Google

U. S. Enterprise Forestalls German Competition

By P. A. E. ARMSTRONG

RUSTLESS and stain-resisting steels have been the subject of keen investigation by American, British and German organizations and there has been a race to produce a stain-resisting and rustless steel at sufficiently low price to enable it to be generally used for cutlery and other rust-resisting applications, such as surgical instruments, dental plates, needles, etc., for general scientific and household use. Other large applications for this steel are turbine bucket blades for steam turbines, marine hardware, propellors in the place of bronze for ocean-going boats, submarine periscope tubes, dairy machine parts, steam and water fittings, and for many uses that a strong rust-resisting material can be put to.

The three principal centers of investigation are: Thomas Firth & Sons, Sheffield, England, the inventors of the so-called stainless steel; Krupp Company, Essen, Germany, inventor of a high chromium nickel steel, and who, without a doubt, started prior to Sheffield in its investigations, and the Ludlum Steel Company, Watervliet, N. Y., which has developed the inexpensive low chromium, high silicon steels.

This latter development is an extremely stain and rust-resisting combination. It has heretofore been considered by metallurgists that silicon is an alloy which should not be used in quantities but this has been proved a fallacy and at the most only applies to iron-silicon combinations and not to chromium alloys; in fact, peculiarly enough, silicon enables chromium and vice versa to form a useful combination, whereas without the silicon a mechanical alloy is about the most that can be expected, chromium having an affinity for carbon, and in steel the principal alloy or staple alloy or nearly so that is formed is the chromium carbon compound known as chrome carbides. The remainder or excess chromium is mixed with the iron in a form of mechanical mixture which can be fairly readily separated out from the iron; therefore a spotty combination is formed of chromium on the one part and iron on the other, which accounts for the mysterious rusting of a high chromium steel, which although chemically the right analysis is physically incorrect.

The use of nickel as per the German investigation stabilizes the combination of the chromium and iron but it adds to the softening and machining difficulties and large quantities of chromium have to be used in combination with nickel to produce a stain-resisting and rust-resisting steel. For instance the German rustless steel contains about 22 per cent chromium and 2 per cent of nickel, balance iron, with low carbon. The English combination as made in Great Britain and in the United States is about 13 per cent chromium, balance iron, with low carbon.

The new American development which is sold at half the usual prices and at very little more than ordinary steel contains chromium 7 per cent and silicon 3 per cent, with the balance iron, with low carbon. If it were not for the very high silicon content, this material would be easily rusted and readily stained, the two things being quite the same; but another way of expressing the same thought as a stain mark on steel from domestic use is nothing more or less than accelerated rusting by chemical action, but the mark or stain is iron oxide. Therefore staining and rusting technically and practically are the same thing.

German competition in cutlery is being keenly felt at this time and, without a doubt, the German rustless steel would be very largely employed in the United States; but due to the enterprise of the American manufacturer, this competition has been forestalled, as the cost of the high chromium nickel steel of the Germans could not be sold, even though their rate of exchange is so low, at a price which would compete with the low chromium, high silicon steel.

The United States has not employed stain-resisting steel for its cutlery to any large extent. This type of material is very largely used abroad and one of the reasons for this is the lower cost in foreign countries. The new low chromium silicon steel can now be sold at very low cost, namely 35 cents a pound, as compared with stainless steel at 75 cents a pound, thereby enabling the cutlery manufacturers to offer to the buying public a very keen edge, stain and rust-resisting cutlery at a greater price than the plated knife. It will be but a short time before the housewife can take her choice of the hardware store of a plated knife or a stain-resisting, rust-resisting sharp steel knife at about the same cost.

The cutlery manufacturers realize that this new development assures them a very big market in this country, free from German competition. The public and the cutlery manufacturers will thereby benefit and keep the money in this country, enabling labor and enterprise to go on unchecked.

This new steel is sold under the trade name of Neva-Stain, which is a very apt term and means what it says—that it, it will never stain.

Northeastern Michigan's Parks Awaiting Tourists

State parks in northeastern Michigan will soon be offering to the automobile tourist who seeks the hundreds of lakes, the trout streams and the forests of the northern part of the state, ideal camping spots for his tour or at which to spend his vacation, according to T. F. Marston, one of the members of the state conservation board, which among other duties has the care and operation of these parks in its charge.

Starting at East Tawas, there is a park on the shore of Tawas Bay, located close to the business section of the city, equipped with a commodious bath house and on which a rest room and community building is now being erected which will provide a place for all kinds of gatherings, dances, etc. At Harrisville is another state park, located on the shore of Lake Huron, where there is plenty of room for campers, an abundance of fuel, good swimming and fishing. The woods on this park are now being cleaned and a bath house, toilets and a pavilion will soon be erected.

At Onaway is located one of the largest of the state parks, consisting of 152 acres on Black lake, with all kinds of camping locations, from thick woods to fairly open ground, sandy and gravelly beaches and at one end an old stone quarry. The work of improving this park is well under way and it will be equipped with boat and bath houses, a pavilion, summer kitchens and good drinking water. Cheboygan has a beautiful state park with opportunity for camping and picnicking, supplied with good drinking water, but not located on the lake front. The state park at Old Michillimackinac with its associations running clear back to the days of the French explorers and the war of 1812, offers the next stopping place. This park is the most complete of any and offers every convenience to campers. All of these parks are located upon or close to the Dixie highway.

Coming down the center of the state on trunk line highway No. 18 some equally interesting and picturesque spots are offered the tourist. The first will be the Indian River state park, located on the south shore of Burt Lake, with some 80 acres of woodland, a fine stream running through it and a water supply furnished by an extremely active flowing well. Next will come the Hanson Military reserve, not controlled by the conservation commission but which will be available, through the commission, for camping purposes when not in use by the national guard, under rules laid down by the state military board. The Otsego state park, which has been accepted but on which work has not yet been started, will be located on Otsego Lake and will have all the conveniences of the other parks. The Gladwin State park is located on Cedar river, just inside the city of Gladwin, has a fine flowing well and offers many other conveniences to campers.

In Clare county Wilson park, located on Budd Lake, has been developed as a city park, and while not owned by the state, is open to tourists and campers. On the western side of the state are a number of state parks which will also be available in the near future but work on them has not yet advanced so well as on those of the eastern side of the state.

MOTOR TRUCKS AND RAILROADS

The Firestone Tire & Rubber Company, Akron, O., calls attention to a law recently passed by the legislature of New Hampshire raising the tax on motor trucks. On a 2-ton truck, for example, the tax is increased from $15 to more than $200. Here is what Firestone says about it:

"Up in New Hampshire the legislature has passed a law raising the tax on a 2-ton truck from $15 to over $200.

"By logging otherwise inaccessible timber tracts and other means, trucks have proved valuable as railroad feeders in that section.

"Would not this be a good example to cite to the railroads, showing them that the motor truck is really their asset?

"An example: For several years prior to 1916 the income of the Boston & Maine was gradually dwindling. Since then it has increased steadily. Income in 1920 was over 60 per cent greater than during 1915.

"It is at least significant that the income of the Boston & Maine began to increase about the same time that motor transport began to be effective.

"How much of the increased income is due to motor truck feeders? Did anyone think to call this angle to the attention of the railroads and solicit their aid?

"The law becomes effective Jan. 1, 1922."

Detroit Tigers' Home Dates for 1921

July 8, 9, 10, 11	Boston
July 12, 13, 14, 15	Philadelphia
July 16, 17, 18, 19	New York
July 20, 21, 23, 24	Washington
August 12, 13	St. Louis
August 17, 18, 19	Boston
August 20, 21, 22	Philadelphia
August 23, 24, 25	Washington
August 26, 27, 28	New York
August 31, Sept. 2, 3, 4	Cleveland
September 5 a. m., p. m.	Chicago
October 1, 2	St. Louis

Digitized by Google

Dividends Payable

Company	Rate	Payable	Stock of Record
American Beet Sugar, pfd..	$1.50 Q	July 1	June 11
American Brake Shoe & Foundry, new com.	$1.00 Q	June 30	June 24
American Brake Shoe & Foundry, pfd.	1¾% Q	June 30	June 24
American Can, pfd.	1¾% Q	July 1	June 16
American Power & Light, pfd.	1¾% Q	July 1	June 17
Central Aguirre Sugar	$2.00 Q	July 1	June 20
Continental Can, com.	$1.25 Q	July 1	June 30
Continental Can, pfd.	$1.75 Q	July 1	June 30
Calumet & Arizona	50 cents	June 27	June 17
Consumers Power, 4% pfd.	1% Q	July 1	June 15
Detroit River Tunnel	3% s.a.	July 15	July 8
Dodge Mfg. Co., com.	5% Q	July 1	June 15
Dodge Mfg. Co., pfd.	1¾% Q	July 1	June 15
D. H. Franklin Mfg., com.	25 cents	July 1	June 15
Horseman-Spitalny Corp., com.	5%	July 1	June 30
Horseman-Spitalny Corp., pfd.	1¾% Q	July 1	June 20
International Cement	62½ cts	June 30	June 15
International Motor Truck, 1st pfd.	1¾% Q	July 1	June 21
International Motor Truck, 2d pfd.	1¾% Q	July 1	June 21
Kelly-Springfield, 6% pfd.	$1.50	July 1	June 21
Kent State Bank, Grand Rapids	3% Q	July 1	.....
Kent State Bank, Grand Rapids	4% extra	July 15	July 7
Kerr Lake Mines	12½ cts	July 1	June 17
Loose-Wiles Biscuit, 1st pfd.	1¾% Q	July 1	June 17
Loose-Wiles Biscuit, 2d pfd.	1¾% Q	July 1	June 17
M. C. R. R.	$1.00 Q	July 20	July 1
Mercury Aircraft Corp., pfd.	1¾% Q	July 1	June 20
Moon Motor Car, pfd.	1¾% Q	July 1	.....
Motor Wheel Corp., com.	37½ cents	June 10	June 19
National City Bank, N. Y.	4% Q	July 1	.....
National City Bank, N. Y.	1½% extra	July 1	.....
N. Y. C. R. R.	1¼% Q	Aug. 1	July
Nipissing Mines	7½ cts	July 20	June 30
Otis Elevator, com.	$2.00	July 15	June 20
Otis Elevator, pfd.	$1.50	July 15	June 20
Otis Steel, pfd.	1¾% Q	July 1	June 20
Phelps-Dodge	$1.00 Q	July 1	June 20
Reading	2% Q	Aug. 1	July 15
Reading, pfd.	1% Q	Aug. 1	July 22
Rice Motor Car, com.	2½% Q	July 15	June 15
Standard Tank Car, pfd.	1¾% Q	July 1	.....
Trumbull Steel, pfd.	1¾% Q	July 1	June 20
Trumbull Steel, com.	1¼% Q	July 1	June 20
Utah Copper	50 cents	June 30	June 15
C. R. Wilson Body, pfd.	1¾% Q	July 1	June 20
Westinghouse Electric, com.	2% Q	July 20	June 30
Westinghouse Electric, pfd.	1¾% Q	July 15	June 30
Youngstown Steel & Tube, com.	50 cts Q	July 1	June 20
Youngstown Steel & Tube, pfd.	$1.75 Q	July 1	June 20
Western Union Telegraph	1¼% Q	.....	.....

The Kent State Bank, Grand Rapids, in addition to declaring the regular quarterly dividend of 3 per cent, has declared an extra 4 per cent to care for taxes, making an increase of 1 per cent in the dividends over last year.

The American Beach Magnetn Company has passed the quarterly dividend of 87½ cents at this time.

Action on the preferred stock of the American Agricultural Chemical Company has been deferred until the dividend on the common stock passed. A statement was issued as follows:

"Directors of the American Agricultural Chemical at the regular quarterly meeting decided to defer action on the preferred dividend. The fiscal year will end June 30. In previous years under normal conditions it has been possible to forecast with reasonable accuracy the fiscal year's results, but conditions in the fertilizer industry have been abnormal for some months past. Therefore, until inventory taking has been completed and the results for the full twelve months to June 30 have been prepared and examined, directors felt it conservative to defer action on the preferred dividend.

"American Agricultural continues in strong financial condition. Its collections during the last year, south and the South and Cuba, have been remarkably good and compare well with those in any other year.

"Sales for the fiscal year will be about 65 per cent of the previous year. Prices have been well adjusted and inventories of raw materials and manufactured goods will be written down to current market prices as June 30, which has been the established custom of the company.

"It should be borne in mind that the dividends on the preferred stock are cumulative at the rate of 8 per cent per annum."

The J. I. Case Plow Works, which three months ago passed the dividend on its second preferred stock, has now passed the dividend on the first preferred.

LUCIUS M. WING DIES

Lucius M. Wing, president of the Coldwater National Bank for several years, died June 21 at his home in Coldwater. He had been in the banking business more than thirty years and was prominent in social and civic organizations.

HOLLISTER GOES TO LONDON

Clay H. Hollister, president of the Old National Bank, Grand Rapids, is a delegate to the meeting of the International Chamber of Commerce, June 27, in London, England. More than 250 Americans will attend this first annual meeting, which will represent virtually every phase of American business, and where world trade problems will be discussed. The object of the meeting is the betterment of international trade relations. Lemuel S. Hillman, editor of the Old National Bank Bulletin, describes the new organization as the "Business League of Nations."

STANDARD REAL ESTATE ELECTION

At the annual meeting of stockholders of the Standard Real Estate Company, Lansing, directors were elected as follows: R. B. McPherson and Hugh A. McPherson, Howell; Roy D. Chapin, Detroit, and F. N. Arbaugh, T. A. Lawler and L. B. Ayres, Lansing. The directors named the following officers: President, Hugh A. McPherson; vice-presidents, F. N. Arbaugh and T. A. Lawler; secretary-treasurer, L. B. Ayres; assistant secretary, M. A. Hess. F. A. McKibbin, who has been vice-president of the company for several years, retires to enter the real estate business under his own name. The assets of the Standard company and its affiliated companies have grown from $25,000 to more than $1,000,000. It will now develop the 40 acres adjoining the new Durant Motors plant.

STUDEBAKER IMPROVEMENT

Since January 1 there has been a $11,000,000 improvement in the quick assets position of the Studebaker Corporation, according to word from South Bend. At the beginning of the year the corporation had $8,500,000 of bank loans. These have all been paid and in addition there is now $2,500,000 of cash on hand.

Grand Rapids Stocks

	Bid	Asked
American Public Utilities, com.	6	10
American Public Utilities, pfd.	15	19
Commonwealth P. R. & L., com.	9	11
Commonwealth P. R. & L., pfd.	29	30½
Citizens Telephone Co.	3¾	4½
United Light & Railways, com.	22	24
United Light & Railways, pfd.	58	60
Cities Service, Bankers' Shares	14⅝	14⅞
Cities Service, com.	122	128
Cities Service, pfd.	46	48
Cities Service, Debenture "B"	82	85
Cities Service, Debenture "C"	79	84
Cities Service, Debenture "D"	73	83

Quotes by Howe, Snow, Corrigan & Bertles, June 26.

Saginaw Stocks

	Bid	Asked
Columbia Sugar	6¾	7¾
Commonwealth Power	9¾	10¾
Home Brewing	9¾	10¾
Michigan Sugar, com.	5¾	6
Michigan Sugar, pfd.		7¾
Michigan Sugar, 6%	6¾	7¾
National Grocer, pfd.	82	85
Saginaw Shipbuilding Co.		7
Symons Bros.	8¾	10
Valley Home Tel. Co., pfd.		48

BANK STOCKS		
Second National	285	315
American State Bank	200	210
Bank of Saginaw	195	210
Commercial National	190	200
Peoples Savings	205	225

Quotes by Phipps, Williams & Beason, June 20.

Cleveland Stocks

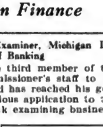
	Last Sale	High 1921	Low 1921
American Multigraph	17¾	19⅝	17¾
Firestone Tire & Rubber, com.	53	56	53
Do., pfd.	75	76	76
Fisher Otto Body	18¾	20	18
Do., pfd.	63	75⅝	61
Goodyear Tire & Rubber	8⅞	22	8
Do., pfd.	23	52½	19⅝
Miller Rubber	50	90	47
Murray Ohio	6	6	6
National Acme	18¾	28⅞	18⅛
Paragon Refining	15¼	25½	15¼
Portage Rubber	10	27	10
Do., pfd.	17	46	17
Standard Parts	1	11½	1
Do., pfd.	2½	8	1¾
Victor Rubber	20	20¾	15
Youngstown Sheet & Tube	50	50	50
Do., pfd.	104⅛	104⅛	102⅝

Quotes by Otis & Co., June 18.

Who's Who In Michigan Finance

Scott E. Lamb, Chief Examiner, Michigan Department of Banking

Scott E. Lamb is the third member of the Michigan banking commissioner's staff to become chief examiner and has reached his goal after three years of serious application to the technicalities of the bank examining business.



SCOTT E. LAMB

Mr. Lamb was born at Dryden, Mich., in 1894, and received his schooling in that village and in the Imlay City High School, from which he graduated in 1913. In 1917 he graduated from the University of Michigan in the school of banking administration, having specialized in banking and accounting. His banking experience includes a service with the Lapeer County Bank, Imlay City, and the American State Bank, Detroit, going from the latter to Lansing in June, 1918, to become chief clerk of the banking department under F. W. Merrick. His ready familiarization with the work won him an examiner's commission in October of that year and since that time he has had extensive experience in examining banks and trust companies.

Mr. Lamb succeeds H. O. Mohrmann, who became deputy commissioner, June 15.

Current Investment Offerings

HALSEY, STUART & CO., DETROIT

Name	Rate	Maturity	Price	Yld.
Amer. Pub. Serv. Co. notes, Series C	8.00	3-1-41	96.00	8.40
Interstate Iron & Steel Co. 1st mtge.	8.00	5-1-41	99.50	8.05
Southw. Pr. & Lt. Co. notes, Series B	8.00	1-1-41	99.00	8.10
Flint, Mich., Union School Jt.	6.00	3-1-20-51	Acc. to Mat.	5.85-5.50
West Allis, Wis., Jt.	6.00	3-1-27-38	Acc. to Mat.	5.70-5.50
Jt. Sch. Ld. Bk. bds.	5.00	Various	Price to yld	5.50

LINK-BELT BUYS CALDWELL

The Link-Belt Company, Chicago, has acquired all the capital stock of the H. W. Caldwell & Son Company, and Frank C. Caldwell has been elected a director of the Link-Belt Company. While the H. W. Caldwell & Son Company's plant will continue to operate under separate corporate existence and under its present name, the joint facilities of the two companies, and the broader avenues of distribution of the Link-Belt Company, are expected to prove of advantage to customers of both. The plant management will remain substantially the same.

STANDARD PARTS REORGANIZATION

Preferred and common stockholders of the Standard Parts Company have agreed to hold out for an extension of the receivership until business conditions improve, according to a dispatch from Cleveland. This means that they will reject the reorganization plan proposed by the creditors.

JACOBY HEADS MITCHELL MOTORS

The Mitchell Motors Company, Racine, Wis., has elected William L. Jacoby president.

Digitized by Google

Public Utilities

NEW LANSING CONTRACT SIGNED

The Lansing city council has renewed its contract with the Michigan Railway Company for another year. A resolution was adopted setting forth that the new agreement would in no way affect the arrangement entered into by the city and company which provided that when the railway company reduced wages a corresponding cut in fares would follow. The company recently cut the wages of its employes. The fares are now 10 cents, four tickets for 30 cents. A resolution has been adopted to take up with the company the question of lowering fares at once.

LIGHTS—PHONE QUIZ ORDERED

The Detroit common council has authorized an investigation of the finances of the Detroit Edison Company and the Michigan State Telephone Company, looking to a downward revision of rates. Both Alex Dow, president of the Edison company, and Franz C. Kuhn, president of the telephone company, have expressed their willingness to co-operate with the city authorities in the investigation.

TEST SUIT INSTITUTED

The Moore Telephone Company, which operates several exchanges in Tuscola county, has filed suit in the Ingham circuit court to test the authority of the Michigan Public Utilities Commission to order one phone company to make physical connections with another. The bill of complaint alleges that the order of the Commission requiring physical connection of the Moore system and the Valley Home exchanges in Caro and surrounding towns will result in destruction of the business of one of the companies, that it is unfair and that it was inspired by a desire to destroy one of the exchanges.

AGREEMENT AT CHARLOTTE

The city council of Charlotte and the gas company have reached an agreement whereby the company may not realize more than 8 per cent profit on the investment. A temporary rate of $1.85 is established. It was agreed that the city was to have free access to the books and each year the rate may be raised or lowered according to the cost of production.

LOWER CAR FARES IN DETROIT

Five-cent fares, with a one-cent charge for transfers, went into effect Sunday, June 19, on the D. U. R. city lines in Detroit. The rate superceded was six cents cash fare, nine tickets for 50 cents. The proposal was made by the company.

UNITED GAS & ELECTRIC

Gross earnings of $12,372,738 for the year ended April 30, are reported by the subsidiaries of the United Gas & Electric Corporation. This is an increase of $1,442,399 over the preceding twelve months.

WRIGHT-FISHER RECEIVERSHIP

The Security Trust Company, Detroit, has been appointed receiver for the Wright-Fisher Bushing Corporation, recently adjudicated bankrupt. The corporation, whose product was being manufactured for it under contract, was preparing to locate a plant of its own at Holly, when the bankruptcy proceedings were instituted.

NEW HANNAN TRUSTEE

The Wayne county probate court has appointed the Security Trust Company, Detroit, a trustee of the estate of the late W. W. Hannan, succeeding the late Flavius L. Brooke. The other trustees of the estate, which includes extensive real estate holdings in Detroit, are Mrs. Hannan and Matthew Slush, the latter of Mount Clemens.

WHEELING STEEL PRODUCTS COMPANY
GENERAL OFFICES, WHEELING, W. VA.

EXCLUSIVE SALES AGENTS FOR

WHITAKER-GLESSNER COMPANY
LA BELLE IRON WORKS AND
WHEELING STEEL & IRON CO.

Pig Iron, Billets, Slabs, Sheet Bars, Plates and Skelp,
Standard Pipe, Line Pipe, Tubing and Casing, Blue
Annealed Sheets, Black Sheets, Galvanized Sheets,
Formed Roofings, Tin and Terne Plate, Cut Nails

The CONSOLIDATED STEEL CORPORATION, 3rd Building, New York City, are the Sole Export Sales Agents for Whitaker-Glessner Company

C. C. COAL COKE COLEY.
1903-4 MAJESTIC BLDG. DETROIT, MICH.

Russel Wheel & Foundry Co.
DETROIT, MICH.
STRUCTURAL STEEL WORK
We can make prompt shipment from our stock on short notice
Phone Melrose 3260

Smith, Hinchman and Grylls
Architects and Engineers
Detroit, Mich.

Digitized by Google

Quality vs. Quantity Circulation

St. Louis Trust Company Official Gives Financial Advertisers a Few Pointers

JULIUS C. PETER, assistant to the president of the Detroit Trust Company; H. F. Pelham, of the same company; Clinton F. Berry, of the Union Trust Company, and H. B. Grimm, of the Security Trust Company, returned this week from Atlanta, Ga., where they attended the sixth annual convention of the Financial Advertisers' Association.

One of the principal addresses of the convention was that of A. E. Bryson, of Halsey, Stuart & Company, Chicago, entitled "Popularizing Bonds," which was printed in full in last week's issue of this paper. Another was "Financial Advertising from the Reader's Angle" by Herbert S. Houston, of World's Work. G. Prather Knapp, of the Mississippi Valley Trust Company, St. Louis, made a keen analysis of the daily newspaper as an advertising medium. In his address, entitled "Your Daily Newspaper and Its Use by a Bank," he advised his hearers not only to know the quantity of circulation of a paper but to look more particularly into the quality of it.

"If your appeal is for counter business in a savings department you will only be interested in circulation among those who live or work or shop in the business section of your town," he said. "Large mail circulation will not interest you. If you are advertising real estate for sale, the same thing will be true. If you are seeking business for a bond department, an out-of-town circulation may interest you, but it must not be a rural circulation because farmers do not buy bonds."

He also pointed out that there was often a vast difference between the kind of people who read one newspaper and the kind who read another and also that there was a difference between the responsiveness of the same reader to advertising in different newspapers, but most important, said Mr. Knapp, was the effect of a newspaper's editorial policy on its utility to an advertiser.

"Suppose we look at a newspaper which asks us for advertising in the same way that we would look at competing restaurants in which we are offered an opportunity to address a few remarks on our business to the gathering of diners," he said. "Would we choose the conservative, quiet place, noted for its good food and its quiet assembly of patrons, or would we choose the glittering lobster palace just across the street, where there is of little consequence and where the patronage is gained by a jazz orchestra, a blind tiger or a Mack Sennett cabaret?

"Therefore we are not old fogies or reactionaries when we apply the same test with the same result to the conservative newspaper as against the sensational newspaper. It is all well to say that the people demand sensational news and entertainment features in a newspaper. Perhaps they do, but the successful newspaper, from our angle, is the one which fills a fundamental demand—that for the solid food of clean news, constructive editorials and useful information.

"There is a definite opportunity for public service in closer relations between bankers and newspaper men. Far from being a different sort of people, they are a very similar sort. Vanderlip, Stedman, Sisson, Ellsworth—here are four examples of writer-bankers, men whose qualities won success in both fields. Bankers and newspaper men are just the sort of people who can and should get together. Get to know editors and reporters who find and serve up the news which makes our advertising valuable, and see if you do not agree with me, say, it is certainly up to us to study the personal element in newspaper service.

"The most valuable advertising which a financial institution or any institution ever receives is unpurchased and unpurchasable. Let me lay particular emphasis on that word unpurchasable. The editorial co-operation which you secure as a result of advertising space or the editorial space which you obtain through appeals to the business managers of newspapers rarely does you much good and sometimes does you real harm. But the editorial co-operation which you can secure by man-to-man relations with the editors and reporters is the most valuable good will that you can win for your bank.

"We can learn a great deal from journalists, we financial advertisers."

Mr. Knapp paid his respects to publishers who refuse misleading advertising and concluded that the money which can be spent for advertising so refused was more than offset by the increased value to the advertiser of that space which is sold.

"The ethics of the business have been changed and improved to such an extent that we practically have editors of advertising in most high grade newspapers, and I think we will all live to see the day when the advertising editor will be a duly recognized member of every large newspaper organization," he said.

Recently, an effort to find whether his bank was doing all that other institutions were doing for customers it was arranged with the Globe-Democrat, of St. Louis, to have a reporter open a savings account in every bank in the city. The reporter was given a list of instructions and a questionaire and was asked to make an individual report on the convenience, cordiality and service of each institution, and a general report in which he rated all institutions.

"His reports," said Mr. Knapp, "were of great value to our savings department and to our advertising department. He discussed us and our competitors without fear or favor, for he was assured that he had promised the scheme, and his criticisms, many of which were directed at our own institution, were invariably constructive."

FRENCH IMPORT TAX EXPLAINED

The Review, Paris, published by the American Chamber of Commerce in France, quotes the following explanation given recently by the French Minister of Finance concerning the tax on business as it may affect imports of merchandise from foreign countries. It is a matter of interest to American exporters.

"With regard to the turnover tax (impôt sur le chiffre d'affaires) of 1.10 per cent, the Minister of Finance was asked by a deputy to define the position of a foreign (English) firm having a branch in France and billing merchandise to that branch, whether the firm must pay first the 1.10 per cent on the entry of the merchandise and again 1.10 per cent on the amount of the sales made by the branch; or whether, after having paid the 1.10 per cent at the entry, it should be held to pay, after the sales made, only on the difference between the value of the merchandise billed to the branch and the sums realized by the sales.

"Reply: (1) All importations of merchandise are subjected to the tax of 1.10 per cent or 10 per cent, according to the nature of the merchandise, no matter who the importer may be (law of June 25, 1920, Art. 72 first clause). The tax therefore is due even when the importation is the result not only of a purchase abroad but also of the simple sending by a foreign firm to a branch in France; (2) the levying of the tax of 1.10 per cent as the moment of the entry of the merchandise does not prevent that of the turnover tax (impôt sur le chiffre d'affaires) at the moment of sale, by the importer, in France, of the said merchandise, in accordance with Art. 59 of the law of June 25, 1920, because the case concerns two taxes entirely distinct, arising from different causes. The turnover tax, also by reason of the sale effected by the importer, therefore should be calculated on the total price of that sale and not on the difference between that price and the value assessed for the import tax. Article 62 of the law of June 25, 1920, explains, furthermore, that, in the cases of the persons selling the merchandise, the amount of the taxation is determined by the total price of some of the sales effectively and definitely realized, without question of any exception."

CANADIAN-U S. TRADE

Canada's total trade with the United States in April was $64,549,005, representing nearly two-thirds of the Dominion's commerce with the world during that period. The total trade between the two countries for 1920 was $88,481,626. The total for April of this year, therefore, shows a decrease of $24,000,000.

Canadian exports to the United States were $32,974,951, a decrease of nearly $3,000,000 compared with April, 1920. Imports were $41,570,054, a decrease of $20,000,000 as compared with April, 1920. The adverse balance of trade with the United States for April was $18,599,103, as compared with an adverse balance for April, 1920, of $37,507,036.

For the ten months ended with April the Dominion's trade with the United States was $1,374,985,266, an increase of $85,000,000, as compared with the total for the twelve months in 1920. Exports to the United States were $539,792,107, an increase of $74,000,000. Imports for the period were $835,193,159, an increase of $14,000,000. The adverse balance of trade was $295,401,052, as compared with an adverse balance for the corresponding period of last year of $355,293,156.

Canada's trade with the world shows a marked improvement. The twelve months ended April 30 found the Dominion with a favorable balance of trade of $27,096,954. For the corresponding period ended April 30 of last year, Canada had an adverse balance of $119,795,696. The returns for the twelve months ended April 30 of this year therefore show a favorable variation of $146,886,650.

CANADIAN PACIFIC EARNINGS

The Canadian Pacific Railway Company reports April gross earnings were $13,761,840, as compared with $15,929,416 a year ago. The net after deduction of expenses was $2,646,131, as compared with $2,241,846 in 1920. For the first four months of this year the gross earnings totaled $55,701,984, as against $59,117,025 in 1920. The net was $6,551,856, as compared with $5,589,424 for the corresponding period in 1920.

N. A. C. C. ISSUES TAX BOOKLET

Summarization of the statements made before the Senate committee on finance by C. T. Hanch, chairman of the tax committee of the National Automobile Chamber of Commerce, and George M. Graham, vice-president of the Pierce-Arrow Motor Car Company, Buffalo, is contained in a booklet issued by the Chamber under the title of "National Taxation Policy." The booklet says that $267,000,000 in "stigma taxes" are paid yearly by motor car owners by which is meant special taxes.

Digitized by Google

Satisfied, Dealers Say

(*Continued from Page 6*)

question that we are beginning to have better times, as we find more ready money in sight, meaning that purchasers are better able to pay cash."

Bemb-Robinson Company (Hudson and Essex)—"Business is improving and we cannot complain, considering everything. Our sales so far this month have reached the total for all of May. More cash seems to be available for buying, which is always a good sign. The outlook for the next month or two appears to be good."

Buick Motor Company—"We have been selling Buick cars right along, and we are selling more of them now since the price redjnction. The cut has stimulated buying and there is no reason to doubt that demand for standard cars will increase. We believe business will keep up, although predicting what it may be in another 60 days is something too hazardous these days. It is, however, not hazardous to say that salesmanship counts for more than most anything else. Sitting in an easy chair and waiting for prospects to come in is not going to sell many cars from now on. The dealer who expects to do business must hustle. He may not sell every car he would like to sell, but he will surely be able to sell some."

Reo Motor Car Company, Detroit Branch—"We can't complain, notwithstanding that sales are not quite up to what they were. We have a good many sales lined up, but owing to general business conditions these are being held in abeyance. They have not been cancelled. Everything considered, Reo business thus far this year has been very satisfactory here."

Dodge Brothers, Detroit distributor—"How is business with us? Why, man, we can hardly find time to go out and eat. Since the price reduction we have been swamped with orders. From Monday, June 12, to Friday, June 17, we sold 146 cars—all new ones. There seems to be money in plenty. In fact we have been considerably surprised at the large percentage of cash orders. It is certainly a good indication as to the business trend. We feel the outlook for the next 30 to 60 days is good and expect to keep on selling more cars than we can get."

Another Detroit Buick distributor—"The outlook is bright although nobody can foretell what may happen over night. As far as the Buick plant is concerned, the latest information is that orders are pouring in from all over the country and it probably is only a matter of time before a normal production of 500 cars a day will be reached. At present the output has passed the 300-a day mark."

Packard Motor Car Company, Detroit Branch—"So far this month business has been very satisfactory, especially in the passenger car line. In fact, the first year has been a big year for Packard. The demand for trucks is not what it might and should be, but that is due to general business conditions. We have a good list of prospects for trucks but they will not buy until their own business has picked up. As to the future, we are, as always, optimists."

Thompson Auto Company (Maxwell and Chalmers)—"Business has been 20 per cent better during the first half of June than it was in May. We can't say that it is what it should be, but nevertheless we are satisfied and feel confident."

Nash Distributing Company—"Sales and inquiries have been thus far this month up to what they were in May. The next four or six weeks should still show good business. Price reductions have naturally been a big factor recently and many prospects are waiting or have been waiting. However, all matters considered, we do not think we need be worried."

Simons Sales Company (Overland and Willys-Knight)—"Business has been very good indeed —about double what it was in May; and that was a good month with us. If you have a car of standing, and if you are a good salesman, you can sell cars. The best indication that the Overland company's business in general is increasing is to be had in the statement from the factory that until further orders, daily output is to be 500 cars."

A distributor whose names and car is withheld at his request—"Notwithstanding that the price of our car has been reduced a second time sales so far this month are not as good as last month, or last April. Just what the reason is is rather difficult to guess at, because when the first price reduction was made sales jumped up immediately. We think, though, that the present condition won't last very long."

Baker-Fisk-Hugill Company (Dort)—"Sales are increasing nicely. So far this month—first half—we have done as much business as during all of last month. We hope it will keep up but we cannot prophesy."

The Detroit distributor for a Michigan-made car—"No, it isn't true that business with us is either better or as good as it was a month ago. The reason is the price situation, which for several months has created more disturbance and more withholding of orders than anything else. Now, when practically all the makers have reduced prices there is a possibility of better times coming to us, but you must also realize that it is getting late in the selling season and that we are approaching the time when it is generally known that the manufacturers are preparing their next year's models. That is not exactly going to help increase sales. As far as the price cutting is concerned, it has taken place at the wrong time and it is to be hoped that the industry will get together and see that it does not occur again right in the middle of the selling season."

Frank P. Gmelin (Briscoe and Mitchell)—"The outlook is brighter and within another thirty days I believe sales will be much better. Unsettled conditions in general have not helped the automobile business. But we cannot complain on account of the very fact."

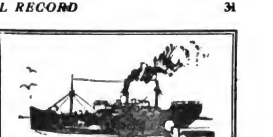
Detroit Cadillac Branch—"Business has been fair and it is not unlikely that it will improve. We hope for a steady increase in sales but it is difficult to say what tomorrow has in store for us."

Lincoln Motor Company, Detroit Branch—"We are satisfied with the way business is coming. We are selling cars, and that is the big thing. There is no cause for complaining."

Chevrolet Motor Company, Detroit Branch—"Sales have been very good, especially on our smaller models. The general outlook is good and we venture to say that it will remain such for the next 30 to 60 days."

Detroit Ford dealers—Four of the local distributors were questioned. Three stated that business was decidedly good and one that it was about as in May. Case of being able to make prompt deliveries, said the first three. Matter of price is being discussed more than formerly. However, it is not any more difficult to sell a Ford now than a year or two ago. The millions of these vehicles in use is the big talking point or sales factor with many, and it is a convincing argument. Outlook for the next 30 to 60 days is said to be good by three of the dealers. The fourth man would not "tie a prediction even for next week.

In announcing a reduction of from $200 to $345 on the American Six, the American Motors Corporation, Plainfield, N. J., adds that



Ship and Sail under American Flag

AMERICAN SHIPS ARE AVAILABLE FOR YOUR OCEAN VOYAGE

New combination Passenger and Freight Ships, Fast, Luxurious Steamers.
Key number beside ship's name indicates operator shown bottom of column.

EUROPE

Bunlo gne and London
From New York
July 12—August 16—September 20—Old North State (159).
June 28—August 2—September 6—Panhandle State (159).

Bremen and Danzig
From New York
July 13—August 30—Hudson (159).
July 23—September 7—Susquehanna (159).
July 28—September 14—October 20—Potomac (159).

Naples and Genoa
From New York
June 30—August 13—September 24—Pocahontas (159).

Plymouth, Cherbourg and Bremen
From New York
July 23—August 24—September 28—America (159).
July 30—August 27—September 24—George Washington (159).

SOUTH AMERICA

Rio de Janeiro, Montevideo and Buenos Aires
From New York
June 29—Martha Washington (91).

FAR EAST

Honolulu, Yokohama, Kobe, Shanghai, Manilla, Hongkong
From San Francisco
July 23—Empire State (105).
August 6—Golden State (105).

Yokohama, Kobe, Shanghai, Hongkong, Manila
From Seattle
July 9—Silver State (106).
July 30—Wenatchee (106).

HAWAII, PHILIPPINES, EAST INDIA

Honolulu, Manila, Saigon, Singapore, Colombo, Calcutta
From San Francisco
July 14—Granite State (105).
August 12—Creole State (105).

COASTWISE AND HAWAII

Havana, Canal, Los Angeles, San Francisco and Hawaiian Islands
From Baltimore
June 25—Hawaiian State (101).

COASTWISE

Havana, Canal, Los Angeles, San Francisco
From Baltimore
June 25—Empire State (105).

80 Matson Navigation Co.
120 Market Street,
San Francisco, Cal.
26 South Gay St., Baltimore, Md.

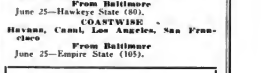
91 Munson Steamship Line
67 Wall Street, N. Y.
Tel. Bowling Green 3200.

105 Pacific Mail S. S. Co.
10 Hanover Sq., N. Y.
Tel. Bowling Green 6530.
601 Market St., San Francisco, Cal.

106 The Admiral Line
17 State Street, N. Y.
Tel. Bowling Green 5625.
L. C. Smith Bldg., Seattle, Wash.

158 U. S. Mail S. S. Co., Inc.
45 Broadway, N. Y.
Tel. Whitehall 1200.

U.S. SHIPPING BOARD
Washington, D.C.



Digitized by Google

the new prices are guaranteed until January 1, 1922. New and old prices are:

Model	New Prices	Old Prices	Reduction
5-pass. touring	$2,195	$2,395	$200
5-pass. roadster	2,195	2,395	200
7-pass. touring	2,375	2,475	200
4-pass. sport	2,350	2,595	245
Sedan	3,150	3,495	345

The F. B. Stearns Company, Cleveland, is quoted by its Hartford, Conn., distributor as having advised its dealers that there will be no reduction in price on the Stearns-Knight, which was brought out in 1919 selling then at $2,550 delivered in Hartford and listed now at $2,750.

"There will positively be no reduction in the price of the Stearns car this year, nor do we believe at any future time," so states the factory," says the dealer's announcement. "If any savings in labor or material cost appear, that saving will be built into the car in added equipment and refinements."

President John N. Willys, of the Willys-Overland Company, Toledo, says that since the price reduction on the Overland and Willys-Knight, business had been steadily gaining and that there are now more than 15,000 unfilled orders at the Overland plant. Trainloads are being shipped to many parts of the country.

The J. C. Wilson Company, Detroit, has reduced the prices of it's trucks as follows:

Model	New Prices	Old Prices	Reduction
5- ton	$4,620	$5,275	$755
2½-ton	3,825	4,300	475
1½-ton	2,925	3,305	475
1-ton	2,270	2,650	380

The Bessemer Motor Truck Company, Grove City, Pa., has lower prices in effect. New and old prices are:

Model	New Prices	Old Prices	Reduction
G—1- ton	$1,395	$1,700	$305
H—1½-ton	1,995	2,445	450
J—2- ton	2,595	3,285	690
K—2½-ton	3,495	4,485	990

The White Company, Cleveland, announced new prices on its trucks the cut ranging from $200 to $600. One model, the 5-tonner, is listed now as in 1914. New and old prices are:

Model	New Prices	Old Prices	Reduction
45—5- ton	$4,500	$5,000	$500
40—3½-ton	4,200	4,500	300
20—2- ton	3,250	3,450	200
15— ¾-ton	2,400	2,600	200

From $200 to $600 has been cut off the prices of the Lexington cars by the Lexington Motor Car Company, Connersville, Ind. The prices, new and old, are as follows:

Model	New Prices	Old Prices	Reduction
S—Touring	$1,885	$2,285	$400
S—Thirty-fifty	1,985	2,385	200
S—Lex-Sedan	2,185	2,785	600
S—Coupe	2,150	2,350	200
S—Sedan	2,150	2,350	200
T—Touring	2,785	2,985	200
T—Sedanette	3,750	4,150	400

The Kentucky Wagon Manufacturing Company, Louisville, Ky., announces various reductions on the Dixie Flyer, as follows:

Model	New Prices	Old Prices	Reduction
Touring	$1,695	$1,895	$150
Roadster	1,445	1,595	150
Speedster	1,795	1,975	200
Sport Touring	1,745	2,150	405
Coupe	2,295	2,570	275
Sedan	2,345	2,570	225

L. J. Ollier on the European Situation

(*Continued from Page 6*)

speculators in France there has been little or no demand, largely because they are being offered prices in excess of 20,000 francs.

Belgium, perhaps, offers a very much better market than France due to the more favorable value of the Belgium franc and the lower duty charges; but I was informed by dealers in Belgium that the maximum price which a buyer is willing to pay for a motor car of any character is about 30,000 francs, and that for cars selling at higher prices there is very little demand.

The Minerva factory, which is the leading automobile manufacturing plant in Belgium, is producing only a limited number of cars and their market is not local; but I was informed that the larger percentage of the cars which they are making are being shipped into other countries. The total number of cars manufactured in all of Belgium would not exceed 2,500 per annum, and a large portion of these are exported. With an improvement of the general economic situation in that country there should be a good business developed because of the splendid roads throughout the country and because of less prejudice against American cars. In fact, the people of Belgium are more favorable to American cars than to the product of any other country because (and rightfully so) the American cars have given a greater degree of satisfaction and service.

In the other European countries the general economic conditions will largely determine the future of automobile sales. Unfortunately, many cars of questionable reputation and character have been shipped into all of the European countries through export houses, whose sole interest seems to have been only to sell some cars regardless of the results obtained, with the natural result that there are at the present time a large number of cars remaining unsold throughout Europe. Standard makes of cars have found comparatively ready markets and there are only a limited number remaining unsold. With a revival of business in Europe the American cars will undoubtedly continue to maintain their position of advantage over all other countries. But the European buyers have learned that all American cars are not good, and will be more discriminating than was the case immediately following the signing of the Armistice.

The information which you received that the British manufacturers were not keen to develop the markets of Belgium and France is not correct, because definite information was given to me to the effect that certain British manufacturers are seeking those markets, even to the extent of being willing to consign cars in order to secure an opening wedge in those countries. You may depend upon it that British manufacturers are constantly alert in seeking the trade of other markets.

Referring to the last paragraph of your let-

The Society Salesman

(*Continued from Page 8*)

salesman than you are. He seems to have sold you on the idea that he didn't need a tractor.

"The next time you meet that kind of fellow, just try this line of talk on him:

"'Of course, you don't need a tractor—that is, *you don't think you need one!* But you're a business man and you're willing to be shown and I'm here to show you—here to show to you why power farming has come to stay. Here to show you how a farm tractor can be profitably used—not up in Canada nor down in the Mississippi Delta—but right here on your own farm!

"'And incidentally—quite incidentally—I'm here to prove that my particular tractor is the one you need.'

"—and then let him have it. Let him have facts—let him have 'em straight from the shoulder—*the truth is good enough.*

"You don't need to resort to pedigree entanglements or secret alliances when you are out to sell an honest-to-goodness tractor—a tractor that's guaranteed to pull three bottoms through virgin soil!"

ter. It is quite true that American manufacturers will find it necessary to carry on their business on a different basis than has prevailed, and it will no doubt become necessary for them to offer equally attractive terms as are being offered by the manufacturers of Europe in seeking their export business. These plans will undoubtedly be worked out satisfactorily in the near future through the channels of the Foreign Trade Financing Corporation and other similar banks working under the provisions of the Edge law.

It is true that certain American manufacturers have made gross misrepresentations to foreign dealers in using cheaper equipment than is usually placed on American cars, and in their indifference to the details. In reality, the foreign buyer is more critical in every respect than the buyers in America.

No manufacturer can hope to build up a permanent foreign business without giving his customers in the foreign countries the very best that his factories can produce, and standing back of the product to an even greater degree than is customary with many manufacturers in America.

Closer study will have to be given by the manufacturer to his foreign business and a more definite knowledge of the requirements of every country obtained. It is of the utmost importance that every American manufacturer should do this, as the impressions formed of American products as a whole are largely the result of many indifferent cases and where good business ethics were seriously lacking.

L. J. OLLIER.

SLOAN AND RASKOB IN EUROPE

Alfred P. Sloan, Jr., vice-president in charge of operations of the General Motors Corporation, and John J. Raskob, chairman of the corporation's finance committee, sailed last week for England and the continent of Europe, where for the next month they will investigate trade conditions for the General Motors Export Corporation.

NASH DEALERS' CONFERENCE

Although prices were discussed at a conference of district sales managers of the Nash Motors Company, Kenosha, Wis., recently, no reduction was authorized because of a promise made to Nash owners that no price reductions would be made before July 1, if at all.

COREY ON MACK BOARD

The International Motor Truck Company, New York, manufacturer of Mack trucks, announces the election of William E. Corey, chairman of the board of the Midvale Steel & Ordnance Company, as a director and member of the executive committee, succeeding Ambrose Monell, president of the International.

HANDLING GMC APPROPRIATIONS

Will Johnson has been appointed vice-chairman of the appropriations committee of the General Motors Corporation, with headquarters in New York. Mr. Johnson's duties will be to handle all matters pertaining to requests for appropriations for capital expenditures for various divisions and subdivisions of the Corporation.

Digitized by Google

Constructing Equipment

TOOLS AND SUPPLIES AT REASONABLE PRICES—
SUBJECT TO PRIOR SALE—STANDARD MAKES
AND IN FIRST CLASS CONDITION.

We are winding up our work in this territory and will sell at a sacrifice the following

Air Compressors—Ingersoll-Rand, 6x6.

Boilers—40-70 h. p.

Cars—Standard gauge flat; Kalamazoo Push; 24-in. Kopel double truck flat.

Conveyors—Wonda belt sand and gravel; Alvey-Ferguson roller gravity.

Cranes—Brown hoist 15-ton, extra buckets; booms; outrigging.

Hoists—37 h. p. Flory; 38 and 37 h. p. Lidgewood; Clyde No. 106 steam.

Lumber—No. 2 yellow pine 4x4, 4x6, 2x6.

Mixers, Concrete — ½ yd. Smith tilting; No. 7 Jaeger.

Mixer, Mortar—3 Buckeye gee-driven.

Pumps—3-in. Suction, gas-driven diaphragm; Knickerbocker 4-in. suction, gas driven, on trucks; No. 1-6 Gilbert & Barker, gas-driven; Novo; 10 h. p. 4-in. centrifugal on truck.

Office Equipment — Flat-top desks; typewriter desks; card files; Burroughs adding machines, hand and motor-driven; comptometers; typewriters; L. C. Smith and Underwood; check-writers, etc. Stromberg time clocks and equipment.

Steel Reinforcing—½ in. to 1½ in. square and round.

Towers—Insley 160-ft. heavy steel, booms; hoppers; chutes; frames; gates; ladders.

Tractors—1-30-70 h. p. 10-ton Holt caterpillar.

Trailers—Troy No. 3 reversible extension type; troy 2½-yd. bottom dump.

Trucks—G. M. C. 2 and 5-ton dump; 1½ and 2-ton stake.

Woodworking Equipment — Saws, tables, etc.

Miscellaneous — Small tools and extra stock, nails, etc.

FOR DETAILED INFORMATION AND PRICES
COMMUNICATE WITH

Du Pont Engineering Co.

Clark Ave., South of Michigan. Phone West 2650

THE JOSEPH L. SKELDON ENGINEERING COMPANY

Power Plant Engineers and Contractors

Ames Single Valve, Four Valve and Unaflow Engines

Water Tube and Tubular Boilers

Pumping Machinery

Electrical Machinery

We design and build general power plants.

Detroit Office
1156 Penobscot Bldg.
Phone Cad. 6941

Cleveland Office
876 Kirby Bldg.
Phone Main 3764

General Offices and Shops
Toledo, Ohio.

Bridge Financing Assured

(*Continued from Page 5*)

increase in traffic up to 5,000,000 cars a year.

Thirty prominent business men in the United States and Canada supplied a fund of $100,000 for the preliminary work. Two companies were formed, the American Transit Company, New York city, which obtained from Congress the authority to span the river, and the Canadian Transit Company, chartered by the Canadian Parliament. These two companies were organized to finance and build the bridge. Mr. Fowler's statement on this point is as follows:

"The contract already has been signed between the American Transit Company, which has authority from Congress to span the river, and the Canadian Transit Company, chartered by Parliament, for joint action in financing and building the bridge. The joint board of directors consisting of eleven members will be elected in August, at which time the proposition of the R. T. Scott Company, Toronto, will be accepted for the sale of bonds for the full amount required for the bridge construction. This proposition provides for a structure built and financed solely for the public benefit without any profits accruing to the promoters other than a reasonable compensation to the directors for their four or five years' tenure of office."

A board of consulting engineers, of which Mr. Fowler is chairman, has been organized. George H. Pegram, chief engineer of the Interborough Rapid Transit Company, New York; Prof. William H. Burr, New York, who was a member of the board of engineers on the Panama Canal and the East river bridges; Prof. C. R. Young, University of Toronto, and Col. C. N. Monsarrat, formerly a member of the board of engineers of the Quebec bridge, are members of this board.

Although the original estimated cost of the bridge was $28,000,000, this figure since has been changed to $30,000,000, which amount is to be obtained by the sale of bonds in denominations from $300 up. The financing plan, which will be handled by the R. T. Scott Company, will not be divulged until the joint board of directors is elected in August.

GREATER MICHIGAN ASSOCIATION

The complete official personnel of the Greater Michigan Association, the supervisory organization for the Western Michigan Development Bureau and the Michigan Tourist & Resort Association, has been completed. The officers are: Chairman, Woodbridge N. Ferris, Big Rapids; vice-chairmen, H. D. Day, Glen Haven, and Fred N. Rowe, Grand Rapids; secretary, W. P. Hartman, Grand Rapids; treasurer, Hugh J. Gray, Grand Rapids. Executive committee: John I. Gibson, Battle Creek; J. H. Klock, Benton Harbor; Perry F. Powers, Cadillac; E. B. Ward, Manistee; A. E. Badger, Detroit; J. F. Hofstetter, Frankfort; J. A. Gerber, Fremont; Carroll F. Sweet, Lee M. Hutchins, W. M. Wardrop and Arthur W. Stace, Grand Rapids; O. H. Gould, Harbor Springs; F. O. Widmark, Ludington; J. C. Beukema, Manistee; J. A. Doelle, Marquette; Archie McCrea, Muskegon; William M. Connelly, Spring Lake; T. M. Sawyer, South Haven; John R. Santo, Traverse City, and Park Robbins, Chicago.

CANNING FACTORY FOR IONIA

The Michigan Canned Food Company, with headquarters in Detroit, has arranged to erect a factory in Ionia. The concern has plants in Owosso and Yale and one under construction in Greenville, and will have three others years in addition to the one in Ionia. The latter, according to the Ionia Sentinel, will have a capacity of 300,000 cases of corn and peas and will take the products from some 4,000 acres about Ionia. The factory will employ about 70 men, it is said, and will afford an outlet for the farming community which will return to them, it is estimated, from $100,000 to $150,000 annually.

CARLBERT CO. IN OPERATION

The Carlbert Company, a new concern in Berrien Springs, is starting operations, the machinery having been installed. The company makes washing machines, home hair clippers, a patented phonograph attachment and patent caps for salt and pepper shakes.

TALBOT MILL SHIPPING ABROAD

The James R. Andrews sawmill, at Talbot, Menominee county, recently shipped to Hong Kong, China, a car of extra high grade elm and maple lumber. Several shipments also have been made to Belfast, Ireland. Although the mill is not one of the largest in the state, it is said to be one of the best equipped.

CHEMICAL PLANT BURNS AGAIN

The machine shop and several other buildings of the Delta Chemical Company, at Wells, were destroyed by fire last week. The buildings, which were razed by a blaze last March, were being rebuilt. Origin of the latest fire has not been determined.

SILAS H. L. COOPER DIES

It is reported from Chicago that Silas H. L. Cooper, chief national bank examiner for the Seventh Federal Reserve district, is dead. Mr. Cooper was for several years attached to the Cleveland Federal Reserve district and had been a national bank examiner about fifteen

Digitized by Google

The Machine Tool Outlook

(*Continued from Page 8*)

service. The new store we have established in Second boulevard is a part of what we consedee the proper facilities for sales development. This concern has between 4,000 and 5,000 turret lathes in Michigan. While our business in the state, like that of other concerns selling one product or another to the automotive industry, was very large during the war and post-war periods, we do not consider for a moment that the field is exhausted.

"We have opened this store at a time when you could see all the business in sight through the eye of a needle, but we are prospecting and this store is part of our equipment. We judge the buyers of such goods as we sell by their past performances. Yesterday they did not want anything and never expected to want anything; tomorrow they will want something right away. Whether it is a machi~ or a repair part or a tool for the machine, the quicker it can be delivered the better. We go on the theory that a machine which cannot be used because a part or a tool is missing is worse than no machine at all.

"One of the big leads in the machine tool business in the future will be tools for machines such as we manufacture—turret lathes It has been customary for plans to make most of their tools. These tools may differ in small details but so far as production is concerned they could be standardized to a certain extent. We believe that the machine tool builder can perform a valuable service by manufacturing these tools so they can be marketed at less cost than the plant tool room can make them. My concern, for instance, has the plant facilities and the skilled men to do this work. All we need to do is find out what it is the users of machine tools need and then meet their



C. S. STILWELL

requirements. Manufacturing in quantity as against manufacturing in piece-meal for use as required will reduce the cost of tools and save a great amount of time.

"Eighty per cent of our business in this territory has been with the automotive industry. Temporarily there is not much prospect of large sales to these concerns. However, as the life of a machine under high production pressure is not more than ten years, the replacement demand will be steady, once the industry is again in production.

"We have another source of future business—the small shop. In the last twenty years there have sprung up in the state many small shops established primarily to make parts and accessories for automobiles. Some of these shops were converted from some form of metal working to exclusively automotive products.

"The decline of car and truck production has left these establishments high and dry. Some of them already have taken up other lines of manufacture and others will do so unless I am greatly mistaken. The brass-working business is gaining momentum in this state, and this is an industry which offers a rich field for machine tool business. In fact I believe Michigan is due to rival the New England states, Chicago and Cincinnati in the metal working business.

"I do not expect much industrial activity this summer, but by fall I believe we will be well out of the woods. In the meantime machinery and tool manufacturers can get their organizations in shape, establish their service policies and be prepared for a sane business development in this state as well as elsewhere. We have put in a stock of tools and repair parts and set up sixteen machines on the floor here, not much for display as for possible emergency calls, and later we will have a staff of engineers prepared to tackle any machine problem that may confront us."

Companies and Dealers Approved by Commission

Following is a list of companies approved and disapproved and dealers licensed by the Michigan Securities Commission at its meeting of June 2, 1921:

COMPANIES APPROVED

American Power & Light Co., Augusta, Me., $2,500,000 20-year 6 per-cent secured gold bonds, Dated May 1, 1921.

Angle Steel Stool Co., Otsego, Mich., $35,000 common stock.

Consolidated Water & Paper Co., Wisconsin Rapids, Wis., $3,000,000 first mortgage 7½ per-cent sinking fund bonds, dated May 2, 1921.

Consumers Dairy Co., Jackson, Mich., $10,000 common stock.

Continental Land Contract Co., Redford, Mich., $50,000 common stock and $50,000 preferred stock.

Dripping Springs Mines Corp., Phoenix, Ariz., 250,000 shares common stock at $1.00 per share.

Georgea Creek Coal Corp., Charleston, W. Va., $200,000 preferred stock.

Handley-Knight Co., Kalamazoo, Mich., $200,000 first mortgage 7-per-cent convertible bonds dated April 1, 1921.

Marland Oil Co., Ponca City, Okla., $4,000,000 10-year 8-per-cent sinking fund participating bonds, dated April 1, 1921.

Monroe Avenue Realty Co., Jackson, Mich., $128,000 first mortgage 7-per-cent bonds, dated May 16, 1921.

Puget Sound Power & Light Co., Seattle, Wash., $13,734,000 general and refunding mortgage bonds, Series "A," dated May 2, 1921.

Quincy Liquid Oil Co., Adrian, Mich., $2,000 common stock, entire issue $10,000 validated.

Superior Spark Plug Co., Detroit, Mich., $10,000 common stock.

A. H. Walker Candy Corp., Muskegon, Mich., $150,000 common stock, $150,000 preferred stock, entire issues $500,000 common and $500,000 preferred validated.

COMPANIES DISAPPROVED

W. E. Iseman Consolidated Coal Co., Hunting ton W. Va.

DEALERS LICENSED

Stuart Howard, Detroit, Mich.
James Wm. Ramsey, Detroit, Mich.
Anthony Stefanowski & Co., Detroit, Mich

The following resolution was made and adopted:

"That the Durant Motors, Inc., of New York, and the Durant Motors, Inc., of Delaware, together with all brokers selling the stock of said corporations, shall in all advertising give the full name of the corporation whose stock is being offered for sale; and

"That this ruling shall apply to and include all other Durant Motors., inc., hereinafter organized and whose stock shall be offered for sale in this state."

Following is a list of companies approved and disapproved, together with dealers licensed, by the commission during the month of May, 1921.

COMPANIES APPROVED

American Public Service Co., Wilmington, Del., $320,000 Series "A" collateral gold notes, dated March 1, 1921.

W. H. Anderson Tool & Supply Co., Detroit, Mich., $75,000 7-per-cent collateral notes, dated May 16, 1921.

Atlas Crucible Steel Co., Dunkirk, N. Y., 10,000 shares common stock.

Barnard Toy Co., Detroit, Mich., $75,000 preferred stock

Buckeye Loan Co., Pontiac, Mich., $25,000 preferred stock.

Burd Air Compressor Co., Detroit, Mich., $24,000 common stock.

Capital News Publishing Co., Lansing, Mich., $25,000 common stock.

Carson Co., Ludington, Mich., $200,000 preferred stock.

Clayton & Lambert Manufacturing Co., Detroit, Mich., $500,000 common stock.

Continental Gas & Electric Co., Cleveland, Ohio, 11,400,000 7-per-cent collateral trust notes, dated July 15, 1920.

Cored Antitoxine, Inc., Jackson, Mich., $100,000 common stock, entire issue $200,000 validated.

Curtis Candy Corp., Detroit, Mich., $150,000 preferred, $100,000 Class "A" common, 4,500 shares Class "B" common stock validated.

Detroit Electric Furnace Co., Detroit, Mich., $22,500 common stock.

Detroit Finance Co., Detroit, Mich., $300,000 common stock.

Detroit Industrial Service Corp., Detroit, Mich., $150,000 preferred stock, 12,500 shares common stock validated.

Detroit Paste & Glue Manufacturing Co., Detroit, Mich., $12,000 common stock.

Dunn Realty Co., Highland Park, Mich., $8,000 first mortgage 6-per-cent bonds, dated April 5, 1921.

Durant Motors, Inc., Wilmington, Del., 492,493 shares common stock; entire issue 1,000,000 shares validated.

Solomon P. & Dora Flayer, Detroit, Mich., $45,000 first mortgage 7-per-cent bonds, dated April 15, 1921.

Fo'ker Co., Inc., Detroit, Mich., $30,000 common stock; entire issue $60,000 validated.

Giuffre & Binelli Investment Co., Detroit, Mich., $148,400 common stock.

Glen Tramway Corporation Co., Ltd., Midland, Ont. $250,000 first mortgage 7-per-cent gold bonds, dated May 2, 1921.

Globe Cashier Co., Kalamazoo, Mich., $150,000 first mortgage 7-per-cent gold bonds, dated May 16, 1921.

Grand River Brookline Co., Detroit, Mich., $369,700 common stock.

Grand Victory Theatre Co., Detroit, Mich., $50,000 common stock.

James Heddon's sons, Dowagiac, Mich., $50,000 preferred stock.

Hugh Lyons & Co., Lansing, Mich., $250,000 common stock; entire issue $500,000 validated.

Jackson Corset Co., Jackson, Mich., $52,250 common stock; entire issues $700,000 common and preferred validated.

Jones, MacNeal & Camp, Inc., Chicago, Ill., $100,000 preferred stock.

Kay Copper Co., Phoenix, Ariz., $1,600,574.50 outstanding common stock validated.

Kelvinator Corp., Detroit, Mich., $250,000 common stock

S. S. Kresge Co., Detroit, Mich., $2,000,000 common stock.

Lowry Oil Corp., Muskegee, Okla., $8,795,220 common stock.

Frederick T. Matthews Co., Detroit, Mich., $25,000 preferred and $27,320 common; entire issues of $125,000 validated.

Maurice Film Co., Inc., Detroit, Mich., $15,000 common stock.

James H. Means & Howard C. Wade, trustees,

Digitized by Google

Detroit, Mich., $40,000 first mortgages 6-per-cent bonds, dated May 2, 1921.
Meisenheimer-Burke Corp., Detroit, Mich., $80,000 common stock.
Meridian Petroleum Corp., Kansas City, Mo., $2,500,000 first mortgage 8-per-cent bonds, dated April 1, 1921.
Michigan Canned Food Co., Detroit, Mich., $800,000 common stock.
Mohammed Furniture Corp., Highland Park, Mich., $2,700 common stock, entire issue $10,000 validated.
Morning Dew Products Co., Milwaukee, Wis., $45,000 preferred stock, 1,500 shares common stock validated.
Muskegon Utilities Co., Muskegon, Mich., $74,840 common stock; entire issue $200,000 validated.
National Hardwood Co., Kansas City, Mo., $1,250,000 first mortgage 8-per-cent bonds, dated May 4, 1921.
New England Oil Refining Co., Boston, Mass., $3,000,000 first mortgage 8-per-cent bonds, dated March 1, 1921.
Frank M. Paull Co., Detroit, Mich., $74,800 preferred and $85,200 common; entire issues $200,000 validated.
Peoples Publishing Co., Idaho and Kalamazoo, Mich., $6,957 common stock.
James H. & Dorotha A. Prince, Detroit, Mich., $67,000 first mortgage 7-per-cent bonds, dated March 29, 1921.
Producers & Consumers Co., Cheboygan, Mich., $50,000 common stock; $200,000 common stock issued for property validated.
Rubberoid Co., South Bound Brook, N. J., $100,000 first mortgage 8-per-cent bonds, dated May 1, 1921.
Rugee Motor Truck Co., Saginaw, Mich., $2,000,000 preferred and 40,000 shares common stock.
Sears & Nichols Canning Co., Chillicothe, Ohio, $750,000 first mortgage 8-per-cent bonds, dated April 1, 1921.
Security Mortgage Corp., Detroit, Mich., $1,500,000 preferred and 100,000 shares common stock validated.
Louis Smilanski, Detroit, Mich., $100,000 first mortgage 7-per-cent bonds, dated May 1, 1921.
Sperlich & Uhlig Co., Detroit, Mich., $75,000 preferred and $50,000 common stock.
Stafford Roller Bearing Car Truck Corp., Carlstadt, N. J., $100,000 common stock.
Superior Food Products Co., Detroit, Mich., $7,000 preferred and $28,000 common stock.
United Breeders' Cannery, Saginaw, Mich., $30,000 common stock, entire issue $100,000 validated.
United Furniture Co., Grand Rapids, Mich., $12,000 common stock.
Washington Hotel & Mineral Baths Co., Benton Harbor, Mich., $185,300 common stock.
Washington Realty Co., Detroit, Mich., $80,000 7-per-cent leasehold bonds, dated May 1, 1921.
Winchester Repeating Arms Co., New Haven, Conn., $50,000 first mortgage 7½-per-cent bonds, dated April 1, 1921.
Wolverine Insurance Co., Lansing, Mich., $800,000 common stock.

DEALERS LICENSED

Andrews, Mallory & Co., Detroit, Mich.
A. G. Becker & Co., Chicago, Ill.
Chas. J. Becker, Detroit, Mich.
DeWeese-Talbott Co., Dayton, Ohio.
DeWolf & Co., Inc., Chicago, Ill.
Gerald W. Evans, Detroit, Mich.
Kriebel & Co., Chicago, Ill.
Hammond H. Loveing, Jackson, Mich.
Elmer A. Roth.

COMPANIES DISAPPROVED

Rockwood Silica Co., Rockwood, Mich.
Charles Weeghman Corp., Chicago, Ill.

DURANT SELECTS N. Y. DISTRIBUTOR

William C. Poertner has been appointed New York distributor of the car to be manufactured by Durant Motors.

REPORTS EXAGGERATED

Some time ago there appeared in the newspapers a number of press reports which made it appear that a very large number of American automobiles, both passenger cars and trucks, were being held in the customs house at Buenos Aires, Argentina, South America. El Automovil Americano, New York, has received information which tends to show that the reports were exaggerated.

Extracts from two letters from prominent persons to the Class Journal Company's publications are as follows: From M. T. Meadows, manager of the Argentine Chamber of Commerce: "I am pleased to advise that the large stocks of cars reported to you in my letter of March 2 are gradually being liquidated and are now figured at two months normal supply. Owing to general business depression, it is probable that the present supply will carry us through the winter and very few new cars will be needed until the spring and summer selling season in the coming month of September."

This letter was dated May 3, says the trade paper, and as Argentina's seasons are the reverse of ours it was written at the start of the winter season.

The other letter, from W. T. Clark, of Henry W. Peabody & Company, Buenos Aires, said in part: "You no doubt have seen press cablegrams concerning the number of cars and trucks in the Buenos Aires customs house. Most of which reports, I think, were exaggerated. The Association of Automobile Importers sent some of their employes to take count of all cars and trucks deposited there, and they gave a total of 2,003. This count was taken March 25. This is not a large stock for normal times, but under present conditions—with winter coming on—it is excessive."

INTRODUCE YOUR PRODUCT ABROAD

Sell direct or establish agency connections in

Germany, Austria, Czecko-Slovakia, Holland, Belgium, Norway, Sweden, Denmark.

A personal interview will make clear to you how you must organize your business for foreign markets, or will assist your foreign department in locating new markets.

Mr. Samuel J. Hoexter will sail for Europe in July and is open to add a limited number of names to the list of those he represents.

S. J. HOEXTER, INC.

416 East Montcalm Street, Detroit. Phone Cadillac 7611.

Potsdamer Str. 45, Berlin W.

We Repair Electrical Apparatus

Motors---Generators---Transformers

Furnish Steam or Electrical Engineers for inspection or repair work.

Manufacture in Detroit all types of switchboards and panel boxes for light or power.

All work carries the customary WESTINGHOUSE GUARANTEE of one year against defective workmanship or material.

SERVICE PROMPT PRICES RIGHT

Westinghouse Electric & Mfg. Co.

1535 Sixth Street. Telephone Cadillac 3075 Detroit, Mich.

The Bellefontaine Bridge and Steel Co.

Fabricators of

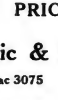
STRUCTURAL STEEL

Main Office and Works, Bellefontaine, O.
Detroit Office, Ford Bldg. Cadillac 6155.

The next time you are in GRAND RAPIDS stay at the HOTEL BROWNING. Home comforts and courteous service. 150 fireproof rooms, all with private bath—$2.50 and $3.00.

1 short blocks from Union Station

HOTEL BROWNING, GRAND RAPIDS, Mich.



America's Headquarters for

Second Hand Electrical Machinery

Overhauled in our shops and sent out "as good as new" with a satisfactory guarantee.

We buy—sell—repair—rent and exchange—and are always ready for a trade. No quantity too large.

Send for our "MONTHLY BARGAIN SHEET" showing complete stock with net prices.

GREGORY ELECTRIC CO.

CHICAGO, ILLINOIS

Digitized by Google

DOING BUSINESS IN MICHIGAN

MINNESOTA

The foreign corporation laws of Minnesota (Sections 6206, 6207, G. S. 1913) provide that every foreign corporation doing business in that state shall appoint an agent and maintain an office or place of business in the state, file with the Secretary of State a copy of its charter and a statement of its business and pay a fee into the state treasury. Section 6208 provides that: "No corporation which shall fail to comply with the foregoing provisions shall maintain any suit or action * * * in any of the courts of this state."

The supreme court of Minnesota holds that the statute was not intended to apply to corporations engaged in interstate commerce but only to foreign corporations doing local business in the state. The failure of a foreign corporation to comply with the law as to local business does not render its previous interstate transactions either void or unenforceable in the state courts. Where a foreign corporation disposed of its goods through the medium of distributors or jobbers and retail dealers under contracts limiting the territory in which and the persons to whom they could sell and the prices they should charge; publicly advertised its wares for the purpose of attracting consumers to buy of its dealers and employed traveling salesmen who took orders for goods which were filled from New Jersey or were turned over to distributors in Minnesota and were filled by them, it was not doing an intrastate business, the transactions between the corporation and its distributors being out-and-out sales without condition. The court goes on to say that some of the restrictions imposed by the corporation upon its distributors and dealers, particularly those which limited the price at which they might sell, may have been void but this did not change the relation of the parties. Some of the provisions of these contracts may have been consistent with a contract of agency but taking all of the transactions together the court decides that the relation of the parties was clearly that of vendor and vendee and not of principal and agent. (Victor Talking Machine Co. v. Lucker 128 Minn. 171; 150 N. W. 790.) Corp. Journal No. 46.

* * *

Carrying on an advertising and selling campaign under the direction of an agent, who has a place of business in the state where is kept a large supply of advertising matter and a stock of goods from which deliveries are made to customers in Minnesota, is doing business in the state, and the agent in charge is a proper person upon whom to make service. Jenks v. Royal Baking Powder Co., 131 Minn. 335; 155 N. W. 102. Corp. Journal No. 57.

* * *

A corporation selling shoes in the state through stores known and advertised as "Selz Royal Blue" stores and which agree to handle its products exclusively, is "doing business," so as to render service upon its state representative valid against it. Prices v. Selz, Schaub & Co., 174 Minn. 245; 158 N. W. 975. Corp. Journal No. 63.

* * *

A foreign corporation which sends an agent into the state to purchase pulpwood to be delivered in Minnesota, and who received a contract for this purpose and forwarded it to the home office for signature, is doing business in the state so that service of process upon such agent was a valid service upon the corporation. Duluth Log Co. v. Pulpwood Co., 137 Minn. 312; 163 N. W. 520. Corp. Journal No. 71.

* * *

ILLINOIS

The state supreme court has held in the case of the Alpena Portland Cement Company vs. the Jenkins & Reynolds Company (decided February 16, 1910, 244 Ill. 354; 91 N. E. 480) that a single transaction within the state by a foreign corporation does not constitute doing business within the meaning of the foreign corporation act, and that "doing business" or "transacting business" by a foreign corporation does not include acts not constituting any part of its ordinary business, such as instituting and prosecuting actions in court, 152 Ill. App. 235. Corp. Journal No. 17.

* * *

A foreign corporation in holding all or the controlling interest in the stock of an Illinois corporation is held to be doing business in Illinois. Central Life Assurance Co. v. Smith, 236 Fed. 170. Corp. Journal No. 64.

* * *

The giving of notes by a foreign corporation is not transacting business in the state. It was not the intention of the statute that a foreign corporation could not incur indebtedness in the state for the purchase of supplies or property or otherwise, or give notes or obligations for its indebtedness, without complying with the conditions for procuring a license to transact business. Plew v. Board, 274 Ill. 232; 113 N. E. 603. Corp. Journal No. 65.

* * *

Agents for foreign corporations engaged in interstate commerce are not subject to local ordinances imposing license taxes on vendors. In the case of Lee's Summit et al. v. Jewel Tea Co., 217 Fed. 965, the following transactions were held to constitute interstate commerce: The Jewel Tea Company is an Illinois merchandising corporation with headquarters at Chicago, in that state. It employed an agent residing in Missouri. The agent canvassed from house to house in Lee's Summit for orders for tea, coffee, spices and coffees. The orders taken were mostly for half-pound and pound lots. He forwarded the orders to the company at Chicago, giving the quantities only, and not the prices of the teas or coffees. At Chicago the company put up the goods in small packages according to the quantities ordered, so as to permit of exact delivery to each purchaser without breaking. On each package was marked its price, but not the name of the purchaser. The packages were then put into a large box or other receptacle and shipped by freight to Lee's Summit, the company being both consignor and consignee. When the shipment arrived at Lee's Summit, the agent received it, opened the box or container, had it hauled around on a dray, delivered the packages unopened to those who had given the orders and collected payment for them on delivery. At the same time he solicited further orders. He made the rounds about twice each month and by other canvassing endeavored to increase the trade. The agent remitted the moneys collected to the company at Chicago. He had no financial interest in the business save his salary, which was paid from that city. Occasionally a purchaser refused to pay or accept and pay. In such case the package intended for him was sent to a branch house of the company at Kansas City, Mo., but all the goods delivered in Lee's Summit were shipped directly there from Chicago in the way described. Corp. Journal, No. 46.

* * *

The mere solicitation of business by agents of a foreign corporation in the state does not constitute "doing business" in such a sense as to subject the corporation to the jurisdiction of the courts of Illinois. Pembleton v. Illinois Commercial Men's Ass'n, 289 Ill. 99; 124 N. E. 355. Corp. Journal, No. 94.

* * *

INDIANA

The act of purchasing real estate to be used by a foreign corporation is not an isolated transaction but constitutes the "doing" or "transacting" of business in the state. Failure to qualify under the foreign corporation prior to entering such a contract renders it unenforcable against the seller. Lowenmeyer v. National Lumber Co., 125 N. E. 67. Corp. Journal, No. 94.

New Publications

"CORRECT LUBRICATION"

The Vacuum Oil Company, New York, has issued a valuable booklet entitled "Correct Lubrication." It is not an advertisement but a textbook on lubrication for automobiles, treating of the importance of oil, troubles that arise from improper lubrication, the difference between winter and summer requirements, costs, motor troubles due in part or entirely to oils, and other information. The booklet is illustrated and is of such size as to be carried in the pocket or kept in the car.

This company manufactures oils and greases under the name of "Mobiloil."

DETROIT TRAILER CO. CATALOG

The Detroit Trailer Company, Detroit, has issued a handsome catalog illustrating and describing its line of motor truck trailers. This is one of the most comprehensive booklets recently brought out. Besides giving all of the essential information prospective buyers may desire, the catalogue has a number of interesting views of trucks with trailer attachment showing the nature of the goods carried and giving a fair idea of the usefulness and help for industrial or business concerns in the employment of trailers. The company now makes the following standard designs: Four-wheel models B and D, reversible and non-reversible; four-wheel drop frame, for load-testing hand-model C trailers, for light work; pole trailers, 1½ to 15-ton; semi-trailers, 3 to 15-ton.

Any one interested will receive a catalogue by writing to the company's headquarters, 954 Milwaukee avenue east.

"FACTORS OF SAFETY"

"Factors of Safety," a neat booklet on automobile spring manufacture, has been issued by the Detroit Steel Products Company, Detroit. The book is bound in brown paper, is illustrated, and the contents tell the story of spring manufacture from raw material to the finished product, including engraving, testing, heat treating, shearing, forming, tempering and assembly.

"THE GOSPEL OF GRIT"

"It is a surprising fact that the total volume of business never drops more than 20 per cent even in the worst of hard times," says an excerpt from an advertisement by Evans-Winter-Hebb, Detroit, reprinted in a booklet just issued by the same concern under the name of "The Gospel of Grit." This is a compilation of advertisements recently published, all of which were bits of business philosophy for just such a period as business has been going through. The opening quotation carries the thought that, although one kind of business may be in the "dumps," there is always some other business "going strong," and when a balance is struck conditions are not as black as pessimism paints them.

HOIST CO. IN NEW QUARTERS

The Hydraulic Hoist Manufacturing Company, Detroit, has moved from 954 Milwaukee avenue east to 5730 Michigan avenue, in order to obtain more working space.

Digitized by Google

Willmarth & Morman
GRINDERS

Brand New at Special Prices

No. 18 Full Automatic, Wet Power Feed Surface Grinder $800

No. 3 Full Automatic, Wet Power Feed Surface Grinder $800

These Grinders are Brand New, Late Style, Complete with all tandard Equipment and on our floor for immediate delivery, f. o. b. Detroit, Michigan.

The Above Machines Carry the Factory Guarantee

Riverside Machinery Depot
251 ST. AUBIN AVE. DETROIT, MICH.

MICHIGAN Mutual compensation insurance business has increased more rapidly than that of any other company operating in Michigan.

Yes, there is a reason.

Ask for it. A postal will do

Every policy is non-assessable

Every policy shares in savings

Michigan Mutual Liability Company

Real Estate Exchange Building
Detroit Michigan
Home Office: Cherry 2929 Grand Rapids, Lansing and Saginaw Hospital: Cadillac 2670

July Furniture Slash Urged on Manufacturers

For the July sale, furniture prices will be cut so close to hardpan that further recessions cannot be made. This is the policy that the national council of furniture associations will recommend to the manufacturers.

The national council met in Chicago last week and was attended by representatives of the case goods, chairs, centertables, dining tables, dining room furniture, upholstered goods and kitchen cabinet branches of the furniture industry. George G. Whitworth represented the case goods manufacturers and the Grand Rapids market. The reports indicated the industry as a whole was on a production basis of about 60 to 65 per cent of normal and some of the manufacturers seemed to think the prospective lower price was a factor in the dullness of trade.

To eliminate this factor and to stabilize business generally the council adopted resolutions recommending to manufacturers that they thoroughly revise their prices for the July sale, that the prices be made the very lowest possible, taking into consideration actual costs at normal production and allowing some margin for safety.

GREENFIELD ENLARGES BUSINESS

A further expansion of the Greenfield Tap and Die Corporation, Greenfield, Mass., has taken place. The board of directors has voted in favor of the purchase by the corporation of the entire capital stock of the Greenfield Machine Company, Greenfield, manufacturer of cylindrical and universal grinders, and the Morgan Grinder Company, Worcester, Mass., manufacturer of internal grinders.

The combination of the two above mentioned concerns, together with the machines now produced by the Greenfield corporation, will constitute the Machine Division of the Greenfield Tap and Die Corporation, which will operate both plants in their present location, although eventually the Worcester plant will be moved to Greenfield.

The organization of both plants will remain the same and is as follows: Morgan Grinder Company—President, Ralph L. Morgan; treasurer, L. M. Crittsinger; general manager, Charles E. Hildreth. Greenfield Machine Company—President, E. F. Smith; treasurer, Joseph G. Stevens.

BOND MEN PICNIC AT PONTCHARTRAIN

Fifty-seven members and three guests of the Bond Men's Club of Detroit attended the annual outing at Ponchartrain-on-the-Lake, near Mount Clemens, Friday, September 17. The party boarded the private D. U. R. car "Yolandie" at 10:30 a. m. and arrived at the resort in time for picnic lunch. After which there was a ball game and other games requiring less muscle and more strategy. At 1 o'clock the party sat down to a splendid frog and chicken dinner in the hotel dining room. G. J. McCoy, of the Security Trust Company, responded to President Higbie's address of welcome and showered his good humor and witticisms plentifully upon the diners. Officers for the ensuing year were elected as follows: President, Alfred Rice, of the First National Company; vice-president, Charles B. Hull, of Hull, Bumpus & Company; secretary, E. K. Matlock, of Detroit Trust Company, and treasurer, J. W. Ballmann, of Bolger, Mosser & Willaman. The above, with Duncan McNab, Carrol H. Lawson and Edwin K. Hoover, comprise the board of governors for the coming year. The club membership limit was raised to 200. Present membership is 136.

Foreign Commerce School This Year June 20-July 30

The second school of Pan-American and Foreign Commerce is being held in Washington, D. C., at the Pan-American Union, June 20 to July 30, and both men and women will be admitted, although the number will be limited.

It was last year that the first school was organized in the Pan-American Union and forty-eight students received certificates of graduation for the successful completion of the courses of study.

The courses being given this year include the following: Commercial Spanish, commercial Portugese, document technique, salesmanship, and a general course in Pan-American commerce, including commercial geography, transportation, shipping and finance. Experts who have seen practical service in commercial education as trade commissioners and as practical business representatives, together with experts in Portuguese and Spanish, give the regular courses of study throughout the session, and a lecture faculty of many leaders in foreign trade corporations, commercial organizations related to foreign trade, governmental departments and attaches of embassies and legations delivers addresses.

The United States Department of Commerce, through the secretary and the Bureau of Foreign and Domestic Commerce, and other governmental agencies will co-operate actively in making a success of the school. The Library of the Department of Commerce is available for research work.

The officials in charge of the school are: Chairman, advisory council, Dr. L. S. Rowe, director general, Pan-American Union; dean of the faculty, Dr. R. S. MacElwee, Georgetown University; executive director, Dr. Clarence J. Owens, director general of the Southern Commercial Congress.

Digitized by Google

NEW MICHIGAN CORPORATIONS

FOR WEEK ENDED 10, 1921

W. H. Parsons & Co., Muske, , beautifying of homes; W. H. Parsons, Georgia C. Parsons, Willard G. Turner .....$

Big Four Fox Co., Muskegon; to breed, buy and sell silver black foxes; Oscar M. Olsen, John W. Hubbell, Martin Moon, Muskegon .....

David Tuchman, Inc., Detroit; general contracting business for erection of buildings; David and Kathryn Tuchman, 670 Hancock ave. E., May Schneider, Detroit .....

Wyandotte Mors-Power Truck Co., Wyandotte; to purchase, manufacture, vend, sell and deal in automobiles, trucks, etc.; Frank Armstrong, 319 State st., Detroit; W. Allard, Grosse Pointe Village; William Anderson, Detroit .....

Ann Arbor Union Builders' Corp., Ann Arbor; to obtain and give employment to members of carpenters' union, No. 512, at the standard wage; R. H. Fletcher, F. Frederick, James Toms, Ann Arbor .....

Frederickson Co., Saginaw; to manufacture, buy, sell and deal in brass, bronze, aluminum and metal castings; Niels J. Frederickson, 5746 Lorain ave., Detroit; Alexander M. Lemke, Saginaw; Otto Schupp, Saginaw .....

Service Theater Supply Co., Detroit; manufacturing, buying, selling, leasing, exhibiting, operating and dealing in motion pictures, films, etc.; George A. Rogers, 234 Alfred st., Detroit; Sophie E. Duloff, Detroit; Helen E. Evans, Royal Oak .....

Crew Levick Co. (F.), Philadelphia; H. A. Stabler, Lansing, Michigan agent .....

Fitzpatrick-McElroy Co. (F.), Delaware, principal office, Chicago; Hubert E. Hartman, 817 Hammond bldg., Detroit; $600,000, non par, 21,000 shares with $1 sale value .....

Moreno-Burkhart Construction Co. (F.), St. Louis, Mo. Grand Rapids, Campau bldg., Detroit, Michigan agent .....

Investors Realty Corp., Detroit; acquiring, improving, mortgaging, leasing, buying, owning, selling and dealing in real estate. Luman W. Goodenough, Hunnewell bldg.; Edward E. Lovely, Guy S. Greene, Detroit .....

Community Finance Service, Inc. (F.), Philadelphia; Harry D. Firth, Kalamazoo, Mich., agent .....

E. P. Hauserman Co. (F.), Cleveland, O. Theodore E. Enjen, 1852 Penobscot bldg., Detroit .....

State Pictures Corp., Grand Rapids; to contract for, obtain production of, sell, release, rent and distribute motion pictures, films, etc.; James Criswell, Charles Clement Hunted, Beulah E. Annison, Grand Rapids .....

Auto Safety Signal Co., Port Huron; manufacture, sale and installation of safety signals, lamps, accessories, etc.; Henry Schenberg, 5062 Allendale ave., Joseph Miller, James C. Cunningham, Detroit .....

Meade Hotel & Apartment Co., Detroit; to buy, sell, exchange and deal in hotel and apartment houses and leaseholds; Chas. C. Mead, M. J. Mead, Lavina Eastland, 77 Temple ave., Detroit .....

Stephenson Cedar & Lumber Co. (F.), Chicago; Carl Benson, Kingsford, Mich., agent .....

Grape Belt Nursery & Fruit Co., Paw Paw and Bangor; growing, buying, selling, wholesale and retail, canning of farm products and fruits, etc.; Albert Campbell, Paw Paw; Dalton F. Carp, Bangor; Millard F. Peaslee, Bloomingdale .....

Nadler & Mark Shoe Mfg. Co., Detroit; manufacturing and selling at retail and wholesale shoes for men, women and children; Morris and Edith Nadler, 41 Columbia st., Louis and Edith Mark, Detroit .....

Detroit International Sales Co., Detroit, buying, selling, trading in, importing and exporting chattels and merchandise; William F. Boswell to Hunnewell st.; Charles A. Teeters, Sidney E. Cartwright, Detroit .....

New Boiler Works, Inc. Detroit; to carry on general business of manufacturing boilers, machinery, tanks, sheet steel and plate work; Charles L. Simmons, Nellie G. Simmons, 1405 Nineteenth st., Detroit; Samuel A. Reigel, Highland Park .....

CHANGES OF NAME

Tausend & Mollere, Inc. (name changed to Tandem Farm Products Co.), Grand Rapids .....$

Lanz Furniture Company (name changed to Alabastine Furniture Co.), Allegan .....

Harry B. Gray, Inc. (name changed to Harry S. Graves Corporation, Detroit

Monroe Ink Co. (name changed to Monroe Printing Ink Co.), Monroe .....

Columbia Motor Truck & Trailer Co. (name changed to Columbia Motor Truck Co.), Kalamazoo .....

CHANGE OF OFFICE

Wolverine Petroleum Co., office moved from Saginaw to Flint .....

INCREASES

Integrity Investment Co., Ltd., Lansing, from $6,000 to..... 12,000

Western Oil & Gas Distributing Agency, Flint, from $75,000 to..... 225,000

Oakland Lakes Realty Co., Detroit, from $80,000 to..... 125,000

Soo Co-Operative Mercantile Ass'n Sault Ste. Marie, from $20,000 to..... 50,000

C. R. Brewer Lumber Co., Battle Creek, from $20,000 to..... 40,000

Belle Isle-East Side Creamery Co., Detroit, from $400,000 to..... 750,000

LaBlounty Summer Resort Co., Lakeside, from $40,000 to..... 75,000

New-Way Motor Co., Lansing, from $1,-250,000 to..... 1,750,000

American Appliance Co. (F.), Indianapolis, Ind., Detroit, from $150,000 to $250,000 to..... 250,000

Mosher Steel Co., Detroit, from $75,000 to..... 175,000

Manufacturers Coal Co., Saginaw, from $225,000 to..... 400,000

Albert H. Parfet Co., Port Huron, from $20,000 to..... 100,000

Mac Sim Bar Paper Co., Otsego, from $1,200,000 to..... 2,400,000

Keystone Stucco Co., Detroit, from $10,000 to..... 25,200

Champion Sand & Gravel Co., Marquette, from $30,000 to..... 45,000

DECREASES

Estate of Justin Wentworth, Inc., Bay City, from $1,500,000 to..... 230,000

Port Huron Salt Co., Port Huron, from $235,000 to..... 10,000

NOTICES OF DISSOLUTION

Briggs-Michigan Clay Co., Lansing 500,000

Imperial Kowal Iron Co., Highland Park 10,000

All Power Truck Co., Detroit..... 100,000

Kramer & Tyrrell Co., Gaylord..... 50,000

Ideal Pattern & Machine Co., Grand Rapids 25,000

Kindervook Land Co., Grosse Pointe Shores 1,000,000

NOTICES OF WITHDRAWAL

Feller Industrial Engineering Corporation (F.), (N. Y.) New York City, Detroit 350,000

Ogibway Realty Co., Ltd. (F.), Sandwich, Ont.-Detroit..... 10,000

H. V. Greene Co. (F.), Boston, Mass.-Detroit 40,000

American Carbolite Sales Co. (F.), Grand Rapids-Duluth 100,000

Linderman Steel & Machine Co. (F.), Munising, Mr.-Muskegon 50,000

Ojibway Town Site Co., Ltd. (F.), Windsor, Ont.-Detroit 1,800,000

35,000

Editor's Mail

THE DEMOCRATS AND THE FEDERAL RESERVE ACT

To the Editor:

I read with very considerable interest your article on what changes, if any, should be made in the Federal Reserve system. I am writing merely to correct some foolish errors that your bank president friend has drifted into.

I, with a great many others, feel that the Federal Reserve Bank is the greatest piece of constructive legislation that we have had in at least a quarter of a century, if not in the last half century, but when your dear friend the banker through apparently the most abject ignorance says that the Democrats in this case did not know what they were doing, he needs to be enlightened. All students of the financial problem know that the idea of a central bank dates back for a number of years; in fact, it has come up at different times all the way from Nicholas Biddle and Andrew Jackson down to when the Federal Reserve Act was finally passed. I think that Andrew Jackson made a fight against it and the reasons he gave for this were that too much power would be placed in the hands of a private central bank which would be governed by selfish interests and not from any public point of view, the controllers of the bank naturally looking to filling their own coffers rather than serving the public. That too, was the point on which the Aldrich plan was obtained a number of years back and that is the reason why the present scheme went through, the originators of the plan feeling that the Government would have enough hold on the machinery and operation of the bank to protect the public interests. When our dear banker friend says that he did not believe the Democrats knew what they were doing when they passed it, I would refer him to the Honorable Robert L. Owen, of Oklahoma, a gentleman of brilliant learning and fine culture who has given this broad subject more intense thought than almost any person I know of in the United States. I would like to refer him to ex-Senator Shafroth, of Colorado, who gave the most extensive study to this plan. These men and a few other thoroughly intelligent Democrats, were the authors, framers and builders of the Federal Reserve Banking System and it looks small and out of place for any man, no matter what his position may be, to deprive these patriotic fellow citizens of whatever credit is coming to them for patriotic and honest work.

FRANK B. NILES.

Toledo, Ohio.
June 14, 1921.

The article referred to in the foregoing letter appeared in the Bankers and Investors annuit of the Michigan Manufacturer and Financial Record, published June 4.—The Editor.

MICHIGAN EMPLOYMENT CONDITIONS

James H. Shepherd, Lansing, district manager of the Michigan Mutual Liability Company, reports that, according to the applications for casualty insurance, industrial conditions in Michigan have improved. Manufacturing concerns throughout the state, he says, are applying for increased insurance, which indicates a return to production and full employment. Increases in insurance have been shown each month this year.

The Michigan Free Employment Bureau reports that lessened industrial activity was shown during May by the fact that employers asked for less workers, fewer applied for positions and less places were filled. In May employers asked for 2,559 men and 1,173 women, while 7,093 men and 1,452 women applied for work. Two thousand two hundred and thirty-one men referred to positions, as were 966 women. In detroit there were 1,624 applications for work with 814 filled; in Saginaw 1,204 applications, 55 filled; Kalamazoo, 1,095 applications, 261 filled; Jackson 985 and 352; Flint 954 and 165; Lansing 254 and 115; Battle Creek 475 and 80.

DINNER TO WILSON

Seventy-five business men of Pontiac were among those who attended a complimentary dinner to Charles B. Wilson, vice-president of Willys-Overland, Inc., in Toledo, last week. Mr. Wilson formerly was president of the Wilson Foundry & Machine Company, Pontiac. The Michigan delegation presented Mr. Wilson with a bronze tablet on which was inscribed: "The Inspiration and influence of Charles B. Wilson are so indelibly impressed on Pontiac that they will endure until the end of time."

Digitized by Google



Digitized by Google

THE NEWTON STEEL COMPANY

Manufacturers of

High Grade Sheets in all Finishes

for

Deep Stamping and Extra Deep Stamping

Auto Body Stock, Fender and Hood Stock, Radiator Stock

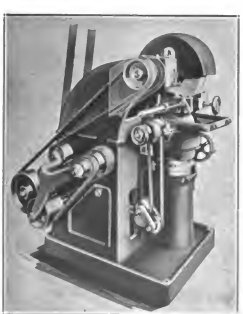
Mills: Newton Falls, Ohio — General Offices: Youngstown, Ohio

H. B. MACGREGOR
District Sales Manager

DETROIT OFFICES
2204-5 Dime Bank Building

Phone
Cherry 7098

Mr. Automotive Parts Manufacturer:--



Did You Get That Order You Figured On?

Maybe this is your predicament.

The other day a local parts manufacturer called on the Purchasing Agent of ——— Motor Company.
He wanted to quote on wrist pins, oil pump plungers, cam rollers and pins, etc.

Says the P. A.: "Have you got a Detroit Centerless Grinder?"

"No. Why?" said the Parts Manager.

Here is what the Purchasing Agent said:
"You can't compete with others unless you grind by the Centerless Method, and you better buy one of the machines."

AND WHY NOT?

Piston Pins, 1 1-16" dia. x 3½ long—125 per hr.
Piston Pins, ¾" dia. x 2¾ long—200 per hr.

Write for Circular Today

DETROIT MACHINE TOOL COMPANY
6545 St. Antoine St., Detroit, Mich.

Digitized by Google



THE TRUMBULL STEEL COMPANY

PRODUCERS OF

STRIP STEEL
Hot and Cold Rolled

SHEETS
Blue Annealed, Black and Galvanized

LONG TERNES

COKE TIN PLATE

Mills and General Offices: WARREN, OHIO

W. J. HANNA
District Sales Manager

DETROIT OFFICES
523-524 Ford Building

PHONE
Cherry 1354

Supervision is cost saving insurance

Expert supervision of any construction or engineering work you may contemplate is profitable insurance against mistakes and unnecessary costs.

Our supervision work covers every feature involved, from the checking of the original plans and specifications to the analytical inspection of material and the personal supervision of all workmanship.

We would like to explain the full scope and exact cost of our Specialized Supervision Service.

Esselstyn-Murphy
Engineers Architects
Marquette Building — Detroit Michigan

Consider our heating and plumbing experts --your experts.

Our organization contains many acknowledged heating and plumbing experts and skilled, practical heating and plumbing craftsmen.

At any time—and without obligation—our experts will deem it a privilege to consult with you regarding your heating and plumbing plans or problems.

R. L. Spitzley Heating Co.
Heating *Contractors* Plumbing
DETROIT • 240 Larned Street West • MICHIGAN

Digitized by Google

RED CROWN GASOLINE EVERYWHERE

Every few miles in the country---and every few blocks in the city---you can get Red Crown Gasoline. That's your assurance of uniform power when you use Red Crown---for it never varies.

Its uniformity is guaranteed---its performance is assured. It's the best motor gasoline you can buy regardless of price.

That steady steam-engine-like piston stroke imparted by Red Crown means long life to your motor.

No racked engine causing frequent overhauling. No delay from lack of power. For the utmost in gasoline service, use---

RED CROWN

Standard Oil Company (Indiana) Chicago, U. S. A.

Pageant of Progress Exposition at Chicago's $5,000,000 Municipal Pier, July 30 to August 14

The Babcock & Wilcox Co.

85 Liberty St., New York

Established 1868

Water Tube Boilers

Babcock & Wilcox

Stirling

Rust

Steam Superheaters

Chain Grate Stokers

Michigan District Office

411-412 Ford Building

Detroit



Pressed Steel Parts

Special Sheet Metal Articles and Parts Made to Order:

Oil Pans	Maxim Silencers
Radiator Shells	Gear Covers
Radiator Tanks	Cylinder Top Covers
Radiator Side Members	Chain Covers
Gasoline Tanks	Cylinder Side Plates

We are at your service for Drawing, Stamping, Pressing, Spinning, Blanking and Forming in all sheet metals such as Aluminum, Brass, Copper, Sheet Steel, Tinplate and Sheet Zinc; Hot Galvanizing, Ternecoating, Japanning, Tinning and Porcelain Enameling.

Send us blueprints, samples or perhaps a casting we can replace with sheet metal—consult our Engineering Service.

Geuder, Paeschke & Frey Co.

1325-1600 St. Paul Avenue, Milwaukee, Wis.

Detroit Office, 712 Dime Bank Bldg.

Digitized by Google

How to Cut Manufacturing Costs On Brass Parts

You realize the necessity for reducing costs—without sacrificing quality.

But do you realize that *MUELLER* can help you so reduce them? The quickest way that we can prove this to you is to ask you to send us drawings, samples or specifications for anything you use in the line of brass parts, stating quantities desired.

Then we will promptly quote you interesting prices. We are equipped to manufacture brass and bronze rod, brass and copper tubing, brass and bronze forgings, sand castings in brass, bronze and aluminum, die castings in aluminum and white metal and all kinds of screw machined products.

The *MUELLER* engineers are competent to solve any manufacturing problem in these lines and are today solving similar problems for many of the largest manufacturers in America.

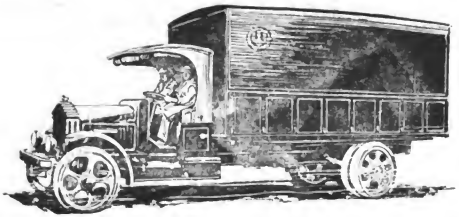
It will pay you to get better acquainted with *MUELLER*.

Mueller Metals Co., Port Huron, Mich.

Makers of "Red Tip" Brass Rod; Brass and Copper Tubing; Forgings and Castings in Brass, Bronze and Aluminum; Die Castings in White Metal and Aluminum; also Screw Machined Products.

H. Mueller Manufacturing Co., Decatur, Ill., and Sarnia, Ont. Makers of Water, Plumbing and Gas Brass Goods and Tools.

Digitized by Google



What is a high price?

A truck that outlasts other trucks and costs less to operate is not high priced. Cost must always be figured against the work done and the time that is saved. The first cost of a Pierce-Arrow is no more than any good truck costs.

Pierce-Arrows not only do more work at a lower operating expense, but they keep out of the repair shop and keep working. And they last longer. It is the cheapest truck to buy.

Pierce Arrow

CHASSIS PRICES

2-ton $3750
3½-ton 4950
5-ton 5700

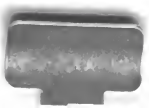
All Prices F.O.B. Buffalo

Wm F·V·Neumann & Sons
QUALITY MOTOR CARS
8252-8310 WOODWARD AVENUE
DETROIT

Digitized by Google

UNIVERSITY OF MICHIGAN
3 9015 08006 6817





Digitized by Google

Digitized by Google